

August 2023

London Luton Airport Expansion

Planning Inspectorate Scheme Ref: TR020001

Volume 8 Additional Submissions (Examination)

8.31 Applicant's Response to Relevant Representations - Part 4 of 4 (SoCGs and Additional Submissions)

Infrastructure Planning (Examination Procedure) Rules 2010

Application Document Ref: TR020001/APP/8.31

The Planning Act 2008

The Infrastructure Planning (Examination Procedure) Rules 2010

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

**8.31 APPLICANT'S RESPONSE TO RELEVANT REPRESENTATIONS
PART 3 OF 4 (SOCG AND ADDITIONAL SUBMISSIONS)**

Deadline	1
Planning Inspectorate Scheme Reference:	TR020001
Document Reference:	TR020001/APP/8.31
Author:	Luton Rising

Version	Date	Status of Version
Issue	August 2023	Deadline 1 submission

Contents

	Page
5 Response to Relevant Representations made by Interested Parties subject to a Statement of Common Ground	1
6 Applicant's Response to Additional Submissions	208
References	214

Tables

Table 5.1: Applicant's Response to Relevant Representations made by Interested Parties Subject to a Statement of Common Ground	
Table 6.1 Applicant's Response to Additional Submissions Accepted at the Discretion of the Examining Authority	

5 RESPONSE TO RELEVANT REPRESENTATIONS MADE BY INTERESTED PARTIES SUBJECT TO A STATEMENT OF COMMON GROUND

5.1 Introduction

- 5.1.1 This section provides Luton Rising's response to Relevant Representations made by Interested Parties who have entered into a Statement of Common Ground (SoCG) with Luton Rising. Responses to issues are presented as verbatim text taken from the Relevant Representations on a topic-by-topic basis.
- 5.1.2 Luton Rising will continue to engage on these matters throughout the course of the Examination. Therefore, this section includes a summary of the status of engagement at the time of writing, recognising that further engagement may be required. The initial draft SoCGs will be submitted at Deadline 2.
- 5.1.3 Relevant Representations were submitted by the following organisations with whom the Applicant has produced a SoCG):
- a. Natural England
 - b. Environment Agency
 - c. National Highways
 - d. The UK Health Security Agency (UKHSA)
 - e. NATS
 - f. CAA
 - g. Cadent Gas
 - h. East of England Ambulance Service (EEAST)
 - i. Bedfordshire Fire & Rescue Service
 - j. Thames Water
 - k. Affinity Water
 - l. Historic England

Table 5.1 Response to Relevant Representations made by Interested Parties subject to a Statement of Common Ground

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
Natural England RR-1079	Agricultural land and soils	2.11. The Soil Management Plan (SMP) needs to be clearer that the aim is for BMV agricultural land subject to temporary development or a change in land use, to be returned to, or retain, its original land quality.	<p>Appendix 6.6 Outline Soil Management Plan [APP-060] (OSMP) provides an outline of the measures to be developed into a full Soil Management Plan (SMP) as a Requirement of the Draft Development Consent Order [AS-005].</p> <p>If required, the OSMP can be revised during examination to include that this clarity should be provided in the SMP prepared by the contractor as required as part of the Code of Construction Practice (CoCP) [APP-049] in the Draft Development Consent Order [AS-005].</p>
Natural England RR-1079	Agricultural land and soils	<p>Soils and Best and Most Versatile Agricultural Land</p> <p>The applicant should provide simple land take breakdowns for each phase and component. A soil balance should be prepared to clearly identify the surplus of different soil types and identify opportunities for the sustainable reuse of this resource on site. Further information has recently been provided.</p>	<p>The request for additional information is noted, however, this detail would not affect the findings of the agricultural land assessment as detailed in Chapter 6 Agricultural Land Quality and Farm Holdings [APP-033] of the Environmental Statement (ES). The lead contractor will be responsible for preparing a Soil Management Plan, as required by the Appendix 4.2, CoCP [APP-049] of the ES in line with the requirements within Appendix 6.6 Outline</p>

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
			Soil Management Plan [APP-060]) of the ES.
Natural England RR-1079	Agricultural land and soils	<p>Soils and best and most versatile agricultural land</p> <p>4.23. Natural England is the statutory body for applications affecting more than 20 ha of BMV land. Based on the information provided with the Luton Airport Expansion application, it appears that the proposed development comprises approximately 120.0 of agricultural land within the Main Application Site, including 57.6 ha classified as best and most versatile (BMV) (Grades 1, 2 and 3a land in the Agricultural Land Classification (ALC) system). There is a further 360 ha of non-agricultural land with the Main Application Site. There is an additional 0.6 ha of agricultural land within the Off-Site Highways that will be impacted by the proposed development.</p>	Noted.

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
Natural England RR-1079	Agricultural land and soils	4.24. The ALC figures for the Main Application Site have been derived from a combination of site-specific ALC and Soil Resource Surveys, and Post-1988 ALC surveys. The ALC figures for the Off-Site Highways Area have been derived from Provisional ALC mapping, assuming all mapped Grade 3 is Subgrade 3a. Assuming that the Provisionally mapped ALC Grade 3 land is BMV makes it impossible to provide an accurate baseline and demonstrate the likely potential impacts. So, whilst this may make the mitigation precautionary, it means that the project is unable to show how it avoids impacts to BMV soils nor the design of potential mitigation to safeguard the soil resources.	Adopting a precautionary approach is best practice and Natural England's Representation under item 2.8 of RR-1080 notes agreement with the conclusion of the assessment of effect on Best and Most Versatile (BMV) land. The Agricultural Land Classification (ALC) impacted by the Off-site Highways Intervention at J10 of the M1 is a small area of 0.6ha contributing a small fraction of ALC impacted. Further surveys are not required to reach robust conclusions for assessment and the measures described in Appendix 6.6 Outline Soil Management Plan of the ES [APP-060] will apply to this area.
Natural England RR-1079	Agricultural land and soils	4.25. The proposals set out that of the 57.6 ha of BMV agricultural land, 5.1 ha will be permanently developed; and a further 27 ha will be subject to land use change to woodland or scrub and assessed as a permanent loss of agricultural land in Phase 1. In Phase 2a, a further 17.6 ha of BMV land will be permanently developed. As a result,	Noted.

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
		22.7 ha of BMV would be irreversibly lost as a result of permanent land take and a further 27 ha being taken out of agricultural use for forestry.	
Natural England RR-1079	Agricultural land and soils	<p>Agricultural Land Quality and Farm Holdings</p> <p>4.26. In addition to the permanent land use change, a further 28.5 ha (27 and 1.5 ha in Phase 1 and 2a, respectively) of BMV land will be subject to a change from intensive agricultural to less-intensive grassland and assessed as a temporary loss of agricultural land. Chapter 6 states that the soil profiles to be permanently converted from arable production to neutral grassland/neutral meadow grassland will remain intact and their physical properties, including ALC Grade will be unchanged. We advise that the applicant should provide simple land take breakdowns for each phase and component. For example, total agricultural area impacted by scheme (split by scheme phase and by ALC grade), and total BMV agricultural area permanently and temporarily</p>	<p>The lead contractor will be responsible for preparing a Soil Management Plan (SMP), as required by Appendix 4.2 CoCP [APP-049] of the Environment Statement (ES), in line with the requirements within Appendix 6.6 Outline Soil Management Plan [APP-060] of the ES.</p> <p>The request for additional information is noted, however, this detail will not affect the findings of the agricultural land assessment as detailed in Chapter 6 Agricultural Land Quality [APP-033] of the ES.</p>

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
		required for the development (split by phase).	
Natural England RR-1079	Agricultural land and soils	<p>Outline Soil Management Plan</p> <p>4.29. Soil is a finite resource which plays an essential role within sustainable ecosystems, performing an array of functions supporting a range of ecosystem services, including storage of carbon, the infiltration and transport of water, nutrient cycling, and provision of food. It is recognised that a proportion of the agricultural land will experience temporary land loss. In order to both retain the long term potential of this land and to safeguard all soil resources as part of the overall sustainability of the whole development (during construction and decommissioning), it is important that the soil is able to retain as many of its many important functions and services (ecosystem services) as possible through careful soil management and appropriate soil use, with consideration</p>	Noted.

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
		on how any adverse impacts on soils can be avoided or minimised.	
Natural England RR-1079	Agricultural land and soils	4.30. Natural England welcomes the preparation of an Outline Soil Management Plan (OSMP) with reference made to the Defra Construction Code of Practice for the Sustainable Use of Soils on Construction Sites. Natural England also welcome that a detailed Soil Management Plan will be produced by the Contractor post consent as secured through Development Consent Order (DCO), which will be in accordance with The oSMP. The SMP needs to be clearer that the aim is for BMV agricultural land subject to temporary development or a change in land use, will to be returned to, or retain, its original land quality. For example, this could be actioned by a target specification for the restored soils according to location and soil types, end use and required ALC grade. In addition to the target specification, a	<p>Natural England's Representation sets out some of the key elements likely to inform a future Soil Management Plan (SMP). The SMP is to be developed by the lead contractor, in accordance with Appendix 6.6 Outline Soil Management Plan (OSMP) [APP-060] of the Environmental Statement (ES).</p> <p>The OSMP can be revised, as agreed through a Statement of Common Ground (SoCG) with Natural England.</p>

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
		<p>monitoring and aftercare plan should be detailed to confirm the target ALC grade is achieved, or retained, to ensure no loss of BMV land. Given the fine texture of the topsoil (clay and silt), the loose-tipping method is the preferred method for soil handling so to minimise any damage to the soil resource. To avoid risk of soil damage and compaction, bulldozers should not normally be employed for soil stripping or replacement for soils being reused. Soil stockpiles should not exceed 3m in height for topsoils and 5m for subsoils. Although it is sensible to include the reconditioning methodology and the separate handling and storage methodology of soils which may be plastic, every effort should be made to avoid this scenario. Decompaction must be undertaken when the soils are dry and friable (Section 5.11). The target specification for the restored soils for each intended end-use should be clearly set out in the oSMP, with required soil volumes.</p>	

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
Natural England RR-1079	Agricultural land and soils	<p>4.31. We advise that if the development proceeds, the developer uses an appropriately experienced soil specialist to advise on, and supervise, soil handling, including identifying when soils are dry enough to be handled and how to make the best use of the different soils on site. All soils should only be handled in a dry and friable condition, and it is expected that soil handling will be confined to the drier summer period to minimise risk of soil damage (April through September). Soil handling methods should normally be as specified as in the Defra Construction Code of Practice for the Sustainable Use of Soils on Construction Sites (including accompanying Toolbox Talks).</p>	<p>Appendix 6.6 Outline Soil Management Plan (OSMP) [APP-060] of the Environmental Statement (ES) identifies the requirement to appoint an appropriately experienced soil scientist, and how responsibilities of said individual can be revised within the OSMP.</p> <p>Soil handling procedures are described in the OSMP where it is noted that handling soil only in dry conditions is not practical. A range of alternative handling procedures must therefore be identified, with the OSMP being revised where appropriate.</p>
Natural England RR-1079	Air Quality	<p>Nationally designated sites</p> <p>4.1. Natural England is the government's adviser for the natural environment in England and the designating authority for Sites of Special Scientific Interest (SSSI).</p> <p>4.2. Natural England agrees with the five Sites of Special Scientific Interest that have been screened into the air</p>	<p>Further air quality analysis information has been provided and agreed by Natural England. The initial draft Natural England SoCG will be submitted at Deadline 2.</p> <p>Ecological habitats were assessed at worst case locations within 200m of the Affected Road Network (ARN), details of the modelled locations and results are provided in</p>

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
		<p>quality assessment, namely Dallow Downs and Winsdon Hill SSSI, Cowslip Meadow SSSI, Wain Wood SSSI, Galley and Warden Hills SSSI, and Smithcombe, Sharpenhoe and Sundon Hills SSSI. The first four sites are within 5km of the application site and may be affected by air quality changes from increased air traffic. Three of these sites are adjacent to the Affected Road Network (ARN), namely Dallow Downs and Winsdon Hill SSSI, Cowslip Meadows SSSI and Smithcombe, Sharpenhoe and Sundon Hills SSSI and may be affected by air quality changes from increased road traffic. We have requested to see the detailed air quality analysis that has been carried out to determine operational air quality impacts arising from increased air and road traffic on the designated features of these sites. We would like to see consideration of habitats within 200m of the ARN. We consider that the increased use of electric vehicles in future cannot be relied upon as mitigation as it is not definite. We are</p>	<p>Appendix 7.3 Air Quality Results [APP-063] of the Environmental Statement (ES).</p> <p>Emission factors have been taken from the Defra Emission Factor Toolkit v.11.0 (Ref 1). These reflect the latest information from the UK Government on the future fleet mix with respect to EV numbers. It should be noted these are more conservative than the current DfT forecasts for electric vehicle take up, hence the assessment is considered to be conservative.</p> <p>Other conservative aspects have been built into the air quality assessment along with model verification to compare the modelled results with real world concentrations. A robust assessment presenting reasonable worst case effects has been provided. It should also be noted that Natural England were satisfied with the mitigation being proposed, as outlined in the initial draft Statement of Common Ground (SoCG) which is being submitted at Deadline 2.</p>

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
		currently reviewing further information that has been provided to us.	
Natural England RR-1079	AONB	<p>Natural England's overall conclusions</p> <p>3.1. The main issue raised by this application is the lack of information that we require in order for us to make an evaluation of the impact of the proposal on protected landscapes and designated sites in accordance with our statutory remit. We would like to see an assessment of the potential impacts on the special qualities of the Chilterns AONB and a consideration of possible mitigation measures for loss of tranquillity. We are currently reviewing further information regarding air quality impacts for nationally designated sites. We are currently reviewing further information on best and most versatile soils. We have some advisory notes on the assessment of Biodiversity Net Gain and Green Infrastructure. We are awaiting draft protected species licence</p>	<p>A specific assessment of the potential impacts on the special qualities of the Chilterns Area of Outstanding Natural Beauty (AONB) and a consideration of possible mitigation measures for loss of tranquillity will be prepared and submitted to the Planning Inspectorate for consideration during examination. Natural England will also be consulted during the preparation of this assessment as part of ongoing engagement and the final report provided.</p> <p>The Applicant welcomes notes on Biodiversity Net Gain (BNG) and continues to discuss this matter with Natural England. Draft Licence for badgers was submitted to Natural England on the 4 July 2023, draft licence for bats was submitted to Natural England on the 10 July 2023.</p>

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
		applications for bats and badger in order to provide Letters of No Impediment.	
Natural England RR-1079	AONB	4.13. We do recommend that any representations provided by the Chilterns Conservation Board (CCB) are given very careful consideration. The CCB is also a statutory consultee for Nationally Significant Infrastructure Projects so of course their advice carries statutory weight. We would however emphasise that the Board's advice is also backed by its statutory management plan for the AONB and detailed understanding the AONB's landscape character and special qualities and the vulnerability of those to internal and external land use changes. Consequently, their advice is essential to a fully informed determination of this scheme by the examining authority.	<p>Noted.</p> <p>Responses to the representations from the Chilterns Conservation Board (CCB) will be presented as part of the Natural England Statement of Common Ground (SoCG), to be submitted at Deadline 2.</p>

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
Natural England RR-1079	AONB	<p>4.15. The special qualities most likely to be directly affected by this scheme are:</p> <ul style="list-style-type: none"> • Relative tranquillity and peace on the doorstep of ten million people, one of the most accessible protected landscapes in Europe; relatively dark skies, of great value to human and wildlife health; unspoilt countryside, secret corners and a surprising sense of remoteness • Panoramic views from and across the escarpment interwoven with intimate dipslope valleys and rolling fields. We cannot say definitively whether the other special qualities presented in the AONB management plan could be affected and the CCB may have a view on this. 	<p>Noted.</p> <p>Responses to these matters will be addressed as part of the Natural England Statement of Common Ground (SoCG), to be submitted at Deadline 2.</p>
Natural England RR-1079	AONB	<p>4.18. We appreciate that landscape consultants are not necessarily able to consider and model alternative uses of airspace across the AONB (and therefore more widely across the east and south-east of England) to relieve pressure on the AONB. This is, however, a potential mitigation measure which the applicant should be</p>	<p>Airspace change is not part the Proposed Development for which development consent is being sought by this application and therefore not assessed in the Environmental Impact Assessment (EIA) or reported in the Environmental Statement (ES). Future airspace changes will be subject to assessment as required to gain approval.</p>

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
		required to address. Whilst alternatives may prove unworkable for air safety and practical operational	
Natural England RR-1079	AONB	4.19. In relation to air traffic, we would like to know on what basis a flight level of below 7,000 ft above mean sea level has been selected for considering effects on tranquillity within the Chilterns AONB.	Although no airspace change is proposed, Civil Aviation Authority guidance CAP1616 (Ref 2) states changes below 7,000ft above mean sea level should consider any changes to routes and/or traffic patterns that may affect either an Area of Outstanding Natural Beauty (AONB) or a National Park, with specific regard to impacts upon tranquillity. The Department for Transport's Air Navigation Guidance 2017 (Ref 3) also states this altitude when considering aircraft over an AONB.
Natural England RR-1079	AONB	Road traffic impacts 4.20. Increased road traffic generated by the airport expansion scheme could lead to an increase of traffic on minor roads in nearby parts of the AONB. This could be local traffic and drivers 'in the know' displaced onto more minor routes and using rat runs to escape more heavily trafficked main roads. This displaced traffic could impact on	The Surface Access Strategy [APP-228] aims to mitigate the impact of these airport journeys (redistribution of traffic through roads in the Area of Outstanding Natural Beauty (AONB)) through the implementation of a significant package of highway improvements in a phased approach, and flight scheduling to minimise additional journeys during peak highway periods. The modelling work has identified the locations where highway mitigations are

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
		<p>the relative tranquillity of the AONB and create pressures for more road signage, lighting, kerbing and other interventions to enable those minor lanes to carry that traffic safely. That road engineering would alter the character of those lanes and the character of the landscapes they sit within. It would be helpful to know whether this scenario has been considered by the applicant and their consultants.</p>	<p>required in response to the Proposed Development. More detail relating to the proposed highway mitigation designs, including type of mitigation and land required, can be found within the Transport Assessment [APP-200 to AS-123] [APP-205 to APP-206] and Surface Access Strategy [APP-228].</p> <p>These documents have demonstrated that there are no significant impacts on the road network within the Chilterns AONB that require highway mitigation as a result of potential additional vehicular traffic flows generated by the Proposed Development.</p>
Natural England RR-1079	AONB	<p>Chilterns AONB Boundary Review</p> <p>4.21. The proposed NSIP is located within a proposed area of search which Natural England is considering as a possible boundary variation to the Chilterns Area of Outstanding Natural Beauty (AONB). Although the assessment process does not confer any additional planning protection, the impact of the proposal on the natural beauty of this area may be a relevant matter in the determination of the development proposal. Natural England</p>	<p>All areas and relevant receptors within the study area for the Landscape and Visual assessment, including the area in question to the east of the airport, have been assessed and reported in Chapter 14 Landscape and Visual [AS-079] of the Environmental Statement (ES).</p> <p>The development and evolution of alternatives, including environmental considerations, is described in Chapter 3</p>

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
		<p>considers the Chilterns to be a valued landscape in line with paragraph 174 of the National Planning Policy Framework (NPPF). Furthermore, paragraph 176 of the NPPF states that development in the settings of AONBs should be sensitively located and designed to avoid or minimise impacts on the designated areas. An assessment of the landscape and visual impacts of the proposal on this area should be undertaken, with opportunities taken to avoid or minimise impacts on the landscape and secure enhancement opportunities. Any infrastructure development should reflect or enhance the intrinsic character and natural beauty of the area and be in line with relevant National Policy Statements and development plan policies.</p>	<p>Alternatives and Design Evolution [AS-026] of the ES.</p> <p>The proposed infrastructure is not physically in the settling of the existing Area of Outstanding Natural Beauty (AONB) but the design has considered the sensitivity of the landscape including land to the east of the airport. The Landscape and Visual Impact Assessment (LVIA), as set out in Chapter 14 – Landscape and Visual [AS-079] of the ES, has considered aircraft noise and tranquillity in the AONB. Appropriate mitigation to reduce identified impacts in this area has been included in the landscape proposals as part of Proposed Development and further detailed design secure by Requirement of the DCO.</p> <p>In addition, the Applicant acknowledges the proposed search area is one of the options considered for a boundary variation and that it does not confer any additional planning protection. However, a sensitivity test has been undertaken and likely changes to assessment conclusions, should this area gain the additional planning protection as an extension of the AONB, are reported in</p>

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
			Appendix 14.9 Chilterns AONB Sensitivity Test [APP-107] of the ES.
Natural England RR-1079	AONB (Various)	4.22. An extension to an existing AONB is formally designated once a Variation Order, made by Natural England, is confirmed by the Defra Secretary of State. Following the issue of the designation order by Natural England, but prior to confirmation by the Secretary of State, any area that is subject to a Variation Order would carry great weight in decisions on planning and infrastructure proposals. For more information about the boundary review process, please read these Frequently Asked Questions.	<p>The Applicant is aware of the potential Area of Outstanding Natural Beauty (AONB) boundary review project and notes that the Variation Order submission is not anticipated until the end of 2024. The proposals therefore confer no additional planning protection at this time or the during the expected examination and decision timeframe for the Proposed Development.</p> <p>However, a sensitivity test has been undertaken and likely changes to assessment conclusions, should this area gain the additional planning protection as an extension of the AONB, are reported in Appendix 14.9 Chilterns AONB Sensitivity Test [APP-107] of the Environmental Statement (ES).</p>
Natural England RR-1079	Biodiversity	Biodiversity net gain: Advisory only; further clarification and justification for scoring within the metric is required - Amber	Further information will be provided, to be discussed through ongoing engagement.

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
Natural England RR-1079	Designated sites	<p>2. The natural features potentially affected by this application</p> <p>Internationally designated sites Our position regarding impacts on internationally designated sites is summarised below. 2.1. Natural England is satisfied that the proposed development is not likely to result in significant effects on the Chilterns Beechwoods Special Area of Conservation (SAC). Due to the distance between the application site and the Chilterns Beechwoods SAC, there is unlikely to be a significant effect arising from air quality changes at the internationally designated site due to increased aircraft movements or vehicle emissions either alone or in combination with other plans and projects. In addition, there are no other likely impact pathways to notified features, e.g. hydrological changes.</p>	Noted.
Natural England RR-1079	Designated sites	<p>2.13. We note that the development will result in almost the entire loss (93%) of Wigmore Park County Wildlife Site (CWS) and loss of habitat at Dairyborn Scarp District Wildlife Site (DWS)</p>	Noted.

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
		(20%) and Luton Parkway Verges DWS (37%).	
Natural England RR-1079	Designated sites	National designated sites: We have requested to see the full calculation and assessment of impacts on designated sites scoped in to the assessment arising from air quality changes. Further information has recently been supplied. Review of further information by our specialists and consideration of their advice- Amber	Further information provided, to be discussed through ongoing engagement. Natural England confirmed (Statement of Common Ground (SoCG) meeting on 18 July 2023) that they are happy with the additional data provided and will continue to provide advice from specialists on this matter.
Natural England RR-1079	Biodiversity	2.5. Natural England's main area of concern relates to proposed habitats within the new open space provision. This specifically relates to the creation of other neutral grassland at "good condition". Where these habitats include public access, we would advise that the condition scores are downgraded to a more realistic condition. This is due to potential impacts from visitor pressure, differences in soil fertility, as well as uncertainties in the provision of seed	Designated pathways are provided through the other neutral grassland, appropriate signage and routing will help to ensure these are utilised and any impacts to the wider other neutral grassland are minimised. Given that the other neutral grassland within the open space is approximately 20ha, impacts from visitor pressure are likely to have minimal impacts on the condition score of this grassland.

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
		sources/green hay and hydrology. Natural England requests further justification as to why the condition scores have been chosen, as well as more detail regarding measures to manage and mitigate impacts from visitors. Nationally designated landscapes Natural England's position regarding nationally designated landscapes is summarised below. Further detail on our reasoning for this is given in Part II.	<p>If negative impacts do occur, remedial action will be undertaken as detailed in Appendix 8.2 Outline Landscape and Biodiversity Management Plan Revision 1 [AS-029] of the Environmental Statement (ES).</p> <p>As detailed within Appendix 8.5 Biodiversity Net Gain Report [APP-067] of the ES, we would expect all six condition criteria to be passed following the establishment of this habitat. Full details are shown on page 25 of this report.</p> <p>Further information will be provided to Natural England, including in relation to the condition scores, which is being discussed through ongoing engagement.</p>
Natural England RR-1079	Biodiversity	<ul style="list-style-type: none"> • Clarity on the functionality of smaller habitat parcels. This should take into account guidance within the Metric User Guide (provided below).4.9. Specific guidance from the Metric User Guide regarding smaller habitat parcels: 'Principle 8 - The metric does not enforce a minimum habitat size ratio for compensation of losses. However, proposals should aim to: 	<p>The smaller habitat parcels shown within the metric are a result of the Biodiversity Net Gain (BNG) calculation creating artificial splits where the baseline data differs, not the areas of habitat created.</p> <p>As shown in Chapter 14 Landscape and Visual Figures 14.1 – 14.17 [AS-102] of the Environmental Statement (ES), the habitat creation has been designed to provide</p>

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
		<ul style="list-style-type: none"> • maintain habitat extent (supporting more, bigger, better and more joined up ecological networks) and • ensure that proposed or retained habitat parcels are of sufficient size for ecological function' 	<p>substantial blocks of habitat that connect with other semi-natural habitats.</p> <p>With the Defra Metric 3.1 Biodiversity Net Gain (BNG) calculations, the habitat parcels within the created tab have often been split depending on the habitat that currently exists within the baseline. This split is designed to help trace where the habitat has changed i.e. from cropland to other neutral grassland and from tall ruderal to other neutral grassland would be separate entries. The resulting other neutral grassland created, would function ecologically as one habitat.</p>
Natural England RR-1079	Biodiversity	And: '6.4.5. High and very high distinctiveness habitats have very specific environmental requirements to successfully establish. Assessors should prove how these requirements will be met when set as a target outcome in the metric. Evidence provided should include reference to: • habitat size'	<p>Details of the target condition set for all habitats including high and very high distinctiveness habitats, is detailed within section 5.2 of Appendix 8.5 Biodiversity Net Gain Report [APP-067] of the Environmental Statement (ES). The size of the created habitats is detailed within the Defra Metric 3.1 Biodiversity Net Gain (BNG) calculations.</p> <p>Appendix 8.2 Outline Landscape and Biodiversity Management Plan Revision 1</p>

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
			[AS-029] details the monitoring requirements which will be set against these criteria.
Natural England RR-1079	Biodiversity	'6.4.7. Assessors should consider any limiting factors when selecting target habitat type and condition, including: • habitat size and fragmentation'	<p>The target habitat type and condition detailed within Appendix 8.5 Biodiversity Net Gain Report [APP-067], have considered limiting factors. Given the control the applicant has over this land and that long term management for 50 years is proposed, it is considered appropriate to target high value habitats and good condition scores.</p> <p>As shown in Chapter 14 Landscape and Visual Figures 14.1 – 14.17 [AS-102] of the Environmental Statement (ES), the habitat creation has been designed to provide substantial blocks of habitat that connect with other semi-natural habitats.</p>
Natural England RR-1079	Biodiversity - mitigation	4.6. Natural England advises that the condition scoring for proposed woodland creation is reviewed and updated based on the following guidance in the Metric User Guide (Section 3.2.2 and 3.2.3). 3.2.2. If woodland creation is required to compensate for the loss of high distinctiveness woodland, then:	<p>Woodland creation is required and has been provided on a like for like basis as per the Metric User Guide. For simplicity all woodland creation is targeted as lowland mixed deciduous woodland as this most closely resembles the targeted habitat created.</p> <p>With respect to the condition of lowland mixed deciduous woodland, it is expected</p>

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
		<ul style="list-style-type: none"> • a 'like for like' replacement must be provided and input into the metric • target habitat must replicate the woodland type that is being lost • lower distinctiveness woodland habitat types must not be used • a realistic target condition should be set (likely poor condition) Woodland creation <p>3.2.3. If a woodland is being created, and is not replacing the loss of a high distinctiveness woodland, the newly created woodland should be input into the metric as either:</p> <ul style="list-style-type: none"> • Woodland and forest – 'other woodland; broadleaved' or • Woodland and forest – 'other woodland; mixed' or • Woodland and forest – 'other coniferous woodland' 	<p>that the use of specimen trees and appropriate management will create varied structure within these created woodlands. It is also expected that woodland ground flora from adjacent woodland will colonise this newly created woodland over time. It should also be noted that Appendix 8.2 Outline Landscape and Biodiversity Management Plan Revision 1 [AS-029] covers a 50 year period and not the minimum 30 years.</p> <p>Choosing moderate for lowland mixed deciduous woodland does not artificially inflate the BNG score. The full details of the target condition set for all habitats including high and very high distinctiveness habitats, is detailed within section 5.2 in Appendix 8.5 Biodiversity Net Gain Report [APP-067] of the Environmental Statement (ES).</p> <p>Further information will be provided to Natural England, including in relation to the condition scores, which is being discussed through ongoing engagement.</p>

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
Natural England RR-1079	Biodiversity - mitigation	<p>4.8. Natural England also advises that further detail is provided within the proposals to justify the following:</p> <ul style="list-style-type: none"> • The process and reasoning for assigning “medium strategic significance” to relevant habitats. • Further detail regarding creation and enhancement measures for proposed habitats, and the reasoning behind the selection of either approach. 	<p>Medium strategic significance is assigned to all habitats of medium or high strategic significance, which are not within a designated site. These habitats are ecologically valuable habitats and therefore medium strategic significance has been assigned throughout the baseline, creation and enhancement tabs of the Defra Metric 3.1 Biodiversity Net Gain (BNG) calculations. This is based on professional judgement and is consistent with the approach described within the Biodiversity Metric 3.1 user guide (relevant metric for the project).</p> <p>Further information will be provided to Natural England through the Defra 3.1 Metric on the rationale for enhancement rather than creation, BNG is being discussed with Natural England through ongoing engagement.</p>
Natural England RR-1079	Biodiversity-mitigation	<p>2.14. Priority habitats and species are of particular importance for nature conservation and are included in the England Biodiversity List published under section 41 of the Natural Environment and Rural Communities Act 2006. There will be impacts on</p>	<p>Consultation has been undertaken with the local Wildlife Trusts through Technical Working Groups (TWG). During these TWGs the landscape design and mitigation proposals have been shared and comments from the various stakeholders have been incorporated. The Applicant will respond to</p>

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
		priority habitats and species, including arable field margins, lowland calcareous grassland, hedgerows, lowland mixed deciduous woodland and certain invertebrates (i.e. picture-winged fly, the set-aside downy-black beetle and the dingy skipper butterfly). We ask that representations from the local Wildlife Trust are taken into account with regard to these aspects.	representations from the Wildlife Trusts once received as appropriate.
Natural England RR-1079	Biodiversity protected species	Protected Species Mitigation strategies for bats and badger have been agreed but draft licenses are required to be provided by the applicant in order to provide a Letter of No Impediment (LONI) Submission and review of draft licences for bats and badger LONIs Amber	Draft Licences for badgers were submitted to Natural England on the 4 July 2023, draft licences for bats were submitted to Natural England on the 10 July 2023.
Natural England RR-1079	Biodiversity tree loss	Ancient woodland and ancient/veteran trees. Natural England's position regarding ancient woodland and ancient/veteran trees is summarised below. 2.12. Natural England and the Forestry Commission have produced standing advice for planning authorities in relation to ancient woodland and ancient/veteran trees. We note that	Noted. Earthworks have been designed to include an ecological buffer zone to safeguard the Winchhill Wood Ancient Woodland site. The buffer zone includes hedgerow planting, neutral grassland creation and new woodland planting close to the tank farm, as well as a bridleway.

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
		ancient woodland habitats may be impacted by construction dust (where they are within 200m of the construction area) and subject to increased air pollution. We support the relevant representations made by Forestry Commission, including recommendations to plant a buffer strip between the car park and the Winchill Wood Ancient Woodland due to the potential for noise, light and dust pollution and measures to safeguard ancient woodland affected by works at the A1081 roundabout.	
Natural England RR-1079	Biodiversity/BNG	Natural England's position regarding provision of Biodiversity Net Gain (BNG) is summarised below. Further detail on our reasoning for this is given in Part II.2.4. As BNG is pre-mandatory, we are not able to require specific measures. However, there are some aspects of the BNG proposals that we wish to provide advice on.	Noted. The responses set out below address each of the individual comments raised by Natural England under RR-1079 .
Natural England RR-1079	Biodiversity/BNG	Biodiversity Net Gain 4.3. As Biodiversity Net Gain (BNG) is pre-mandatory, we are not able to require specific measures and defer to the responsible body for BNG.	The Applicant is committed to deliver at Biodiversity Net Gain (BNG) through extensive habitat provision and long term management for 50 years, as discussed during the Thematic Working Groups and

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
		<p>However, there are some aspects of the BNG proposals that we wish to provide advice on.</p> <p>4.4. Natural England notes that the applicant is targeting a 10% biodiversity net gain for the proposals and this is welcomed. However, the Oxcam Arc Principles ((download.php(semlep.com))) set out an aspiration for a 20% uplift for NSIPs. Therefore given the scale of the project, Natural England encourages the applicant to consider a more ambitious target that delivers significant gains for nature. We also note that habitats will be managed for 50 years, which is supported. We recommend consideration of a 60 year period for management as this would provide a potential opportunity for a second 30 year uplift for biodiversity net gain, provided additional enhancements were achievable. This could ensure longer-term management of habitats and greater gains for biodiversity.</p>	<p>Stakeholder Engagement and that this is supported in the comment received. This commitment is 20 years above the minimum commitment of 30 years and is considered proportionate to the habitats created. The habitats created have been designed to maximise biodiversity within this timeframe.</p> <p>Whilst it is still not mandatory for NSIPs such as the Proposed Development, the Applicant has set a voluntary ambition of achieving at least 10% BNG which is consistent with the ultimate intention of the Environment Act 2021.</p> <p>With regards to targets for BNG within the Oxford-Cambridge Arc, it is understood that an aspiration for 20% net gain has been set out in the 'Shared regional principles for protecting, restoring and enhancing the environment in the Oxford-Cambridge Arc' document published in March 2021. However, this document states that for NSIPs a minimum of 10% should be delivered.</p>

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
			As such, it is considered that the Applicant's ambition of achieving 10% BNG is proportionate.
Natural England RR-1079	Biodiversity/BNG	4.7. We note that individual trees were not considered within the BNG calculations. The Urban Tree Calculator should be used to assess individual trees that do not contribute towards the definition of another broad habitat type (e.g. woodland) so that they are adequately factored into the overall assessment of net gain. Please refer to section 8.3 of the Metric User Guide for further information.	The majority of trees would form a secondary feature within an existing habitat, so within Biodiversity Net Gain (BNG) the broader habitat type has been recorded within the metric (i.e. scrub, grassland). Section 2.3 of Appendix 8.5 Biodiversity Net Gain Report [APP-067] of the Environmental Statement (ES), states the minimum mappable unit (0.01ha). Individual trees would fall below this threshold and given the site of the Proposed Development it is not considered appropriate to carry out the BNG calculations at a higher level of resolution than has already been calculated.
Natural England RR-1079	Biodiversity/BNG	<ul style="list-style-type: none"> How the orchid translocation and the areas of high invertebrate interest have been accounted for within the BNG calculations. 	The Defra Metric 3.1 Biodiversity Net Gain (BNG) calculations focus on habitats, specific species either flora or fauna are not accounted for within the metric specifically, only the broader habitats in which they reside. Specific habitat creation measures for invertebrates such as creating areas of bare ground and scrapes will be below the minimum mappable unit utilised in this calculation. They will also not be undertaken

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
			in areas that equate to more than 5% of the relevant habitat types (thereby negatively affecting their condition).
Natural England RR-1079	Environmental Impact Assessment (EIA) general	2.19. Natural England's Green Infrastructure Framework provides evidence-based advice and tools on how to design, deliver and manage green infrastructure (GI) and is a useful resource for informing GI provision within the proposals. GI should create and maintain green liveable places that enable people to experience and connect with nature, and that offer everyone, wherever they live, access to good quality parks, greenspaces, recreational, walking and cycling routes that are inclusive, safe, welcoming, well-managed and accessible for all. GI provision should enhance ecological networks, support ecosystems services and connect as a living network at local and regional scales. ⁶	Noted. The Strategic Landscape Masterplan [APP-172] provides high level principles for green infrastructure and provision of the facilities and connectivity suggested. The Landscape Design Principles include Principle 10: Provide opportunities for unstructured or natural play and additional recreational facilities and Principle 13: Provide considered circular walks and include links into wider connections, including multi-user routes and ensuring accessibility to all. The Draft Development Consent Order [AS-005] includes a Requirement to develop further detailed plans reflecting these principles.
Natural England RR-1079	EIA general	4. Part II: Natural England's detailed advice Part II of these representations expands upon the detail of all the significant issues ('red' and 'amber' issues) which, in our view remain outstanding and includes our advice on	Noted.

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
		<p>pathways to their resolution where possible. Part II also shows 'green' issues where a resolution has been reached and subject always to the appropriate requirements being adequately secured. Natural England's advice is that there are a number of matters which have not been resolved satisfactorily as part of the pre-application process that must be addressed by London Luton Airport Limited and the Examining Authority as part of the examination and consenting process before development consent can be granted. Natural England advises that, if approved, the project must be subject to all necessary and appropriate requirements which ensure that unacceptable environmental impacts either do not occur or are sufficiently mitigated. Natural England will continue engaging with the applicant to seek to resolve outstanding concerns throughout the examination. Natural England advises that the matters indicated as 'red' and 'amber' will require consideration by the</p>	

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
		Examining Authority during the examination.	
Natural England RR-1079	Landscape	Access and green infrastructure Natural England's position regarding access and green infrastructure (GI) is summarised below.2.16. Natural England is aware of two large, proposed developments that are adjacent to the airport proposals. This includes Land to the East of Luton which has been allocated as a strategic housing site in Cockernhoe for 2,100 homes within North Hertfordshire District Council's Local Plan (Sites EL1, EL2 and EL3), as well as Land North East of Wandon End (Ref: 22/03231/FP) which is an application for a Solar Farm.	Noted.
Natural England RR-1079	Landscape	2.20. Development should be designed to meet the 15 Green Infrastructure Principles. The Green Infrastructure Standards can be used to inform the quality, quantity and type of green infrastructure to be provided. The proposals should have a GI plan including a long-term delivery and management plan. Strong community	The Strategic Landscape Masterplan [APP-172] provides high level principles for green infrastructure which have taken into account the Green Infrastructure (GI) Principles set out in Natural England's GI Framework. The Draft Development Consent Order [AS-005] includes a Requirement to develop further detailed

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
		engagement regarding the design of the replacement open space provision is also encouraged to maximise its value for the local community.	plans reflecting the GI principles set out in the Strategic Landscape Masterplan. The Applicant will continue to engage with the local community during the Examination in relation to the design of the replacement open space. It is proposed to establish a Community Trust and the replacement open space vested in that Trust, for them to control / manage in perpetuity.
Natural England RR-1079	Landscape	2.18. Opportunities should be sought to link GI provision between these developments to maximise gains for people and nature, and improve connectivity. The design of the replacement open space provision should aim to improve connections with the wider landscape, as well as existing access routes such as the Chiltern Way, in particular opportunities should be investigated to provide off road walking and cycling routes. Opportunities should be taken to reflect and / or enhance local landscape character, drawing on the baseline evidence and recommendations contained within the relevant Landscape Character Assessments	The Proposed Development will seek opportunities to link Green Infrastructure (GI) provision with other developments and the wider landscape. A key landscape design principle of the Strategic Landscape Masterplan [APP-172] is to provide circular walks and include links into wider connections, including multi-user routes and ensuring accessibility for all.

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
		(LCAs) and National Character Profile (NCA). Links to urban fringe areas should also be explored to strengthen access networks, reduce fragmentation, and promote wider green infrastructure.	
Natural England RR-1079	Landscape and Visual Impact Assessment (LVIA)	2.6. The Landscape and Visual Impact Assessment (LVIA) should be supported by an assessment of how the scheme, both in its construction and operational phases, would impact on the defined special qualities of the Chilterns Area of Outstanding Natural Beauty (AONB). These are presented in the AONB's statutory management plan. Natural England advises that a significant adverse impact on a special quality of the AONB would impact on the area's capacity to deliver its statutory purpose.	A specific assessment of the potential impacts on the special qualities of the Chilterns Area of Outstanding Natural Beauty (AONB) and a consideration of possible mitigation measures for loss of tranquillity will be prepared and submitted to the Planning Inspectorate for consideration during examination. Natural England has been consulted on the proposed methodology, and the preparation of this assessment is part of ongoing engagement.
Natural England RR-1079	LVIA	2.7. The applicant should address potential mitigation measures for any identified impacts on the AONB, including loss of tranquillity. Whilst alternatives may prove unworkable for air safety and practical operational reasons, the need to explore such potential mitigation measures is fully	A specific assessment of the potential impacts on the special qualities of the Chilterns Area of Outstanding Natural Beauty (AONB) and a consideration of possible mitigation measures for loss of tranquillity will be prepared and submitted to the Planning Inspectorate for consideration during examination. Natural England has been

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
		justified by the designation status of the Chilterns AONB.	consulted on the proposed methodology, and the preparation of this assessment is part of ongoing engagement.
Natural England RR-1079	LVIA	2.8. We agree with the general conclusion that effects on best and most versatile (BMV) land would be moderate adverse (significant). However, we have requested further clarification of the points below; this has recently been supplied and we will review with our specialists in time for written representations.	Noted.
Natural England RR-1079	LVIA	2.9. We advise that the applicant should provide simple land take breakdowns for each phase and component. For example, total agricultural area impacted by scheme (split by scheme phase and by Agricultural Land Classification (ALC) grade), and total BMV agricultural area permanently and temporarily required for the development (split by phase).	Noted. The responses set out above regarding soils, along with Appendix 6.6 Outline Soil Management Plan [APP-060] , address each of the comments raised by Natural England under RR-1079 on a case-by-case basis.

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
Natural England RR-1079	LVIA	2.10. A soil balance should be prepared to clearly identify the surplus of different soil types and identify opportunities for the sustainable re-use of this resource on site. We advise that the applicant should provide simple soil volume breakdowns for each phase and soil type. For example, total soil volume impacted by scheme (split by scheme phase and by soil type). The balance (soil re-use and surplus) should be consistent with the proposals set out in the outline Landscape and Biodiversity Management Plan (oLBMP).	Noted. The responses set out above regarding soils, along with Appendix 6.6 Outline Soil Management Plan [APP-060] , address each of the comments raised by Natural England under RR-1079 on a case-by-case basis.
Natural England RR-1079	LVIA	National designated landscapes. The applicant should provide an assessment of the impact on the Chilterns AONB special qualities. The applicant should consider what mitigation and/or compensatory measures are available for any identified impacts on the AONB's special qualities. The production of an impact assessment which considers the impact of the development on the relevant special qualities of the AONB. Mitigation measures should be	Noted. The responses set out above regarding soils, along with Appendix 6.6 Outline Soil Management Plan [APP-060] , address each of the comments raised by Natural England under RR-1079 on a case-by-case basis.

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
		considered and clarified. Agreed strategy for the implementation of any reasonably practicable identified mitigation and monitoring measures. Amber	
Natural England RR-1079	LVIA	<p>Nationally designated landscapes</p> <p>4.10. Natural England is the national landscape agency, the Government's advisor on landscape matters and the designating authority for National Parks and Areas of Outstanding Natural Beauty (AONBs). We only provide landscape related planning advice for proposed development schemes affecting designated landscapes. This includes schemes outside but within the settings of designated landscapes which may impact on the designated area itself and the delivery of its statutory purpose. As such, our landscape comments and concerns regarding this scheme relate to the Chiltern Hills AONB and its statutory purpose, which is to 'conserve and enhance the area's natural beauty'. The non-technical summary recognises that: 'The Chilterns Area of Outstanding</p>	Noted.

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
		Natural Beauty (AONB) is located approximately 3km north and 5km west of the airport. The existing airport is a prominent feature in views from much of the surrounding area and is also visible from long distance views from the Chilterns AONB'.	
Natural England RR-1079	LVIA	<p>The scope of Natural England's landscape advice</p> <p>4.11. We are unable to comment on specific, individual assessments of landscape and visual significance because we have not been involved in the preparation of the Landscape and Visual Impact Assessment (LVIA). Despite being a statutory consultee, we have not been included in workshops or other pre-application phase engagement exercises to understand how the assessment has progressed and mitigation measures identified, and to offer relevant advice. Having only been presented with a completed LVIA as part of the DCO submission, we have not carried out any site visits and do not now have the capacity to do so. Consequently, our comments and concerns are high level, pose questions</p>	Noted.

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
		which we believe will clarify matters for ourselves and the examining authority, and address how the AONB and its statutory purpose are dealt with by the LVIA.	
Natural England RR-1079	LVIA	4.12. Some of the issues we are able to raise at short notice may be answered by information contained in the LVIA or elsewhere in the ES, and which other pressures on our time have prevented us from uncovering.	Noted.
Natural England RR-1079	LVIA	<p>Assessing effects on the special qualities of the AONB</p> <p>4.14. The LVIA should be supported by an assessment of how the scheme, both in its construction and operational phases, would impact on the defined special qualities of the AONB. These are presented in the AONB's statutory management plan. Natural England advises that a significant adverse impact on a special quality of the AONB would impact on the area's capacity to deliver its statutory purpose.</p>	<p>Noted.</p> <p>The responses set out above regarding soils, along with Appendix 6.6 Outline Soil Management Plan [APP-060], address each of the comments raised by Natural England under RR-1079 on a case-by-case basis.</p>

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
Natural England RR-1079	LVIA	The core LVIA methodology ^{4.16} . The LVIA methodology correctly assigns a very high value to the AONB it only rates the sensitivity of receptors within the AONB as 'high' rather than very high. It would be helpful to have the process and application of professional judgement used to justify this separately explained, along with consideration of whether and how an increased sensitivity would affect any of the conclusions.	<p>The inclusion of 'very high' within the classification of landscape value acknowledges the presence and importance of the Area of Outstanding Natural Beauty (AONB) within the LVIA study area, identified in Chapter 14 Landscape and Visual [AS-079] of the Environmental Statement (ES).</p> <p>However the presence of the Area of Outstanding Natural Beauty (AONB) does not automatically confer a rating of very high sensitivity to receptors within the AONB. The sensitivity of landscape and visual receptors is derived from a combination of landscape value and susceptibility and classified as low, medium or high, which is in line with guidance set out by the Landscape Institute (LI) and IEMA (refer to Appendix 14.1 LVIA Methodology [AS-036]).</p>
Natural England RR-1079	LVIA	Increased air traffic over the AONB 4.17. We note that the LVIA identifies significant effects from increased air traffic over the designated landscape for the operational phase of the scheme, but that no mitigation is proposed. The table on page 22 of document 5.02 Appendix 14.4 Detailed	The mitigation considered regarding aircraft noise is described in Appendix 16.2 Operational Noise Management (Explanatory Note) [APP-111] , which appears to have been omitted from the second column. There is no practicable additional mitigation identified as part of this Proposed Development. Future airspace

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
		Landscape Impact, identifies a moderate adverse (which is rated significant) residual effect from aircraft movements on the aesthetic or perceptual characteristics of the landscape within the Chilterns AONB.	changes will be assessment as part of a separated approval process.
Natural England RR-1079	Water resources and flood risk	2.15. We advise that representations from Environment Agency are taken into account for any water-dependant priority habitats and species that might be affected.	The Environment Agency has been consulted and their relevant representations have been responded to in this document.
Environment Agency RR-0444	General	<p>Summary</p> <p>These Relevant Representations contain an overview of the project issues which fall within our remit. They are given without prejudice to any future detailed representations that we may make throughout the examination process. We may also have further representations to make when supplementary information becomes available in relation to the project.</p> <p>We have reviewed the draft Development Consent Order (DCO), Environmental Statement (ES) and supporting documents submitted to the Planning Inspectorate on the 27</p>	Noted.

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
		<p>February 2023 as part of the above application. We are pleased that some of the concerns and issues raised by the Environment Agency during pre-application consultation have been considered and addressed. However, there are aspects relating to the assessment and mitigation of groundwater impacts that will require further consideration and remain of particular concern to us.</p>	
Environment Agency RR-0444	General	<p>We would welcome the opportunity to make specific comments on the proposed drainage design during the Examination. The proposed drainage system poses risks to groundwater, surface water flooding, Water Framework Directive compliance.</p> <p>If these concerns are overcome, we consider it will be necessary to include a specific Requirement within the Development Consent Order (DCO) to ensure that the final agreed groundwater protection measures will be implemented.</p>	Noted.

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
		<p>We can confirm at this stage that we consider that the ES provides a satisfactory assessment of the potential impacts of the scheme within our remit, except for the potential impacts to groundwater which we have raised with the applicant and in our comments below.</p>	
Environment Agency RR-0444	Water resources and flood risk	<p>Groundwater protection A potentially significant issue posed by the development is the plan to discharge treated liquid effluent to the ground. The development is located over the Chalk principal aquifer and is within the total catchment area (also referred to as source protection zone 3 (SPZ3)) for groundwater abstractions in the vicinity of the site. SPZ3 is defined as the area around an abstraction within which all groundwater ends up at an abstraction point. Several of the nearby abstractions are utilised for potable water supply including abstractions at East Hyde and Kings Walden. Groundwater will also provide baseflow</p>	<p>The Applicant acknowledges the potential risks to the water environment from the discharge of treated effluent to ground, and the drainage design for the airport is to be further developed at the detailed design state.</p> <p>Table 8.1 of Appendix 20.4 Drainage Design Statement [APP-137] of the Environmental Statement (ES) sets out the design principles to be followed at the detailed design stage. Compliance with this document is secured through Requirement 13 of Schedule 2 of the Draft Development Consent Order [AS-067].</p> <p>Requirement 13 of Schedule 2 of the Draft DCO also notes that 'no part of the authorised development is to commence until</p>

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
		to the Rivers Lee and Mimram located to the west and east of the site respectively. As such, the discharge of treated effluent from the proposed development could pollute the underlying groundwater, potentially impacting upon the viability of groundwater to be utilised as a resource in this area and pollute nearby rivers.	<p>for that part written details of the surface and foul water drainage plan, including means of pollution control and monitoring have been submitted and approved in writing by the relevant planning authority following consultation with the Environment Agency on matters related to its functions.'</p> <p>The Applicant is currently in consultation with Thames Water to determine the feasibility of directing foul water and polluted surface water into the Thames Water foul drainage network for treatment downstream.</p>

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
Environment Agency RR-0444	Water resources and flood risk	<p>The discharge will require an environmental permit and any permit granted will also include specific conditions that will need to be complied to for the lifetime of the discharge. At this time, we are not confident that a permit for the proposed discharge to ground could be granted. If the planned discharge cannot meet the requirements of an environmental permit, then a permit may not be issued. In its current form this proposal is reliant on the assumption that discharging treated effluent to ground will be acceptable, however we feel that our lack of confidence that a permit could be granted is a significant risk to the deliverability of the scheme in its current form. The discharge of treated effluent to ground should never be considered as a routine activity and should only be considered if no other options exist. The Environment Agency will only agree to developments involving release of sewage effluent, trade effluent or other contaminated discharges to ground if it is satisfied</p>	<p>The Applicant acknowledges the potential risks to the water environment from the discharge of treated effluent to ground, and the drainage design for the airport is to be further developed at the detailed design state.</p> <p>Table 8.1 of Appendix 20.4 Drainage Design Statement [APP-137] of the Environmental Statement (ES) sets out the design principles to be followed at the detailed design stage. This includes application for environmental permits.</p> <p>Compliance with this document is secured through Requirement 13 of Schedule 2 of the Draft Development Consent Order [AS-067].</p> <p>Requirement 13 of Schedule 2 of the Draft Development Consent Order [AS-067] also notes that 'no part of the authorised development is to commence until for that part written details of the surface and foul water drainage plan, including means of pollution control and monitoring have been submitted and approved in writing by the relevant planning authority.'</p>

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
		<p>that it is not reasonable to make a connection to the public foul sewer. We are concerned that the applicant has not provided evidence to support that all other options have been explored and exhausted. We are also concerned that if a permit is granted but the discharge does not meet the stringent discharge quality criteria that will be required, given the sensitivity of the groundwater beneath the site, that the discharge to ground will have to be stopped and this could impact the operation of the airport.</p>	<p>The Applicant is currently in consultation with Thames Water to determine the feasibility of directing foul water and polluted surface water into the Thames Water foul drainage network for treatment downstream.</p>
Environment Agency RR-0444	Water resources and flood risk	<p>We also note that the current proposal utilises automated systems to divert potentially contaminated surface water flows for treatment prior to discharge to ground. We are concerned about the ability of these systems to detect relatively low concentrations of hazardous compounds, that are routinely utilised in airport operations, in surface water flows. This could</p>	<p>Noted.</p> <p>The detailed design and operational procedures will be developed to address these issues. The principles are set out in Appendix 20.4 Drainage Design Statement [APP-137] of the Environmental Statement (ES).</p>

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
		potentially result in surface water contaminated with low concentrations of hazardous compounds not being treated and discharged to ground; this is not acceptable, and the Environment agency must take all necessary measures to prevent the input of hazardous substances to groundwater.	
Environment Agency RR-0444	Water resources and flood risk	Volume 5: Environmental Statement – Appendix 20.2: Water Framework Directive Compliance Assessment The Water Framework Directive (WFD) assessment has considered the implications of the main application site and off-site highway works, during both construction and operation, for the Lee (from Luton to Luton Hoo Lakes), Mimram (Whitwell to Codicote Bottom), Hiz (through Hitchin) and the Upper Lee Chalk groundwater body, with these water bodies screened in or out of the preliminary assessment depending on risks. The screening in/out of water bodies for the preliminary assessment didn't raise any concerns. The preliminary assessment detailed that any risk of non-compliance with WFD was reduced to a	Noted.

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
		"low adverse impact" (Table 7.2, page 31-32).	
Environment Agency RR-0444	Water resources and flood risk	As a result of the proposed drainage there is a potential risk of deterioration in groundwater quality, and therefore the risk of deterioration to the Upper Lee Chalk Water Framework Directive (WFD) designated groundwater body. The Upper Lee Chalk water body is classified as Poor for its Chemical (Groundwater) Status, due to a Poor Chemical Drinking Water Protected Area status and Poor General Chemical Test status. When an element is at its lowest status class (which is Poor for groundwater), no further deterioration of these elements is allowed.	<p>The Applicant acknowledges the potential risks to the water environment from the discharge of treated effluent to ground, and the drainage design for the airport is to be further developed at the detailed design state.</p> <p>Table 8.1 of Appendix 20.4 Drainage Design Statement [APP-137] sets out the design principles to be followed at the detailed design stage. This includes the discharge not containing hazardous substances or being polluting.</p> <p>Compliance with this document is secured through Requirement 13 of Schedule 2 of the Draft Development Consent Order [AS-067].</p>

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
			<p>Requirement 13 of Schedule 2 of the Draft DCO also notes that 'no part of the authorised development is to commence until for that part written details of the surface and foul water drainage plan, including means of pollution control and monitoring have been submitted and approved in writing by the relevant planning authority.'</p> <p>The Applicant is currently in consultation with Thames Water to determine the feasibility of directing foul water and polluted surface water into the Thames Water foul drainage network for treatment downstream.</p>
Environment Agency RR-0444	Water resources and flood risk	The proposals haven't adequately demonstrated that there isn't a risk of deterioration to the Upper Lee Chalk WFD designated water body, and therefore associated surface water features including the Lee (from Luton to Luton Hoo Lakes) and Mimram (Whitwell to Codicote bottom) water bodies.	<p>The Applicant acknowledges the potential risks to the water environment from the discharge of treated effluent to ground, and the drainage design for the airport is to be further developed at the detailed design state to minimise these risks.</p> <p>Table 8.1 of Appendix 20.4 Drainage Design Statement [APP-137] sets out the design principles to be followed at the detailed design stage. This includes the discharge not containing hazardous substances or being polluting.</p>

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
			Compliance with these design principles is secured by Requirement 13 of Schedule 2 of the Draft Development Consent Order [AS-067] .
Environment Agency RR-0444	Water resources and flood risk	We would expect to see a detailed WFD assessment of the pollutant load, sensitivity, and quality of receiving water body and certainty of appropriate mitigation at the EIA. As this is expected at a detailed design stage, we would expect the WFD assessment to reflect the need for a more detailed assessment of this risk for both on-site and off-site highway interventions.	<p>The WFD assessment is based on the assumption that the drainage design will be non-polluting.</p> <p>Table 8.1 of Appendix 20.4 Drainage Design Statement [APP-137] sets out the design principles to be followed at the detailed design stage. This includes the discharge not containing hazardous substances or being polluting.</p> <p>Compliance with these design principles is secured by Requirement 13 of Schedule 2 of the Draft Development Consent Order [AS-067].</p>
Environment Agency RR-0444	Water resources and flood risk	Volume 5: Environmental Statement – Appendix 20.5: Water Cycle Strategy We are supportive of the inclusion of the Water Cycle Strategy, and value the intention to maintain potable water consumption at the 2019 baseline level. Failure to recognise and mitigate for the increased water consumption	Noted.

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
		resulting from increased passenger numbers would have resulted in us making a representation toward this aspect of the proposal. This is linked with the Drainage Design Statement, and depending how this is resolved, the Water Cycle Strategy may require updating.	
Environment Agency RR-0444	Water resources and flood risk	Volume 5: Environmental Statement – Appendix 20.1 Flood Risk Assessment We agree that the sequential test has been applied correctly. The proposed development passes the sequential test for Fluvial flood risk but there are areas on site which are at medium or high surface water flood risk and therefore we are in agreement the exception test should be applied.	Noted.
Environment Agency RR-0444	Water resources and flood risk	The site is entirely within flood zone 1 including with the application of climate change. We have no concerns with regards to fluvial flood risk and agree the proposed works are highly unlikely to increase fluvial flood risk. However, there are areas of high surface water risk. We recommend that Luton Borough Council, in their role as lead local flood	The Applicant is engaging with Luton Borough Council. Requirement 13 of Schedule 2 of the Draft Development Consent Order [AS-067] also notes that 'no part of the authorised development is to commence until for that part written details of the surface and foul water drainage plan, including means of pollution control and monitoring have been

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
		authority, are satisfied with the design of the surface water management scheme, although we retain an interest in the destination of the water, given our overview role in flood risk management.	submitted and approved in writing by the relevant planning authority following consultation with the Environment Agency on matters related to its functions.'
Environment Agency RR-0444	Soils and Geology	<p>The development will require permits and consents from the Environment Agency which will need to be considered in the design of the development submitted in the DCO application.</p> <p>The applicant has confirmed the intention to apply for a Deposit of waste for Recovery (DfR) permit and sought to secure agreement in principle from the Environment Agency before DCO submission to support the application. This has not occurred, and no submission has been made by the applicant, which does raise a risk to the delivery of the project. We are concerned that currently the management of waste and materials has been considered under the incorrect legislation. Rather than assessment in line with waste</p>	<p>The position of the Environment Agency is noted.</p> <p>The Applicant will be applying for a DfR permit for recovery of all wastes. A Waste Recovery Plan (WRP) is being finalised with the intention of sending this to the Environment Agency National Permitting team during the early stages of the examination. This is to secure the agreement in principle before embarking on the full DfR permit application. The Environment Agency continues to be engaged and informed, and obtaining the appropriate permit for the works is planned and the risk to the project acknowledged and managed appropriately.</p> <p>The risk assessments and Appendix 17.5 Outline Remediation Strategy [APP-125] which accompany Chapter 17 Soils and Geology [APP-125] of the Environmental Statement (ES) were prepared for the DCO</p>

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
		<p>legislation, it has been considered in line with contaminated land legislation which has a lower bar for environmental protection; to seek betterment, rather than minimise impact. As such, the current proposals would pose an unacceptable risk to the environment and would be undeliverable, however we continue to work with the applicant to resolve these concerns.</p>	<p>submission (planning) and therefore the application of the contaminated land legislation is pertinent. The Environment Agency have previously reviewed and commented on the assessments for the DCO submission as follows: <i>The former Eaton Green landfill has been adequately characterised and risks from contamination adequately assessed and understood for current conditions. The risks will change once construction commences.</i></p> <p>This is recorded in the Statement of Common Ground between London Luton Airport Limited and the Environment Agency, which will be submitted as an initial draft at Deadline 2.</p> <p>The DfR application will be submitted with supporting documentation, a pre-application meeting will be arranged with the Environment Agency to agree the scope of the documentation and any additional monitoring or ground investigation required. The reports will be prepared in line with waste legislation as stated and as required for the permit application and management of works on the landfill. They will reflect the fact the potential risks from the landfill will change</p>

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
			<p>once construction commences (this is acknowledged by the Applicant) and will be addressed by mitigation and control measures agreed with the Environment Agency.</p> <p>The operation of works on the landfill in accordance with the permit which will be regulated by the Environment Agency will ensure the proposals will not pose an unacceptable risk to the environment.</p>
Environment Agency RR-0444	Water resources and flood risk	The applicant is seeking to disapply the requirement to comply with any byelaws made under (or treated as though they are made under) paragraphs 5, 6 or 6A of the Water Resources Act 1991. We do not have any concerns to raise at this stage considering the current proposed development. Approvals are required under legislation which the applicant will apply for at the relevant stage of detailed design. We support that the applicant does not look to disapply the EPR flood risk activities permit requirements and as such will need to	Noted.

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
		engage with us for a permit for the relevant works	
Environment Agency RR-0444	Draft DCO	Requirements – Schedule 2 Paragraph 36 of Schedule 2 relates to discharge of the requirements. The draft states 10 business days, we wish to challenge that this should be 20 business days (15 business days, in addition to the 5 allocated to the LPA to issue the consultation) to better align with the Development Management Procedure Order 2015.	<p>Noted.</p> <p>As is explained more fully in the Explanatory Memorandum [AS-007] the requirements provide a clear procedure for the discharge of requirements by the discharging authority. It sets out clear time limits for decisions to be made and makes provision for circumstances where the discharging authority requires further information for the discharge of a requirement.</p> <p>These time limits are considered necessary to remove the possibility for delay and provide certainty that the authorised development can be delivered in a timely fashion.</p> <p>The Applicant believes that, as an NSIP, the authorised development should not be at risk of being held up due to a failure to respond to an application for consent/approval and that</p>

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
			<p>the proposed time limits are appropriate and justified.</p> <p>Schedule 2, as drafted, reflects the discharge of requirements provisions approved in a number of recently made DCOs.</p>
National Highways RR-1076	SOCG	<p>National Highways has met regularly with the Applicant's surface access transport consultants during the pre-application period and substantial progress has been made in understanding the modelling approach and outputs. This has enabled National Highways to understand the impacts of the proposed Development on the SRN and the adequacy of the proposed design of mitigation works at M1 Junction 10.</p> <p>However, a number of matters remain unresolved, and we have not yet received an agreed Statement of Common Ground, despite requesting this for the past twelve months.</p>	<p>Noted.</p> <p>The National Highways SoCG is currently being updated, with the initial draft SoCG being submitted at Deadline 2.</p>
National Highways RR-1077	Principal concerns	National Highways' principal concerns requiring resolution can be summarised as follows (see 1-5 below):	<p>Noted.</p> <p>Please refer to specific responses below.</p>

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
National Highways RR-1076	Traffic and Transportation	1. The design of the mitigation at M1 Junction 10 to enable the SRN to operate safely and effectively is acceptable, as far as it goes. However, some additional works are believed by National Highways to be required to enable safe operation.	Noted. Luton Rising continues to engage with National Highways on the impacts and design of M1 Junction 10.
National Highways RR-1076	Protective provision	2 Protective provisions have not yet been discussed, although National Highways sent a draft proposal to the Applicant before the DCO application was submitted. It is essential that these are agreed and formalised to ensure that National Highways is able to discharge its duties under the License on behalf of the Secretary of State, particularly in respect of highway safety and commercial matters.	The Applicant is in ongoing discussions with National Highways to address matters raised in its Relevant Representation. Draft protective provisions have been received and are under review.
National Highways RR-1076	Traffic and transportation	3. The potential impact of the (Proposed) Development on adjacent junctions and parallel routes, due to diverting traffic as a consequence of congestion, is not yet fully understood.	The Applicant understands that there is potential for some redistribution of vehicular trips around the local highway network as a result of the Proposed Development. Any significant impacts have been identified through detailed modelled assessments and mitigation proposed.

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
			More details are provided in the Transport Assessment [APP-203 to APP-206] .
National Highways RR-1076	Traffic and transportation	4. The proposal for a traffic monitoring regime to determine the timing of the phasing of implementation works requires further details in terms of its operation and application.	<p>Noted.</p> <p>The ongoing development of the Transport Related Impacts Monitoring and Mitigation Approach (TRIMMA) will set out additional detail on the proposed monitoring regime.</p>
National Highways RR-1076	Traffic and transportation	5. Construction impacts on the SRN are not sufficiently understood and further detail is required in respect of how they will be managed.	<p>The Applicant sets out the proposed construction traffic volumes, management measures and vehicle routing in detail in Section 13 of the Transport Assessment [APP-206].</p> <p>All construction traffic was assumed to access the airport via the M1 and A1081 New Airport Way. A Construction Impacts on Strategic Road Network (SRN) Technical Note has been submitted to National Highways (NH) and subsequent comments from NH have been closed out. The Construction Traffic Management Plan (CTMP) would be worked up in more detail at the construction planning stage when more detailed information is known.</p>

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
National Highways RR-1076	Traffic and transportation	<p>These issues are set out in detail in Annex A of National Highway's letter, which responds directly to the application documents. Annex B responds directly to the (Examining Authority's) Rule 9 letter dated 16 May 2023.</p> <p>We note that, in its further Rule 9 letter dated 13 June 2023, the Examining Authority requested that the Applicant engages with stakeholders, including National Highways, to agree an appropriate methodology for modelling Covid-19 impacts on demand if the transport model is not to be rebased. As this has not been raised with National Highways, we assume that the model will be rebased.</p>	<p>Following the Examination Authority's (ExA's) request in the Rule 9 letters of 16 May and 13 June 2023, the Applicant is engaging with National Highways (NH) and other key stakeholders on the ExA's requirements and the proposed approach.</p> <p>This will include on-going engagement throughout the process.</p>
National Highways RR-1076	Traffic and transportation	<p>National Highways is not yet satisfied that neither the mitigation proposed, nor the timing of delivery, is adequate to deal with the additional pressures arising from the proposed expansion of Luton Airport.</p> <p>NH is keen to resolve the concerns raised within this Relevant Representation to enable the</p>	<p>Noted.</p> <p>The Applicant has continued to engage with National Highways (NH) to address these concerns since the submission of the DCO application and will continue to do so.</p>

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
		development to proceed, whilst safeguarding the safe operation of the SRN.	
National Highways RR-1076	General	<p>DETAILED NATIONAL HIGHWAYS RESPONSE TO LONDON LUTON AIRPORT EXPANSION DEVELOPMENT CONSENT ORDER APPLICATION 23 JUNE 2023 SUMMARY</p> <p>Issues identified during the review of the DCO documents are presented according to the categories in the table below.</p> <p>Categorisation of Review Comments</p> <p>Category</p> <p>Observations - are points for consideration on an issue that would not significantly affect model operation or output.</p> <p>Comments - which may identify particular assumptions, technical approaches or guidance references which may be deemed inadequate but may not influence the result of the analysis. The main function is to highlight such issues for attention in</p>	Noted.

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
		subsequent project stages, or for future projects. substantive issues - which are material issues for National Highways and the SRN that require corrective action.	
National Highways RR-1076	Traffic and transportation	Transport assessment - chapters 1 and 8 The approach and trigger points for monitoring should form part of a condition for the DCO application as this is critical to the timing of infrastructure delivery. – substantive issue	Noted. Whilst the Outline Transport Related Impacts Monitoring and Mitigation Approach (OTRIMMA) as set out in Appendix I of the Transport Assessment [APP-202] sets out the principles for ongoing monitoring, the TRIMMA is being developed in more detail that will set out the triggers and approach. This will be shared with National Highways in due course and prior to examination.
National Highways RR-1076	Traffic and transportation	Transport assessment -chapter 4,9,10. It should be noted that a smart motorway (ALR) as part of capacity enhancements in this area of the SRN will no longer be an option – substantive issue	The Applicant undertook scenario testing in Chapter 14 of the Transport Assessment [APP-206] . This considered the impacts of the Proposed Development in the scenario where no upgrade to the M1 mainline was included and this confirmed that in the absence of ALR and as concluded in the sensitivity test the mitigation strategy continues to mitigate the impacts of the scheme.

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
National Highways RR-1076	Traffic and transportation	Transport assessment - chapter 4. Reference should also be made to the new Department for Transport Circular 01/2022, which needs to be applied – substantive issue	<p>Noted.</p> <p>The new Circular requires that new development should be facilitating a reduction in the need to travel by private car and focused on locations that are or can be made sustainable. The airport currently has a bus interchange and the Luton DART which provide access to a comprehensive network of bus and rail services. As such, and considering the mode share targets which have been set, we consider that the aims of the Circular have been taken into consideration.</p> <p>The Applicant aims to build on the existing provision in the Proposed Development with an extension of the Luton DART to Terminal 2, a new additional bus and coach station at Terminal 2 and restricted growth in car parking spaces which will be supported by Travel Plans. Through the GCG Framework [APP-218] proposals, the Applicant is committed to a series of clearly specified 'Limits' for the lifetime operation of the airport.</p>

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
			Surface access monitoring and controls form one of the key components and breaches of these Limits could result in the airport's ability to grow being limited if appropriate and reasonable actions are not implemented.
National Highways RR-1076	Traffic and transportation	Transport assessment -chapter 5. Are there any car park capacity / utilisation surveys available that provide evidence that this level of car parking is currently fully utilised? Comment	The Applicant does not have peak time car park demand data for 18mppa. However, car park surveys were undertaken in October 2017 to determine arrival / departure profiles and occupancy levels at the various on-site car parks, and these can be discussed with NH as part of our ongoing collaboration.
National Highways RR-1076	Traffic and transportation	Transport assessment - chapter 5. Further analysis would enable NH to understand whether the staff arrival and departure pattern aligns with that of the highways network. Information to be provided on the arrival and departure profile of HGV and LGV deliveries. Comment	Table 9.8 within Chapter 9 of the Transport Assessment [APP-204] sets out the baseline and future year trip generation for staff, and Table 9.9 sets out the AM and PM peak HGV/LGV flows for all with development scenarios. However, an arrival and departure profile across the entire day for both modes has not been created, as the modelling exercise is focused on the typical highway peak periods.
National Highways RR-1076	Traffic and transportation	Transport assessment - chapter 5 Information to be provided on the arrival and departure profile of HGV and LGV deliveries.- comment	As noted above, the Applicant does not have arrival/departure profiles for HGV and LGV. However, the change in passenger numbers has been used to grow the number of HGVs and LGVs as this relates to the number of

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
			flights, which require deliveries of fuel, food etc and the amount of products required in retail and food and beverage.
National Highways RR-1076	Traffic and transportation	Transport assessment - chapter 5- Clarification is sought on the staff mode share numbers -comment	The Applicant requires some further clarification. It is considered that this refers to Chapter 6, but it is not clear what clarification is being sought. The basis of the future year mode share is set out in section 9.5 of the Transport Assessment [APP-204] and Table 9.4 of the same submission shows the public transport mode share assumptions.
National Highways RR-1076	Traffic and transportation	Transport assessment - chapter 7 Details of the three accidents at the junction on the northbound on-slip MI Junction 10 -comment	Noted, the Applicant will discuss this with National Highways in due course.
National Highways RR-1076	Traffic and transportation	Transport assessment - chapter 8 The operating performance of the Phase 2b changes in 2043 cannot be based on assumed ALR being in place. – substantive issue	The Applicant undertook scenario testing in Chapter 14 of the Transport Assessment [APP-206] . This considered the impacts of the Proposed Development in the scenario where no upgrade to the M1 mainline was included and this confirmed that in the absence of ALR and as concluded in the sensitivity test the mitigation strategy continues to mitigate the impacts of the scheme.

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
National Highways RR-1076	Traffic and transportation	<p>Transport assessment - chapter 8</p> <p>The Phase 2b drawings (0029 and 0030) are included within the section 'Future Baseline', as opposed to 'With Airport Development'. It is unclear why this is, as it is assumed the Phase 2b changes in their entirety are a result of, and necessary to accommodate, the airport expansion.</p> <p>Appendix A implies these works will be a 'reference case' change by 2043 irrespective of the airport expansion - comment</p>	<p>The Applicant discussed and agreed this approach with National Highways (NH) as part of the engagement. The approach assumed that improvements to the network would be required in the future baseline by 2043 and that NH was unlikely to address the mainline without consideration for the junction.</p> <p>It is noted that the NH position with regard to future baseline capacity has changed particularly given the pause on Smart Motorways.</p>
National Highways RR-1076	Traffic and transportation	<p>Transport assessment - chapter 8</p> <p>How can diverge flows well over the capacity of a single running lane and diverge point be accommodated safely due to potential drivers changing lanes. – substantive issue</p>	<p>Noted.</p> <p>This is a baseline issue and the Applicant will continue to work with National Highways to agree a way forward. Notwithstanding this, the proposed mitigation strategy for the junction as a whole provides substantial benefits and the assessment of the scheme should be considered in its overall contribution to improving the operation of the network.</p>
National Highways RR-1076	Traffic and transportation	<p>Transport assessment - chapter 8</p> <p>Flows exiting to the A1081 New Airport Way do not differentiate between</p>	<p>The Applicant discussed lane choice and utilisation at M1 J10 during recent engagement with NH, where sensitivity tests</p>

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
		movements continuing along the A 1081 through the London Road interchange and those exiting via London Road to London Road Roundabout – observation	were undertaken to define volumes of eastbound traffic travelling to London Road or continuing along the A1081. The tests differentiated these movements as part of an updated O/D matrix and demonstrated that queuing on the northbound off-slip would not block back onto the M1 mainline. NH were satisfied with the modelling outcomes. A comprehensive signage strategy would be required in the vicinity of M1 J10 to accommodate the proposed changes to the highway layout. These changes to signage would be picked up as part of any ongoing detailed design, with the Applicant willing to continue working alongside NH in developing an acceptable solution.
National Highways RR-1076	Traffic and transportation	A signing strategy, which includes gantries above the northbound exit slip and approaching or above the southern M1 overbridge on the circulatory, to direct drivers to avoid a need for weaving and lane changing after exiting M1 Junction 10, should be conditioned in the DCO. - substantive issue	Noted. A comprehensive signage strategy would be required in the vicinity of M1 J10 to accommodate the proposed changes to the highway layout. These changes to signage would be picked up as part of any ongoing detailed design, with the Applicant willing to continue working alongside NH in developing an acceptable solution.

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
National Highways RR-1076	Traffic and transportation	<p>Transport assessment - chapter 8</p> <p>On the Phase 2b works to the A1081 (Drawing 0029) the centre lane on the A1081 approach may currently be used by drivers routing to the MI (S) or the MI (N). However, with the proposed layout this centre lane becomes a left turn only to the MI (S). Based on the predicted right turn flows to the MI (N) in this scenario, these are shown to be 1,259 vph (AM) and 2,379vph (PM). As such, confining all the MI (N) bound traffic to the outer lane would not be desirable given the PM demand, so it is considered that the centre lane would need to retain the option of 'split' destinations. Comment</p>	<p>As per recent discussions with Nation Highways (NH), it was agreed that minor changes such as these could be accommodated within the design as the project progresses to detail design, The Applicant intends to continue working with NH to develop the detailed design options.</p>
National Highways RR-1077	Traffic and transportation	<p>Transport assessment - chapter 8</p> <p>The AM VISSIM results without ALR implemented show that both slip-road junctions in 2043 are 'critical', with all slip-road lanes operating over practical capacity and close to saturation, as well as those on the circulating section on the northern bridge. Substantive issue</p>	<p>This is a baseline issue and the Applicant will continue to work with NH to agree a way forward. Notwithstanding this, the proposed mitigation strategy for the junction as a whole provides substantial benefits and the assessment of the scheme should be considered in its overall contribution to improving the operation of the network.</p>

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
National Highways RR-1077	Traffic and transportation	Transport assessment - chapter 8 Further details of how the CAA data has been used to derive the future car parking demand and how this relates to the passenger trip generation is requested. Comment	<p>As outlined in Chapter 8 of the Transport Assessment [APP-206]. The Applicant used CAA mode share for car park users and the corresponding annual number of passengers to establish the annual baseline number of car park users.</p> <p>The future number of car park users was based on the future mode share assumptions and corresponding annual number of passengers.</p> <p>The growth between the future and baseline annual car park users was applied to the existing number of car parking spaces to derive future car parking requirements.</p>
National Highways RR-1077	Traffic and transportation	Transport assessment - chapter 8 Comprehensive details of the monitoring methodology are required as well as the trigger points for the implementation of the proposed upgrade phases at the M1 Junction 10. Substantive issue	<p>Noted.</p> <p>The ongoing development of TRIMMA will set out additional detail on the proposed monitoring regime.</p>
National Highways RR-1077	Transport assessment	Transport assessment - chapter 8	The Applicant used 2016 CAA data for the CBLTM-LTN base model and 2017 CAA data for the Vissim base model.

Interested Party and Examination Library Reference	Topic	Matters Raised in Relevant Representation (Verbatim)	Luton Rising's Response
		Could it be confirmed which year of CAA data has been used to derive the baseline? Comment	
National Highways RR-1077	Transport assessment	<p>Transport assessment - chapter 8</p> <p>The requirement to be able to park maintenance vehicles safely will remain following removal of the hatched area of the northbound overbridge on the circulatory, and the facility will need to be re-provided as part of the mitigation design.</p> <p>The ideal location for a new parking bay (layby) would be on the eastern side of the gyratory, close to the A1081 exit. Substantive issue</p>	<p>Noted.</p> <p>It would be possible to accommodate a maintenance parking layby on the eastern side of the gyratory.</p>
National Highways RR-1077	Transport assessment	<p>Transport assessment - chapter 9</p> <p>Details of the transport schemes' modifications are required. Comment</p>	<p>The Applicant provides details of the proposed highway improvements within the Transport Assessment [APP-203 to APP-206].</p> <p>Table 9.2 sets out East Luton Highway Improvements (non-airport expansion related) and Table 8.1 sets out the proposed off-site highway works forming part of the Proposed Development.</p>

National Highways RR-1076	Transport assessment	Transport assessment - chapter 9 Details of the basis of the latest aviation forecasts and the actual schedule produced and/or the number of movements anticipated on the day that the forecasts are based should be provided. Comment	The Applicant gives a full explanation of the basis of the aviation forecasts in the Need Case [APP-213] . It is noted that National Highways (NH) has indicated that these are “sound and sufficiently robust” in its review of the Transport Assessment Appendix I [APP-202] relating to the Need Case.
National Highways RR-1076	Transport assessment	Transport assessment - chapter 9 Confirmation on whether the flight schedule has been agreed with the airport and/or other stakeholders prior to its use in modelling for surface access. Comment	The Applicant notes that the future flight schedule is indicative and based on realistic expectations as to airline operating patterns. These profiles were discussed with the airlines in developing the aviation forecasts during 2018/19. Their basis is explained in section 6 of the Need Case [APP-213] .
National Highways RR-1076	Transport assessment	Transport assessment - chapter 10 It is requested that the Applicant's transport consultant present a comparison of VISSIM, CBLTM-LTN and TEMPRO forecast demands for each modelled scenario. This should include overall network demand, flows on the M1 and turning counts at Junction 10. Substantive issue	The Applicant has provided comparisons of traffic flows from the VISSIM and CBLTM-LTN models to NH. A scenario test was also undertaken which included growth from the strategic model into the VISSIM model which confirmed that the mitigation strategy continues to mitigate the impacts of the scheme. This is reported in Chapter 14 of the Transport Assessment [APP-206] .
National Highways RR-1076	Transport assessment	Transport assessment - chapter 10 The Do Minimum scenarios contain 18mppa at Luton Airport, regardless of the year. This means that VISSIM models have not been presented for the committed	The Do Minimum scenarios are based on the existing level of consented development at Luton Airport, i.e. 18mppa.

		<p>transport network with proposed development demand.</p> <p>This obscures that ability to identify the impact of the proposed development on the existing highway network. Substantive issue</p>	<p>The Do Minimum scenarios do not include any additional highway mitigation in the future year scenarios as it assumes there is no airport expansion.</p>
National Highways RR-1076	Transport assessment	<p>Transport assessment - chapter 10.</p> <p>Observation of the models and subsequent communication with the Applicant's transport consultant indicate that the assignments have not been converged or stabilized for each modelled scenario. This gives rise to some erroneous assignment in the vicinity of Junction 10. Comment</p>	<p>Noted.</p> <p>The Applicant conducted a sensitivity test to achieve a higher level of convergence for the 2043 full development scenarios. The results of the test revealed that the models successfully met the 95% convergence criteria for four consecutive runs for all scenarios in 2043.</p> <p>When comparing the original model to the higher convergence model runs, no significant differences were observed in terms of overall network performance, journey times, and the performance of M1 J10.</p>
National Highways RR-1076	Transport assessment	<p>Transport assessment - chapter 10.</p> <p>The assumption that an ALR (or similar) upgrade will be provided on the M1 means that the 2043 VISSIM models quoted in the Transport Assessment do not represent a realistic forecast scenario.</p> <p>Therefore, NH's confidence in the outputs from the 2043 VISSIM models is undermined. Comment</p>	<p>Chapter 14 of the Transport Assessment [APP-206] presents the findings of scenario tests conducted to assess the impacts of the Proposed Development on the M1 corridor in the CBLTM-LTN strategic model, assuming no capacity upgrades.</p> <p>In May 2023 following a request from National Highways, a sensitivity test was carried out using the VISSIM model to</p>

			<p>evaluate the operational effects of no future upgrades to Junction 10 of the M1 in the baseline scenario.</p> <p>This work and its findings were not included in the DCO report, however, have been shared with National Highways as part of the on-going engagement.</p>
National Highways RR-1076	Transport assessment	<p>Transport assessment - chapter 14</p> <p>The VISSIM data in the powerpoint provided to NH indicate that, without ALR, the model shows some congestion impacts during the AM period.</p> <p>The Phase 2b scheme does deliver an improvement in performance at the roundabout compared to the situation with no mitigation implemented.</p> <p>However, this benefit is limited by the fact that southbound merge is overloaded in both the Do Minimum and Do Something models. Substantive issue</p>	<p>The VISSIM sensitivity test shows consistent AM peak hour performance with increased throughput in the with Full development.</p> <p>In the PM peak hour, the "without Full Development" scenario is limited due to low demand flows and network constraints.</p> <p>However, the "with Full Development" scenario significantly increases throughput, reducing queues and maintaining acceptable delay and LoS levels.</p>
National Highways RR-1076	Transport assessment	<p>Transport assessment - chapter 14</p> <p>The 2043 the VISSIM models demonstrate significant amounts of congestion in each of the model scenarios. This is in part due to the impact of off-network delays on the M1 main carriageway that are simulated in the model. In each of the 2043 non-ALR VISSIM tests, the southbound merge is over capacity and generates congestion. In the PM periods this congestion is sufficient</p>	<p>The VISSIM sensitivity test shows consistent AM peak hour performance with increased throughput in the with Full development.</p> <p>In the PM peak hour, the "without Full Development" scenario is limited due to low demand flows and network constraints.</p> <p>However, the "with Full Development" scenario significantly increases throughput, reducing queues and</p>

		to lock up the entire model. Substantive issue	maintaining acceptable delay and LoS levels.
National Highways RR-1076	Transport assessment	Transport assessment - chapter 14 It would be useful to have a table showing flow differences between the two scenarios shown in Figure 14.1 and Figure 14.2. Observation	The Applicant notes that flow differences are shown in Table 14.21 and 14.24 of the Transport Assessment [APP-206] for the AM and PM peak respectively.
National Highways RR-1076	Transport assessment	Transport assessment - chapter 14 - For several of the tables/figures (Figure 14.1, Figure 14.2 Figure 14.3, Table 14.21, Table 14.22, Table 14.23, Table 14.24 and Table 14.28) there are no units. Are these numbers in PCU's or vehicles? There is also no indication of whether they are actual or demand flows. Could this be confirmed? comment	The Figures show PCUs/hour flow differences, and the Tables are in vehicles per hour. All reported flows are 'actual'.
National Highways RR-1076	Transport assessment	Transport assessment - Chapter 14 NH needs to understand the impact of removing ALR on Junction 9 as the text indicates that traffic would reduce on the mainline carriageway and divert to the local road network. Therefore, it is likely that traffic will leave the M1 at Junction 9. At present, NH have only seen Saturn forecasts for Junction 9 with ALR. The impact on Junctions 9, 1 1 and 1 1a of traffic diverting to the A5 to avoid congestion should also be understood. Substantive issue	The Applicant undertook scenario testing in Chapter 14 of the Transport Assessment [APP-206] . This considered the impacts of the Proposed Development in the scenario where no upgrade to the M1 mainline was included and this confirmed that in the absence of ALR and as concluded in the sensitivity test the mitigation strategy continues to mitigate the impacts of the scheme.
National Highways RR-1076	Transport assessment	Transport assessment - Chapter 14. NH would request to be part of the ATF and the FTP steering groups in order that	The Airport Transport Forum (ATF) is comprised of representatives from local authorities, National Highways, and

		they are able to monitor the impacts of the development. Observation	public transport operators. It is intended that forum attendance is encouraged from National Highways going forward.
National Highways RR-1076	Transport assessment	Transport assessment _ Appendix B What are differences between the M2 Tag old and new versions and what are the likely impacts on the Proposed Development? Comment	M2 TAG was current at the time of preparing the Strategic Modelling: Model Specification Report in 2018. It is anticipated that there are likely to be little or no impact on the development of the variable demand model.
National Highways RR-1076	Transport assessment	Transport assessment - Appendix I The full details of the proposed traffic monitoring methodology should be set out in the TRIMMA. There is insufficient detail provided for NH to accept the monitoring and delivery approach to highway capacity interventions on the SRN. Substantive issue	Noted. The ongoing development of TRIMMA will set out additional detail on the proposed monitoring regime.
National Highways RR-1076	Traffic and transportation	Framework travel plan - The FTP approach will need to be secured through a planning condition. NH will also need to agree to the approval of each TP produced, which should be produced in line with prevailing policy and best practice - substantive issue	No part of the authorised development is to be operated until a travel plan for the operation of the authorised development has been submitted to and approved in writing by the relevant planning authority as set out in the Draft Development Consent Order [AS-005] , as specified by Requirement 30. The Applicant and Operator are currently developing a suitable and effective funding mechanism that best responds to the vision and objectives of the Surface Access Strategy, and realising Sustainable Transport Opportunities. Further details will be shared during the

			<p>course of the examination, following further consultation with relevant stakeholders on the details of the Sustainable Transport Fund.</p> <p>It is the role of the relevant planning authority (Luton Borough Council) to discharge applications under Requirement 30 and approve periodic TPs produced by the airport operator. LBC will ensure that feedback from the relevant highway authorities and National Highways, through the ATF has been accounted for in the production of each Travel Plan (TP).</p>
National Highways RR-1076	Traffic and transportation	Framework travel plan - chapter 2 Reference should also be made to the DfT Circular 01/2022. Observation	Noted.
National Highways RR-1076	Traffic and transportation	Framework travel plan - chapters 2 and 7 Luton has an active ATF and, as indicated later in the FTP, NH should be invited to join this ATF as a statutory consultee. Observation	The Airport Transport Forum (ATF) is comprised of representatives from local authorities, National Highways, and public transport operators. It is intended that forum attendance is encouraged from National Highways going forward.
National Highways RR-1076	Traffic and transportation	Framework travel plan - chapter 3 Acknowledging the TP is a framework, it does not provide any real detail of the existing surface access situation. The FTP is effectively a standalone document to inform future phased TPs and at this stage it should demonstrate what the base situation is. Observation	<p>Noted.</p> <p>The Transport Assessment [APP-203 to APP-206] provides a detailed description of the existing surface access context.</p>

National Highways RR-1076	Traffic and transportation	Framework travel plan - chapter 4 NH should be consulted on the CAA data and the related targets to prior to approval to confirm an acceptable approach has been applied. Observation	<p>As stated within the Framework Travel Plan [APP-229] submitted by the Applicant, the future TP will be produced every 5 years using the last 5 years of CAA data from the annual monitoring surveys.</p> <p>As part of the Travel Plan monitoring consultation will be undertaken to determine whether any mitigation is required and the appropriate mitigation to improve sustainable travel. This could be via the Airport Transport Forum or similar.</p>
National Highways RR-1076	Traffic and transportation	Framework travel plan - chapters 4,6 and 7 NH will require additional information on how the % targets translate into actual reductions in airport generated vehicle numbers (including freight), on and around the SRN, how these will be monitored and how they relate to any proposed highway interventions to be set out in the TRIMMA. Comment	<p>The Transport-Related Monitoring and Mitigation Approach (TRIMMA), developed from the Outline TRIMMA (refer to the Transport Assessment Appendices – Part 3 of 3 (Appendices G – M) [APP-202] will include detail on the required monitoring and reporting related to traffic flows and congestion, focused on the localised impacts and required mitigation identified by the Transport Assessment.</p> <p>The Travel Plans produced every 5 years will include further detail on interventions and measures to encourage sustainable travel by passengers and staff.</p>
National Highways RR-1076	Traffic and transportation	Framework travel plan - chapter 4 NH will need to be consulted on any review of targets within each TP prior to approval	The Applicant set out the Travel Plan targets within the Framework Travel Plan [AS-131] . These are more

		and to understand the reason for any change, ensure they remain suitably ambitious and that agreed commitments or measures have been reasonably delivered in accordance with each phased TP. Observation	ambitious than the Green Controlled Growth (GCG) limits and will be monitored every 5 years.
National Highways RR-1076	Traffic and transportation	Framework travel plan chapters 4, 6,7 Any reports monitoring progress against targets should be submitted to NH for review prior to approval. Observation	It is the role of the relevant planning authority (Luton Borough Council) to discharge applications under Requirement 30 and approve periodic Travel Plans (TP) produced by the airport operator. LBC will ensure that feedback from the relevant highway authorities and National Highways, through the ATF has been accounted for in the production of each TP.
National Highways RR-1076	Traffic and transportation	Framework travel plan - chapter 5 The long list of measures and proposed toolkit approach for future phased TPs to draw upon is noted. Prior to approval, each phased TP submitted should provide a more detailed assessment of the proposed measures to be implemented and the level of sustainable mode shift they are expected to deliver. Observation	Noted. Future phased Travel Plans will provide more detail on the measures and interventions selected to be implemented for that particular TP, in line with the Targets proposed.
National Highways RR-1076	Traffic and transportation	Framework travel plan - chapters 6 and 7 NH should be consulted on the proposed staff survey, monitoring and data collection methodology prior to the approval of each subsequent phased TP to ensure a consistent approach is adopted. Observation	The Applicant is committed to working with local stakeholders through the Travel Plan process. The Applicant has produced a Framework Travel Plan [AS-131] that outlines the process of engagement for future Travel Plan (produced every 5-years). This includes consultation through the Airport Transport Forums, which provides a

			mechanism to engage with National Highway on monitoring and data collection as well as future mitigation proposals.
National Highways RR-1076	Traffic and transportation	Environmental Statement - chapter 4 Confirmation of the highways boundary and land take is required for the improvements to M1 J 10, particularly to the west of the junction. 'Off-Site Highway Interventions' state that all works occur within highway estate boundaries, however specific work order descriptions do not explicitly confirm this. Comment	The proposed works to M1 J10 have been designed to fall within the existing highway boundary, with the exception of the construction compound to the immediate south-west of the junction.
National Highways RR-1076	Environmental Statement - compounds	Environmental Statement - chapter 4 Management and operation of the construction compound, such as any Section 61 applications, expected Traffic Management arrangements, and site lighting (in the absence of other street light sources on Half Moon Lane) should be detailed. Comment	The Code of Construction Practice referred to in Chapter 4 [APP-031] and provided as Appendix 4.2 to the Environmental Statement (ES) [APP-049] describes the proposed measures to manage environmental effects of construction including section 61 application, traffic management and lighting.
National Highways RR-1076	Environmental Statement - compounds	Environmental Statement - chapter 6 The precise footprint of the construction compound(s) is not clear, nor the nature of any permanent land-take. Comment	Chapter 6 Agricultural Land Quality and Farm Holdings [APP-146] of the Environmental Statement (ES) contains sufficient information to undertake the assessment. There is no permanent land take for the construction compound at J10 of the M1. Further detail on land to be acquired temporally and/or permanently is shown in the Land Plans and Crown Land Plans [AS-011 and AS-024] .

National Highways RR-1076	Environmental Statement - compounds	Environmental Statement - chapter 8 The Applicant should cross-check the proposals against the strategic objectives of any updated NH Plan as the asset landowner, or through direct consultation. Comment	Noted. As final proposals develop they can be reviewed against the latest NH Plan and NH can be consulted.
National Highways RR-1076	Traffic and transportation	Environmental Statement - chapter 9 NH requires that the final M1 Junction 10 design is, or can be compliant with, appropriate drainage standards and climate change scenarios. Observation	The final M1 Junction 10 design will be designed to be compliant with appropriate drainage standards and climate change scenarios.
National Highways RR-1076	PROW	Environmental Statement chapter 14 The nearby public right of way FP12 is shown on figures as being close to the M1 Junction 10 works, but does not appear to be specifically assessed in the chapter. Comment	FP12 is to the south east of J10 of the M1. Users are not expected to experience impacts due to the Proposed Development therefore were not included within the assessment. The receptors considered within the landscape and visual assessment were agreed with Central Bedfordshire Council (CBC) and the wider LVIA Working Group and are described in section 14.4 of Chapter 14 Landscape and Visual [AS-079] of the Environmental Statement (ES).
National Highways RR-1076	LVIA	Environmental Statement - chapter 14 As a result of consultations in 2022 with CBCe and the Applicant, two additional visual receptors affected by the M1 J10 works were agreed for inclusion within ES scope. There is no apparent reference to the additional receptors requested by the	The additional receptors included as a result of discussions with CBC regarding the works at J10 of the M1 were users of Bridleway 1 and users of Half Moon Lane, near J10 of the M1. Both are included in Chapter 14 Landscape and Visual [AS-079] of the Environmental Statement (ES) and Appendix 14.5

		Council incorporated within the visual assessment chapter. Comment	Detailed Visual Assessment [AS-087] of the ES in the same way as any other visual receptors, no specific reference is required.
National Highways RR-1076	Noise	Environmental Statement - chapter 16 It is assumed that noise assessment examined only the effects of the construction of the highway improvements and did not include the effects of the construction compound. Confirmation of this is sought. Comment	The methodology for the construction noise assessment is based on current industry standard approach and is presented in Section 16.5 of Chapter 16 of the Environmental Statement (ES) [AS-080] and details of the works that are included in the assessment are presented in Section 5 of Appendix 16.1 Noise and Vibration Information [AS-096] of the Environmental Statement (ES). As set out in this appendix, the assessment is based on reasonable worst-case activities that are likely to generate the highest noise levels during construction. In line with this methodology, the construction compound has not been assessed due to the relatively minor works required, limited duration of noisy works and distance to the nearest sensitive receptors. Measures included within the Code of Construction Practice [APP-049] will be sufficient to manage noise and vibration emissions from the construction compound.
National Highways RR-1076	OCTMP	Outline Construction Traffic Management Plan (CTMP) - Appendix 18.3 A full CTMP will need to be secured through a planning condition stating that prior to the commencement of the	The Draft Development Consent Order [AS-005] requires that development of any part of the Proposed Development may not commence until the Construction Traffic Management Plan

		development, a CTMP and a phasing plan shall be agreed and approved in writing with the LPA/ highways authorities / NH. Substantive Issue	(CTMP) for that part has been approved by the relevant planning authority, following consultation with the relevant highway authority.
National Highways RR-1076	OCTMP	<p>Outline Construction Traffic Management Plan (CMTP) - Appendix 18.3</p> <p>It would be useful to have more information and mapping of any identified sensitive routes, areas or populations that could be restricted to construction traffic and have potentially divert traffic onto the SRN.</p> <p>Further information is required on complex areas where traffic management could be needed on the SRN and adjoining local road network e.g. junctions, structures.</p> <p>Comment</p>	<p>By seeking to limit construction traffic to the SRN, sensitive areas will be avoided as far as reasonably practicable.</p> <p>The Applicant is aware of the air quality issues along the A602 in Hitchin, hence construction traffic which does not have a local origin will be discouraged from using this route.</p> <p>As referred to in an earlier response, complex temporary traffic management measures will be agreed with relevant highway authorities following the appointment of the leading contractor and during the design process.</p>
National Highways RR-1076	OCTMP	<p>Outline Construction Traffic Management Plan (CMTP) - Appendix 18.3</p> <p>It will be the responsibility of the Applicant and lead contractor to monitor the execution of the approved CTMP and report back to NH and others via the TMWG to advise on mitigation, updates to programme and any proposed changes to the CTMP for approval. Observation</p>	<p>The lead contractor will appoint a senior member of staff who will be the designated liaison officer responsible for the implementation, day-to-day management, and monitoring of the approved CTMP, but the overall monitoring will lie with the TMWG which will include amongst its members, the Applicant and representatives from the relevant highway authorities that accept the invitation to join.</p>

National Highways RR-1076	OCTMP	<p>Outline Construction Traffic Management Plan (CMTP) - Appendix 18.3</p> <p>Paragraph 4.1.3 states 300 movements at peak but 'Construction Impacts on Strategic Road Network - Technical Note' (Arup, March 2023) talks of over 460 two-way movements during peak construction please clarify which is correct. Comment</p>	<p>The figure of over 460 two-way movements during peak construction matches the figure for the daily number of construction vehicles shown in paragraph 18.9.45 of Chapter 18 Traffic and Transportation [AS-030] of the Environmental Statement (ES) when it is factored by two to reflect total movements on the highway network.</p> <p>The values in the Technical Note and the Environmental Statement should be taken as a more accurate indication of peak traffic levels.</p> <p>The figure in the Outline Construction Traffic Management Plan [APP-130] would be superseded when the Construction Traffic Management Plan (CTMP) is produced and the lead contractor's work programme is known.</p>
National Highways RR-1076	OCTMP	<p>Outline Construction Traffic Management Plan (CMTP) - Appendix 18.3</p> <p>Section 4.2 Routeing of Construction Traffic - more details of routing on the SRN and local adjacent network, construction traffic volumes and times of delivery will need to be agreed through the eventual approved CTMP prior to commencement. Observation</p>	Noted.
National Highways RR-1076	OCTMP	Outline Construction Traffic Management Plan (CMTP) - Appendix 18.3	The Applicant believes it would be premature to get into this level of detail before a lead contractor was appointed.

		More specific details of temporary traffic management on the SRN and local adjacent network will need to be agreed in the approved CTMP. Observation	The more specific details of temporary traffic management on the SRN and local adjacent network would be agreed as part of the detailed CTMP when the lead contractor's methodology has been determined.
National Highways RR-1076	OCTMP	<p>Outline Construction Traffic Management Plan (CMTP) - Appendix 18.3</p> <p>An approved monitoring plan of volumes, type, delivery times and numbers of arrivals outside of allocated slots. Monitoring plan to be agreed in the approved CTMP and all information will need to be made available to National Highways via the TMWG. Observation</p>	<p>Noted.</p> <p>Appendix 18.3 Outline Construction Traffic Management Plan [APP-130] includes a proposal for a Traffic Management Working Group to be formed as a forum for stakeholder engagement during construction (refer to Section 3 of the Outline Construction Traffic Management Plan [APP-130]). A detailed CTMP, substantially in accordance with the Outline CTMP, will be prepared and submitted for approval by the relevant local planning authority following approval of the DCO. This is secured by Requirement 14 of the Draft Development Consent Order [AS-005].</p>
National Highways RR-1076	OCTMP	<p>Outline Construction Traffic Management Plan (CMTP) Appendix 18.3</p> <p>More details for proposed abnormal loads, communication /engagement plans and proposed mitigation will need to be agreed in the approved CTMP. This will need to be monitored and all information to be shared with NH via the TMWG. Observation</p>	Noted.

National Highways RR-1076	OCTMP	Outline Construction Traffic Management Plan (CTMP) - Appendix 18.3 Analysis of existing safety and collision data on key construction routes should be provided in the outline CTMP and then updated in the approved CTMP. Comment	The Applicant has reported existing safety and collision data in the Transport Assessment [APP-203 to APP-206] and it is not considered that it is necessary to include this in the CTMP.
National Highways RR-1076	OCTMP	Outline Construction Traffic Management Plan (CTMP) - Appendix 18.3 Initial information should be provided now of proposed data to be collected, the area of interest and specific locations within it. A detailed monitoring plan will then need to be agreed in the approved CTMP prior to commencement. This will need to include, but not limited to: • Agreed monitoring area of interest • Pre-construction data collection • Volumes, type and speed of traffic • Safety • Reducing carbon emissions • Wider impacts of traffic management • All data to be analysed and reported to National Highways via TMWG	Although preferred construction routes have been proposed in the Outline Construction Traffic Management Plan [APP-130] , these are subject to agreement with the relevant highway authorities. Until they have been agreed the monitoring area of interest cannot be defined. The Traffic Management Working Group, which National Highways will be invited to join, will have the opportunity identify the issues that should be included in the monitoring process.
National Highways RR-1076	OCWTP	Outline Construction Workers Travel Plan (CWTP) - Appendix 18.4 A full CWTP will need to be secured through a planning condition stating that prior to the commencement of the development, a CTMP and phasing plan shall be agreed and approved in writing with the LPA / highways authorities / NH. Substantive issue	The Applicant has produced and submitted an Outline Construction Workers Travel Plan [APP-131] as part of the Environmental Statement to identify key matters that will need to be considered by the lead contractor during the logistical planning and execution of the construction works. As stated in the OCWTP, a CWTP for each part of the Proposed Development will be prepared by the lead contractor, substantially in

			accordance with this Outline CWTP, and will be submitted for approval from the relevant planning authority (in consultation with the relevant highway authority) prior to the commencement of the Proposed Development, as required by the Development Consent Order. The CWTP would be agreed with the relevant highway authorities (prior to construction commencement) once a contractor has been appointed and the construction methodology/programme is defined in detail.
National Highways RR-1076	Protective provision	Protective Provisions. Agreement to a set Protective Provisions is essential to enable National Highways to discharge its duties under the Infrastructure Act (2015) on behalf of the Secretary of State for Transport. It is requested that these are incorporated into the finalised DCO to afford National Highways with sufficient protection in respect of the safe operation of the SRN and its commercial position. Substantive Issue	<p>The Applicant is in ongoing discussion with National Highways to address matters raised in its Relevant Representation.</p> <p>Draft protective provisions have been received and are under review.</p>
National Highways RR-1076	Protective provision	Book of Reference Land ownership and temporary/permanent acquisition issues to be discussed and agreed between the parties' legal advisors as part of the Protective Provisions. Substantive Issue	Draft protective provisions have been received and are under review.
National Highways RR-1076	Protective provision	N/A Commuted Lump Sum for maintenance of the M1 Junction 10 mitigation works to be calculated and	Draft protective provisions have been received and are under review.

		agreed as part of the Protective Provisions. Substantive Issue	
National Highways RR-1076	Transport assessment	<p>Transport Assessment - 1. Introduction Paragraph 1.1.4 sets out the key elements of the Proposed Development including 'further infrastructure enhancements and initiatives to support the target of achieving zero emission ground operations by 2040.'</p> <p>Paragraph 11 of the DfT Circular 01/2022 reiterates National Highways (NH's) support of achieving Net Zero; 'Alongside this, the company has an important role to play in the drive towards zero emission transport through its commitment to net zero maintenance and construction emissions by 2040 and net zero road user emissions by 2050, and its role as a statutory consultee in the planning system.'</p> <p>NH notes that there are assessment phases (set out in Paragraph 1.1.16), notwithstanding that the development will be brought forward in increments which may differ from the assessment phases. Although the Applicant references a monitoring approach in the application, it lacks detail on how it would operate and be managed. NH seeks to understand how the development will be monitored with reference to the trip generation and phasing of the junction improvements to M1 Junction 10, which are critical to its safe and efficient operation.</p> <p>NH is keen to understand how monitoring will differentiate the background growth</p>	This monitoring approach is under consideration and will be reported on in due course.

		and traffic associated with the Proposed Development. NH believes that the detailed approach and specific trigger points for monitoring should form part of a condition for the DCO application as this is critical to the timing of infrastructure delivery.	
National Highways RR-1076	Transport Assessment	<p>4. Transport Planning Background It is noted that paragraph 4.11 makes reference to Road Investment Strategy 2 (RIS2) which sets out the five-year strategy for investment and management of the Strategic Road Network (SRN) up to March 2025.</p> <p>It should be noted within this report that no reference is made in RIS2 to any proposed or future pipeline schemes on the M1 at junction 10, including All Lane Running (ALR) or any other capacity enhancement. Furthermore, following the recent Government announcement 'Plans for new smart motorways cancelled' (17th April 2023), it should be noted that an ALR smart motorway solution to providing capacity enhancement to the south of junction 10 will no longer be an option. It should further be noted that that it was also announced on 17th April that the existing pipeline of major schemes will be deferred to RIS 4 (2030-35). Whilst reference has been made to the Department for Transport Circular 02/2013, reference should also be made to its</p>	Noted.

		replacement, the Department for Transport Circular 01/20223.	
National Highways RR-1076	Traffic and transportation	<p>5. Highway Network</p> <p>Paragraph 5.6.2 states that the 'the Short, Mid and Long stay car parks provided a total of 10,550 spaces for passengers, pre-Covid-19-pandemic. T</p> <p>This level of car parking was required at the point when the airport reached its permitted capacity of 18 mppa.' It is noted that this level of car parking has now been reduced to 9,055. It is also noted in the car parking forecasts submitted by the Applicant (September 2021) that 9,717 car parking spaces are required for the Do Minimum scenario 18mppa. Are there any car park capacity / utilisation surveys available that provide evidence that this level of car parking is currently fully utilised?</p>	<p>Noted.</p> <p>On-site car park surveys were undertaken as part of the baseline data gathering exercise and these can be discussed with NH as part of ongoing collaboration.</p>
National Highways RR-1076	Transport Assessment	<p>Tables 6.8 and 6.14 illustrate the number of staff arrivals and departures during the AM and PM peak period.</p> <p>Due to the 24-hour nature of the airport operations, it would be useful to understand the breakdown of arrival and departures of staff over the duration of a day. Table 6.8 table indicates that no staff depart during the AM peak hour. Further analysis would enable NH to understand whether the staff arrival and departure pattern aligns with that of the highways network.</p>	<p>The Applicant does not have a daily profile of staff arrivals and departures as the impact analysis is focussed on the highway peak hours. The airport operations involve day workers and 24 hour shift workers. Since shift workers do not impact on the highway peak hours, the TA only considers the day workers. It was assumed that 60% of day workers arrived in the morning peak hour, and 45% departed in the evening peak hour. The Applicant does not have a daily profile of arrivals and departures of HGV</p>

		Similarly, it would be useful to understand the arrival and departure profile of HGV and LGV deliveries as it would be anticipated that many of these deliveries are re-timed to outside of the highways network peak hours which could form part of the mitigation/delivery and servicing plan.	and LGV, as again, the impact analysis is focused on the highway peak hours.
National Highways RR-1076	Transport Assessment	Table 6.14 sets out the staff arrivals. This shows an arrival total of 459 and departure of 344. The staff mode share is then set out in Table 6.15. This gives a total of 465 arrivals and 348 departures. It is unclear why the numbers vary. Furthermore, it is indicated that the staff mode shares are based on table 6.4, this gives a total of 59% 'car driver alone'. When applied to 465, this equates to 274 'car driver alone' trips where, as table 6.15 indicates, this is 271. Clarification is sought on the staff mode share numbers.	The small variation in numbers is due to rounding in the calculation. The staff mode split is based on Table 6.4 as stated in the Transport Assessment [APP-203 to APP-206] . The difference between the numbers in Tables 6.14 and 6.15 is immaterial, and the numbers in Table 6.15 which are carried through to the impact analysis are higher.
National Highways RR-1076	Transport Assessment	7. Personal Injury Collision Data Analysis of the accident data at the M1 Junction 10 indicates that the highest number of collisions in any one location (three) in 2019 was on the northbound on-slip. It would be useful to NH to have further details of these to understand the pattern of these three accidents and whether there is an underlying safety issue at the northbound on-slip.	The Applicant does not have the causation details for the accidents, as in line with typical practice this was not required for the Transport Assessment [APP-203 to APP-206] . The Applicant confirms that the proposed schemes have been designed with consideration Design Manual for Roads and Bridges (Ref 4), Manual for Streets (Ref 5) and relevant local authority standards, however the Applicant would

			work with the relevant local authorities following approval of the DCO in developing the highway mitigation schemes.
National Highways RR-1076	Transport Assessment	<p>8. Development Proposals</p> <p>Chapter 8 of the Transport Assessment describes the development proposals and how these are expected to evolve during Phases 1,2a and 2b. With regard to Phase 2b, it is noted the proposed changes rely on the introduction of ALR on the southbound M1 to the south of Junction 10, by removing the existing hard shoulder. The Applicant has been advised in ongoing discussions with NH since January 2022 that the operating performance of the Phase 2b changes in 2043 cannot be based on an assumption that ALR (or similar capacity enhancement) has been implemented, for the reasons explained in the response to Section four in this Annex. Within Appendix A, it is also noted that the Phase 2b drawings (0029 and 0030) are included within the section 'Future Baseline', as opposed to 'With Airport Development'. It is unclear why this is, as it is assumed the Phase 2b changes in their entirety are a result of, and necessary to accommodate, the airport expansion. However, this grouping in Appendix A implies these works will be a 'reference case' change by 2043 irrespective of the airport expansion.</p>	<p>The Applicant undertook scenario testing in chapter 14 of the Transport Assessment – Part 4 of 4 (Chapters 11-16) [APP-206]. This considered the impacts of the Proposed Development in the scenario where no upgrade to the M1 mainline was included and this confirmed that in the absence of ALR and as concluded in the sensitivity test the mitigation strategy continues to mitigate the impacts of the scheme.</p>

		National Highways believes that this should not be assumed to be the case.	
National Highways RR-1076	Transport Assessment	Section 8.5 'Road Traffic Forecasts' refers to the VISSIM modelling undertaken to indicate the robustness of the mitigation measures at M1 Junction 10. As part of ongoing dialogue with Applicant's surface access consultant, additional LinSig modelling was requested for M1 Junction 10 and comments on these results are also included here in assessing the adequacy of the highway changes to the SRN presented in Chapter 8 of the Transport Assessment. In terms of this infrastructure, comments based on both examination of the Appendix A plans and this additional LinSig modelling are included in the subsequent comments.	Noted.
National Highways RR-1076	Transport Assessment	During the AM peak hour, the volume diverging from the M1 northbound mainline to the northbound exit slip-road to M1 Junction 10 is predicted in 2043 with airport growth to be 2,974 vehicles per hour (vph), and 2,516vph in the PM peak hour. However, the existing main-line northbound carriageway on approach to Junction 10 has four lanes, all of which continue through the interchange. Therefore, the diverge to the exit slip-road is limited to the nearside lane, even though two lanes emerge on the slip-road shortly after the initial exit point and run parallel for 200m before the nose to the taper is reached.	<p>Noted.</p> <p>The 2043 core modelling assumed a 5-lane section thereby enabling two lanes to effectively exit the motorway.</p> <p>In the absence of any upgrade to the baseline network for the motorway, the identified issue would be a baseline issue and we understand that National Highways are considering how this could be addressed. The Applicant will continue to work with National Highways to agree a way forward.</p>

		<p>It is thus unclear how diverge flows well over the capacity of a single running lane (approximately 1800vph) and diverge point are to be accommodated safely.</p> <p>Accommodating this level of exit flow will encourage and in fact necessitate driver 'swooping' across from mainline Lane 2 to Lane 1, with these drivers then required to force access into the parallel 2-lane slip-road length between the nearside lane diverge point and the 'nosing' (200m).</p> <p>This would cause potential road safety issues. If proposals are predicated on the northbound hard shoulder being used to provide a fifth lane and nearside 'lane drop' then this again is an invalid assumption.</p>	
National Highways RR-1076	Transport Assessment	<p>Flows exiting to the A1081 New Airport Way do not differentiate between movements continuing along the A1081 through the London Road interchange and those exiting via London Road to London Road Roundabout. As the nearside of the three lanes on this length of the A1081 is marked and signed for Harpenden/St Albans, and the outer two lanes for Luton and the airport, it is not inconceivable that signage would be extended to M1 Junction 10 to avoid weaving between the exit from M1 Junction and the London Road exit.</p> <p>This could influence the lane choice taken by drivers on both slip-roads, with the nearside lane in both cases potentially underutilised, certainly by airport bound</p>	<p>The Applicant discussed lane choice and utilisation at M1 J10 during recent engagement with NH, where sensitivity tests were undertaken to define volumes of eastbound traffic travelling to London Road or continuing along the A1081. The tests differentiated these movements as part of an updated O/D matrix, and demonstrated that queuing on the northbound off-slip would not block back onto the M1 mainline. NH were satisfied with the modelling outcomes.</p> <p>A comprehensive signage strategy would be required in the vicinity of M1 J10 to accommodate the proposed changes to the highway layout. These changes to signage would be picked up as part of</p>

		<p>traffic. This potential outcome is not reflected in the LinSig modelling, with resultant usage of the three lanes on each slip-road relatively 'balanced' in both peak hours, particularly on the northbound slip-road.</p> <p>Given the forecast level of overall exit flow to the A1081 is expected to be circa 5,000vph in the AM peak hour, and just over 4,000vph in the PM peak hour, and due to the complexity of the road layout, National Highways wishes to see a signing strategy which includes gantries above the northbound exit slip and approaching or above the southern M1 overbridge on the circulatory to direct drivers to avoid a need for weaving and lane changing after exiting M1 Junction 10. Whilst this is a matter for detailed design, it is important that the principle is conditioned in the DCO to ensure the safe and efficient operation of the junction following implementation of the works.</p>	<p>any ongoing detailed design, with the Applicant willing to continue working alongside NH in developing an acceptable solution.</p>
National Highways RR-1076	Transport Assessment	<p>NH is concerned about the Phase 2b works to the A1081 (Drawing 0029) as the centre lane on the A1081 approach may currently be used by drivers routing to the M1(S) via the main roundabout give-way line or the M1(N). However, with the proposed layout this centre lane becomes a left turn only to the M1(S).</p> <p>Based on the predicted right turn flows to the M1 (N) in this scenario, these are shown to be 1,259vph (AM) and 2,379vph</p>	<p>The Applicant agreed in recent discussions with NH that minor changes such as these could be accommodated within the design as the project progresses into detail design. Sensitivity testing using LinSig has highlighted that such a change would not negatively affect the modelled performance of the junction.</p>

		(PM). As such, confining all the M1(N) bound traffic to the outer lane would not be desirable given the PM demand, so it is considered that the centre lane would need to retain the option of 'split' destinations.	The Applicant would be willing to continue working alongside NH in developing the options.
National Highways RR-1076	Transport Assessment	<p>It is noted that each of the Do Minimum modelling scenarios contains 18mppa (current demand) at Luton Airport, regardless of the year. This means that VISSIM models have not been presented for the committed transport network with proposed development demand.</p> <p>For future years, the M1 Junction 10 infrastructure proposals are included, but the associated demand growth since the baseline year is not included. For example, for 2043, all phases of the improvement scheme are included, but demand growth associated with Phase 1 and Phase 2a are not. This obscures the ability to identify the impact of the proposed development on the existing highway network as it would be at that time.</p> <p>To summarise, the main concern with both peak hour scenarios in 2043 (and so the final Phase 2b mitigation proposals at M1 Junction 10) is the lack of network resilience or identified 'spare' capacity to deal with problems if driver behaviour and effective utility of all available capacity provided is not perfect.</p> <p>Furthermore, in the absence of any comparative 'Reference Case' modelling for 2043, as described in the previous</p>	<p>The Applicant has described the approach to do-minimum modelling above in previous responses.</p> <p>Reference case modelling was not requested but would only be for the existing junction and for the existing configuration, and would therefore be difficult to provide as a direct comparator. With regard to spare capacity, it is evident from all of the modelling undertaken that M1 Junction 10 would fail to operate in the do-minimum scenarios even in the absence of the DCO scheme. There are clearly baseline issues which result in network problems and a lack of resilience cannot be attributed to the DCO proposals. The DCO proposals mitigate the impacts of the proposed scheme.</p>

		<p>paragraph, it cannot be determined as to whether this outturn situation is better or worse than a situation without the airport expansion and 'committed' growth. In other words, the 'nil detriment' or ideally betterment situation cannot be evaluated, as only the 'development case' can be judged. Lack of network resilience as forecast in only a 'development case' is therefore a concern.</p>	
National Highways RR-1076	Transport Assessment	<p>Further to the comment on Section 5 relating to car parking capacity. It is noted that additional coach, taxi and car parking drop off/parking spaces are being provided as part of the development proposals. It is indicated that the requirements for the number of spaces is calculated based on Civil Aviation Authority (CAA) passenger mode share data. Future details of the numerical analysis indicating how the demand for spaces/drop offs has been derived without any existing car park utilisation surveys is requested.</p> <p>Also, further details of how the CAA data has been used to derive the future car parking demand and how this relates to the passenger trip generation is requested.</p>	<p>The baseline principle for the future surface access facilities is that the facilities provided in 2019 were what was required to support 18mppa.</p> <p>The calculation of the future year surface access facilities including car parking were calculated using the method described in previous responses.</p>
National Highways RR-1076	Transport Assessment	<p>Paragraph 8.3.20 sets out that; 'this highway mitigation is embedded into design of the Proposed Development and the assessment has been undertaken on the basis that the mitigation would be required in line with the assessment phases of passenger growth to 21.5 mppa,</p>	Noted.

		27 mppa and 32 mppa. The actual phasing of their delivery will be determined by the on-going monitoring with delivery of any mitigation adjusted to address the requirements of the scheme.'	
National Highways RR-1076	Transport Assessment	As previously set out in this response (under Section 1), a comprehensive monitoring methodology is required by National Highways, including the trigger points for the implementation of the proposed upgrades to M1 Junction 10. Paragraph 8.4.6 notes that CAA data has been used to derive the origin and destination of passenger trips. Could it be confirmed which year of CAA data has been used to derive the baseline?	2016 CAA Origin-Destination data was used.
National Highways RR-1076	Transport Assessment	<p>An additional requirement for a maintenance location bay at M1 Junction 10 needs to be addressed within the mitigation design. At present, National Highways' Technology Managing Agent Contractor (Tech MAC) utilises the hatched area on the northern overbridge of the circulatory carriageway to park vehicles involved in maintaining technology assets at the junction.</p> <p>The mitigation design involves the hatched area becoming a traffic lane to create the required additional capacity. The requirement to be able to park maintenance vehicles safely will remain and the facility will need to be re-provided as part of the mitigation design. The ideal location for a new parking bay (layby)</p>	<p>Noted.</p> <p>The Applicant notes it would be possible to accommodate a maintenance parking layby on the eastern side of the gyratory.</p> <p>This can be included within the scheme layout as the detailed design progressed.</p>

		would be on the eastern side of the gyratory, close to the A1081 exit.	
National Highways RR-1076	Transport Assessment	<p>9. Modelling Methodology It is stated in Paragraph 9.4.8 that some transport schemes would be further modified, and this is described in Chapter 9. It is not clear in which section of Chapter 9 this is contained. Clear details of the modifications should be provided to NH. Paragraph 9.4.9 indicates that NH would need to consider measures to address the existing constraints on the M1 corridor. It is acknowledged that there is no committed scheme but noted that any upgrade is likely to be a smart motorway as opposed to full motorway widening. It is also noted that 'through discussion with National Highways a capacity upgrade has been included in the 2043 Future Baseline between M1 Junctions 9 and 10.'</p>	<p>Whilst Table 9.2 of the Transport Assessment – Part 3 of 4 (Chapters 9 – 10) [APP-205] sets out the East Luton Study (non-airport related) highway improvements, the Applicant notes that Table 8.1, section 8 of Transport Assessment – Part 2 of 4 (Chapters 5 – 8) [AS-123] -sets out the proposed off-site highway mitigation measures, which include improvements to the East Luton Study measures.</p>
National Highways RR-1076	Transport Assessment	<p>As set out in the earlier comments in this response due to the Government announcement a smart motorway (ALR) in this location has been ruled out. Furthermore, as noted, there is no committed scheme for this location included in the current RIS, nor a pipeline scheme for RIS3/4, and it should not be assumed that this will be in place.</p>	<p>The Applicant undertook scenario testing in chapter 14 of the Transport Assessment – Part 4 of 4 (Chapters 11-16) [APP-206]. This considered the impacts of the Proposed Development in the scenario where no upgrade to the M1 mainline was included and this confirmed that in the absence of ALR and as concluded in the sensitivity test the mitigation strategy continues to mitigate the impacts of the scheme.</p>

National Highways RR-1076	Transport Assessment	<p>10. Highway Capacity Assessments</p> <p>NH has reviewed the Transport Assessment and the VISSIM models submitted by Arup, the Applicant's surface access consultants, to review Chapter 10. The following VISSIM models have been reviewed by Jacobs on behalf of National Highways:</p> <ul style="list-style-type: none"> • 2024 Do-Minimum (18mppa) • 2024 Do-Something Assessment Phase 1 (21.5mppa) • 2039 Do-Minimum (18mppa) • 2039 Do-Something Assessment Phase 2a (27mppa) • 2043 Do-Minimum with assumption of capacity increase on M1 (18mppa) • 2043 Do-Something with assumption of capacity increase on M1 and Assessment Phase 2b (32mppa) 	Noted.
National Highways RR-1076	Transport Assessment	<p>Following an initial review of the VISSIM models, it was identified that Arup had included a capacity upgrade (ALR) on the M1 in the 2043 forecast scenarios. This included increasing vehicle speeds on the M1 and provision of an additional lane on both the northbound and southbound carriageways. NH reiterated its advice that there is no committed capacity upgrade for the M1 at this location. As there is no committed scheme on the M1, no capacity upgrade should be included in the VISSIM models, as per DfT TAG forecasting guidelines.</p>	<p>The Applicant undertook scenario testing in chapter 14 of the Transport Assessment – Part 4 of 4 (Chapters 11-16) [APP-206]. This considered the impacts of the Proposed Development in the scenario where no upgrade to the M1 mainline was included and this confirmed that in the absence of ALR and as concluded in the sensitivity test the mitigation strategy continues to mitigate the impacts of the scheme.</p>

National Highways RR-1076	Transport Assessment	<p>In response to this, Arup prepared a new set of VISSIM models (11/04/23) without a capacity upgrade on the M1. Referred to by Arup as 'sensitivity test' models, they simulate the existing layout of the M1. Therefore, this review of the VISSIM information in the Transport Assessment also includes the following information:</p> <ul style="list-style-type: none"> • 2023-04-04 VISSIM Sensitivity test – No M1 ALR. Sent to Jacobs by Arup via email on 06/04/23. • 2043 Do-Minimum without M1 capacity increase (18mppa). Sent to Jacobs by Arup via file transfer on 11/04/23. • 2043 Do-Something Assessment Phase 2b highway infrastructure (32mppa). Sent to Jacobs by Arup via file transfer on 11/04/23. 	Noted.
National Highways RR-1076	Transport Assessment	<p>Forecast Flows</p> <p>Paragraph 9.1.2 of the Transport Assessment (TA) states that one purpose of the strategic model is to provide growth forecasts for the VISSIM model. However, Figure 9.1 shows the forecasting process for the VISSIM model, which features no input from the strategic model. Para 9.4.12 states 0.5% growth per annum has been added to motorway through traffic, with 0.25% growth per annum to internal roads. Section 14 of the TA indicates that the CBLTM-LTN SATURN flows are around 5% higher than VISSIM demands. This leads to concern that the VISSIM model may have been prepared using an</p>	<p>It is unclear where the reference in Section 14 is taken from, however, the Applicant has previously provided traffic flow information on flows through J10 to NH which shows that the demand through J10 is higher in the VISSIM modelling than in the strategic model. This can be provided again.</p>

		<p>underestimate of forecast demand. 17 of 38</p> <p>It is requested that ARUP present a comparison of VISSIM, CBLTM-LTN and TEMPRO forecast demands for each modelled scenario. This should include overall network demand, flows on the M1 and turning counts at Junction 10.</p>	
National Highways RR-1076	Transport Assessment	<p>Configuration of Modelled Scenarios</p> <p>As noted previously, each of the Do Minimum scenarios contains 18mppa at Luton Airport, regardless of the year. This means that VISSIM models have not been presented for the committed transport network with proposed development demand. This obscures the ability to identify the impact of the proposed development on the existing highway network.</p>	<p>The Do Minimum scenarios are based on the existing level of consented development at Luton Airport, i.e. 18mppa. As such, the Do Minimum scenarios do not include any additional highway mitigation in the future year scenarios as it assumes there is no airport expansion.</p>
National Highways RR-1076	Transport Assessment	<p>Model Assignment</p> <p>Analysis of the assignment convergence and stability in the VISSIM models has not been presented within the Transport Assessment. Observation of the models and subsequent communication with Arup indicates that the assignments have not been converged or stabilised for each modelled scenario. This gives rise to some erroneous assignment in the vicinity of Junction 10. As an example, Figure 1 illustrates unrealistic route choice with regard to the left turn from the A1081 to the southbound on-slip at M1 Junction 10.</p>	<p>A sensitivity test was undertaken by the Applicant to achieve a higher level of convergence for the 2043 full development scenarios. The results of the test revealed that the models successfully met the 95% convergence criteria for four consecutive runs for all scenarios in 2043. Additionally, when comparing the original model to the higher convergence model runs, no significant differences were observed in terms of overall network performance, journey times, and the performance of M1 J10.</p>

			No further concerns in this regard were raised by National Highways.
National Highways RR-1076	Transport Assessment	<p>Network Coding</p> <p>A review of the VISSIM model coding indicates that the capacity of the southbound merge at Junction 10 may have been overestimated. Figure 2 shows that the physical capacity of the merge has been overestimated, with vehicles overlapping lane markings and each other.</p>	<p>The layout of the southbound merge is identical to the layout agreed in the validated Base year model which has already been agreed with National Highways.</p> <p>No modifications have been made to the layout or driving behaviour for any of the future year tests or this sensitivity test.</p> <p>It is important to note that in the existing (2017) AM peak hour there is existing queuing occurring at this location and it was calibrated with great attention to replicate actual behaviour and queuing. Additional journey time surveys were undertaken at this location to ensure that the model is calibrated and validated well against observed behaviour.</p> <p>No further concerns in this regard were raised by National Highways.</p>

National Highways RR-1076	Transport Assessment	<p>Figure 3 below indicates the impacts of unrealistic speed distributions in the model. Vehicles emerging from the southbound off-slip at Junction 10 have desired speeds of up to 69mph, whilst vehicles on the main carriageway have maximum speeds set as low as 18mph.</p> <p>Within Figure 3, the vehicles in yellow on the southbound carriageway have vehicle speeds capped at around 41.9 mph, whilst the vehicles highlighted in green are those emerging from the slip road that have a desired speed of up to 69mph. Within the model, this means that vehicles in the left hand lanes are coded to travel up to 50 mph faster than the right hand 3 lanes. This leads to unrealistic undertaking and merging. Overall, it is considered that the capacity of the southbound merge has been overestimated within the VISSIM model.</p>	<p>The Do Something impacts should be compared back to the Do Minimum impacts. These have shown that generally speaking, the Do Something with the scheme and mitigation performs in line with or better than the Do Minimum.</p> <p>It should also be noted that Green Horizons Park (GHP) has only been included in the Do Something (given the link to AAR) but not the Do Minimum and therefore the Do Something always overestimates the scheme impacts.</p>
------------------------------	----------------------	--	---

National Highways RR-1076	Transport Assessment	<p>VISSIM Outputs</p> <p>Paragraph 10.2.34 of the Transport Assessment states that it is assumed that by 2043 there will be a scheme in place on M1 to 'unlock' the mainline and J10. However, as previously explained, there is not a committed scheme for this part of the M1. Neither is there a planned (pipeline scheme). Therefore, National Highways does not consider this to be a safe assumption.</p> <p>The assumption that an upgrade will be provided on the M1 means that the 2043 VISSIM models quoted in the Transport Assessment do not represent a realistic forecast scenario. Therefore, NH's confidence in the outputs from the 2043 VISSIM models is undermined. A powerpoint presentation was prepared by Arup and issued to NH on 06/04/23, the purpose of which was to present the findings of the non-ALR VISSIM model tests. The overall network in this VISSIM data indicates that, without ALR, the model shows some congestion impacts during the AM period. The Phase 2b scheme does deliver an improvement in performance at the roundabout compared to the situation with no mitigation implemented. However, this benefit is limited by the fact that southbound merge is overloaded in both the Do Minimum and Do Something models</p>	<p>This is a baseline issue and the Applicant will continue to work with National Highways to agree a way forward. Notwithstanding this, the proposed mitigation strategy for the junction as a whole provides substantial benefits and the assessment of the scheme should be considered in its overall contribution to improving the operation of the network.</p>
------------------------------	----------------------	---	--

National Highways RR-1076	Transport Assessment	<p>It is noted that the VISSIM models demonstrate significant amounts of congestion in each of the model scenarios. This is in part due to the impact of off-network delays on the M1 main carriageway that are simulated in the model. Figure 5 shows the typical level of congestion in the 2043 DS models without the assumed ALR on the M1. This is illustrated by the purple colouring on the M1 southbound slip-road. Figure 5: 2043 DS AM No-ALR – Congestion on Southbound on-slip and blocking back through the Local Road Network</p> <p>It is noted that in each of the 2043 non-ALR VISSIM tests, the southbound merge is over capacity and generates congestion. In the PM periods this congestion is sufficient to lock up the entire model.</p>	<p>This is a baseline issue and the Applicant will continue to work with National Highways to agree a way forward. Notwithstanding this, the proposed mitigation strategy for the junction as a whole provides substantial benefits and the assessment of the scheme should be considered in its overall contribution to improving the operation of the network.</p>
National Highways RR-1076	Transport Assessment	<p>Summary of VISSIM Review</p> <p>Notwithstanding the issues identified with the VISSIM models, it appears that the Phase 2b Junction 10 roundabout layout can accommodate the demand that reaches it in the 2043 AM period. It is more difficult to draw a judgement from the VISSIM Model in the PM period due to the level of congestion, blocking and gridlock in these models. The VISSIM model indicates that with the Phase 2b layout in place the southbound merge at Junction 10 will be over capacity in 2043 with no ALR. This leads to extensive congestion and blocking back from the SRN to the Local Road</p>	Noted.

		Network. In the AM period, this appears to be in part due to capacity on the M1 main carriageway. Whilst in the PM period, the congestion appears to originally generate on the on-slip itself.	
National Highways RR-1076	Transport Assessment	The lack of a Do Minimum network with proposed airport demand from the previous airport upgrade phases makes it difficult to isolate the impact of development trips and therefore to establish whether congestion on the southbound merge is sufficiently mitigated. The configuration of modelled scenarios also makes it difficult to pinpoint the timing at which mitigation would be required in order to accommodate airport demand on the SRN.	The Do Something impacts should be compared back to the Do Minimum impacts. These have shown that generally speaking, the Do Something with the scheme and mitigation performs in line with or better than the Do Minimum. It should also be noted that Green Horizons Park (GHP) has only been included in the Do Something (given the link to AAR) and not the Do Minimum and therefore the Do Something always overestimates the scheme impacts.
National Highways RR-1076	Transport Assessment	14. Scenario Testing For comments on chapter 14 please also refer to NH's comments on chapter 10 above. Figure 14.1 and Figure 14.2 show the AM and PM peak comparison of traffic flows for the sensitivity test without ALR. NH request a table showing flow differences between the two scenarios.	The Applicant notes that flow differences are shown in Table 14.21 and 14.24 of the Transport Assessment – Part 4 of 4 (Chapters 11 – 16) [APP-206] for the AM and PM peak periods respectively
National Highways RR-1076	Transport Assessment	For several of the tables/figures (Figure 14.1, Figure 14.2 Figure 14.3, Table 14.21, Table 14.22, Table 14.23, Table 14.24 and Table 14.28) there are no units. Are these numbers in Passenger Car Units (PCUs) or vehicles? There is also no indication of whether they are actual or demand flows. NH requires clarity on these points.	The Figures show PCUs/hour flow differences and the Tables are in vehicles per hour. All reported flows are 'actual'.

National Highways RR-1076	Transport Assessment	<p>It is indicated in Paragraph 14.3.10 that the removal of the increased motorway capacity assumption, introduced to simulate ALR or a similar capacity upgrade, reduces traffic on the M1 corridor particularly in the southbound direction between Junction 10 and Junction 9 with traffic diverting to other local routes. NH would like to understand what impact the removal of ALR has on Junction 9 as the text indicates that traffic reduces on the mainline carriageway and diverts to the local road network. Therefore, it is likely that more traffic will leave the M1 at Junction 9 without a mainline capacity enhancement being in place. Furthermore, congestion on the M1 in the vicinity of Junction 10 may lead to additional traffic using the A5 as an alternative between Junctions 9 and 11 or 11a. The potential scale for these movements and the potential impacts should be understood.</p>	<p>The Applicant undertook scenario testing in chapter 14 of Transport Assessment – Part 4 of 4 (Chapters 11 – 16) [APP-206]. This considered the impacts of the Proposed Development in the scenario where no upgrade to the M1 mainline was included and this confirmed that in the absence of ALR and as concluded in the sensitivity test the mitigation strategy continues to mitigate the impacts of the scheme.</p>
National Highways RR-1076	Transport Assessment	<p>15. Residual Impacts It is noted that monitoring will be managed through the Airport Transport Forum (ATF) and by the Travel Plan Co-ordinator role to be established as part of the Framework Travel Plan (FTP) and future Travel Plans. NH indicated previously that it would like to be part of the ATF and the FTP steering groups in order that they are able to monitor the impacts of the development. However, resource input into these forums will need to be addressed as part of</p>	<p>The Applicant is committed to working with local stakeholders through the Travel Plan process. The Applicant has produced a Framework Travel Plan that outlines the process of engagement for future Travel Plan (produced every 5-years). This includes consultation through the Airport Transport Forums, which provides a mechanism to engage with National Highway on monitoring and data collection as well as future mitigation proposals. The Applicant</p>

		discussions about protective provisions (see later section of this Annex).	welcomes further discussion on this and clarification of resource input required.
National Highways RR-1076	Transport Assessment	Appendix B: Strategic Modelling - Model Specification Report It should be noted that the latest M2 TAG unit was released in May 2020, the latest unit M4 was published in April 2020 and the latest data book is dated January 2023. NH requests to know the differences between the M2 TAG old and new versions and the likely impact on the Proposed Development? 22 of 38	The Applicant notes that the M2 TAG was current at the time of preparing the Strategic Modelling: Model Specification Report in 2018. It is anticipated that there are likely to be little or no impact on the development of the variable demand model.
National Highways RR-1076	Transport Assessment	Appendix I: Outline Transport Related Impacts Monitoring and Mitigation Approach National Highways is particularly interested to understand how the Proposed Development traffic will be distinguished from the background traffic on the SRN, and at M1 Junction 10 in particular. Paragraph 2.2.1 'monitoring of growth (in traffic volumes) due to increases in airport related vehicular traffic would be required at a number of physical locations both at the airport and externally on the highway network.' As set out the response to Chapter 1 above, comprehensive details of the proposed methodology should be set out in the Transport Related Impacts Monitoring and Mitigation Approach (TRIMMA). There is insufficient detail provided for NH to accept the monitoring and delivery approach to highway capacity interventions on the SRN.	Noted. Whilst the OTRIMMA as set out in the Transport Assessment Appendices – Part 3 of 3 (Appendices G – M) [APP0202] sets out the principles for ongoing monitoring, the TRIMMA is being developed in more detail that will set out the triggers and approach. This will be shared with National Highways in due course.

National Highways RR-1076	Need case	<p>THE NEED CASE (TR020001/APP/7.04)</p> <p>National Highways has reviewed the Need Case and discussed the airport demand forecasts with Arup and York Aviation on 15 June 2023. It is concluded that the forecasts are sound and sufficiently robust.</p>	National Highways confirmation that the aviation demand forecasts are sound and sufficiently robust is welcomed.
National Highways RR-1076	Traffic and transportation	<p>FRAMEWORK TRAVEL PLAN (FTP) (TR020001-000845-7.13) The FTP provides high-level information for the proposed structure and approach to deliver a series of Travel Plans (TPs) to support the implementation phases contained within the DCO application and deliver the surface access strategy as the airport expands.</p> <p>The FTP makes reference to the overarching (TR020001-000844-7.12) Surface Access Strategy and (TR020001-000840-7.08) Green Controlled Growth (GCG) Framework, but does not provide specific details of key elements needed in a TP e.g. actual targets, specific measures to be implemented, monitoring methods. As stated in paragraph 1.2.1 of the FTP 'No part of the authorised development is to be operated until a travel plan for the operation of the authorised development has been submitted to and approved in writing by the relevant planning authority as set out in the Draft DCO [TR020001/APP/2.01], as specified by Requirement 30 of the Draft DCO.'</p>	<p>Baseline data for passenger and staff travel has been subject to considerable variation over recent survey years.</p> <p>Therefore, the Applicant will set Targets with the latest CAA air passenger travel data and once the first staff survey has been completed post DCO approval.</p> <p>The Framework Travel Plan [AS-131] sets out how Targets will be set within the first future TP. The scope of Targets may be revisited when developing the first TP I to best reflect the latest survey results.</p>

National Highways RR-1076	Traffic and transportation	In the first instance, this approach will need to be secured through the DCO or via a subsequent planning condition (i.e, a S.106 agreement). In this case, NH will also need to be consulted on the approval of each TP produced, which should be produced in line with prevailing policy and best practice and include, but not limited to: <ul style="list-style-type: none"> • The identification of targets for trip reduction and modal shift • The measures to be implemented to meet these targets • The timetable / phasing for the implementation of the travel plan measures • The mechanisms for monitoring and review • The mechanisms for reporting • The remedial measures to be applied where targets are not met • The mechanisms to secure variations to the travel plan following monitoring/reviews • Contact details of the appointed key individual responsible for the delivery of each travel plan e.g. Travel plan coordinator 	<p>The Applicant and Operator are currently developing a suitable and effective funding mechanism that best responds to Sustainable Transport Opportunities.</p> <p>Luton Borough Council, as the relevant planning authority, will have final approval of each TP and the proposed Targets over its five-year duration, following engagement on the TPs with the relevant highway authority.</p>
National Highways RR-1076	Traffic and transportation	The overall FTP structure is consistent with the Government Aviation Policy Framework (APF, 2013), which is an appropriate starting point to inform the evolving Airport Surface Access Strategies (ASAS). However, the FTP is very high-level and does not provide sufficient detail for agreement on specifics such as targets, measures and monitoring at this stage. In addition to above, the FTP sections have been reviewed with the following observations and recommendations.	Baseline data for passenger and staff travel has been subject to considerable variation over recent survey years. Therefore, the Applicant will set Targets with the latest CAA air passenger travel data and once the first staff survey has been completed post DCO approval. The Framework Travel Plan [APP-229] sets out how targets will be set within the first future Travel Plan (TP).

			<p>Baseline data for passenger and staff travel has been subject to considerable variation over recent survey years. Therefore, Targets will be set with the latest CAA air passenger travel data and once the first staff survey has been completed post the application be granted consent. The toolbox approach set out in the FTP consists of interventions and measures that the operator can draw upon and scale up or down as and when required. The toolbox would be deployed flexibly to respond to changing circumstances and the results of ongoing monitoring and stakeholder feedback and achieve Limits and Targets.</p>
National Highways RR-1076	Traffic and transportation	<p>2. Policy Reference should also be made to the DfT Circular 01/2022 Strategic road network and the delivery of sustainable development requirement for 'development promoters must put forward clear targets and commitments to manage down the traffic impact of development and maximise the accessibility of and within sites by walking, wheeling, cycling, public transport and shared travel. Targets for achieving a modal shift to sustainable transport will need to be subject to sustained monitoring and management by an appointed travel plan coordinator. Advice on preparing and monitoring travel plans is contained in the planning practice guidance.'</p>	Noted.

National Highways RR-1076	Traffic and transportation	At this stage the FTP does not provide clear targets for each of the phased TPs to be delivered and how they will contribute to reducing the traffic impact on the SRN. NH will need to agree the targets and how they will be monitored prior to the approval of each phased TP going forward.	<p>The Airport Transport Forum (ATF) is comprised of representatives from local authorities, National Highways, and public transport operators (it is intended that forum attendance is encouraged from National Highways going forward). The ATF is an advisory body, and exists to provide feedback to the airport's management team on the issues which are of concern to those using the airport, living around it, or working/operating at it.</p> <p>The Surface Access Strategy [APP-228] and Framework Travel Plan [APP-229] set out the role and responsibilities of the bodies and organisations associated with Travel Plan governance.</p> <p>The ATF will provide feedback to the airport operator on the proposed content of each TP and work with the airport operator on activities and issues in relation to the surface transport serving the airport.</p>
National Highways RR-1076	Traffic and transportation	Paragraph 2.1.2 makes reference to an Airport Transport Forum (ATF). Luton has an active ATF and, as indicated later in the FTP, NH should be invited to join this ATF as a statutory consultee.	<p>The Airport Transport Forum (ATF) is comprised of representatives from local authorities, National Highways, and public transport operators. It is intended that forum attendance is encouraged from National Highways going forward. Further information can be found within the Transport Assessment [APP-203 to APP-206] and Surface Access Strategy [APP-228].</p>

National Highways RR-1076	Traffic and transportation	<p>3. Surface access at the airport today</p> <p>Acknowledging the TP is a framework, it does not provide any real detail of the existing surface access situation. This is covered in other documents to a certain extent, however, the FTP is effectively a standalone document to inform future phased TPs and at this stage it should demonstrate what the base situation is for the following as a minimum:</p> <ul style="list-style-type: none"> • Current sustainable access arrangements • Where / how staff and passengers typically travel to the airport • Current modal share <p>Paragraph 3.1.2 makes reference to the Outline Transport Related Impacts Monitoring and Mitigation Approach (TRIMMA) as an Appendix to the Transport Assessment [TR020001/APP/7.02].</p> <p>Separate comments have been made on this document and should be referred to, noting at this stage, there is insufficient detail provided for National Highways to accept the monitoring and delivery approach to highway capacity interventions on the SRN.</p> <p>24 of 38</p>	<p>The Applicant notes comments on detail in the Outline Transport Related Impacts Monitoring and Mitigation Approach [APP-202]. The ongoing development of TRIMMA will set out additional detail on the proposed monitoring regime.</p>
National Highways RR-1076	Traffic and transportation	<p>4. Surface access targets</p> <p>The FTP provides an outline approach to how targets will be set in the future but stops short of confirming what the targets will be. NH will need to agree the eventual proposed targets prior to the approval of each phased TP.</p>	<p>As part of the Proposed Development the Applicant is seeking to achieve a decrease in the non-sustainable passenger and staff mode share, setting increasingly ambitious Limits through the Green Controlled Growth Framework (GCG) [APP-218] in line with airport passenger growth, with additional Targets set over and above these Limits</p>

			<p>to incentivise even greater ambition for sustainable travel.</p> <p>Mode share Limits are clearly set out in the GCG, and mode share Targets will be set at an appropriate level (always further reaching than GCG Limits) through the development of Travel Plans in future.</p> <p>Encouraging passengers to access the airport by bus and coach is an important part of achieving both Limits and Targets, and as such a new coach station is proposed at Terminal 2. The detailed design for the coach station will be developed at the appropriate time, following grant of development consent.</p>
National Highways RR-1076	Traffic and transportation	Paragraph 4.1.2 makes reference to the initial targets being set using “the latest Civil Aviation Authority (CAA) air passenger travel data and the most recent staff survey. It is accepted that the operator will pursue an equivalent alternative source of survey data (e.g. undertaking their own departure surveys) should the CAA survey not be available for a particular annual cycle, at any stage in the future, for whatever reason.”	The Applicant has clearly set out mode share Limits in the GCG [APP-218] , and mode share Targets will be set at an appropriate level (always further-reaching than GCG Limits) through the development of Travel Plans in future.

National Highways RR-1076	Traffic and transportation	When available, NH should agree to the use of this data and the related targets to prior to approval to confirm an acceptable approach has been applied. Paragraph 4.1.4 advises that any targets will exceed the relevant surface access limits set out by the separate Green Controlled Growth (GCG) Framework e.g. achieve higher levels of sustainable transport mode share than the limits. Given these limits are available in a separate document it would be useful to have these included in the FTP as a starting point and for benchmarking against the eventual targets set in the future phased TPs.	The Framework Travel Plan (FTP) [APP-229] does not include the GCG Limits to avoid confusion. The mode share targets set in the FTP are more ambitious and separate to the Limits in the GCG as such it is not considered appropriate to include them in the FTP.
National Highways RR-1076	Traffic and transportation	Paragraph 4.1.5 includes the two headline management targets that each phased TP must include. These comprise passenger and staff mode share % and are consistent with the surface access related GCG limits. From the perspective of the SRN, NH will require additional information on how these % targets translate into actual reductions in airport generated vehicle numbers (including freight), on and around the SRN, how these will be monitored and how they relate to any proposed highway interventions to be set out in the TRIMMA.	The Travel Plan will contain information on targets and reductions as well as future monitoring arrangements for sustainable transport options. The TRIMMA will focus on highway mitigation and interventions.

National Highways RR-1076	Traffic and transportation	NH will need agree to any review of targets within each TP prior to approval and to understand the reason for any change, ensure they remain suitably ambitious and that agreed commitments or measures have been reasonably delivered in accordance with each phased TP. Evidence of the impact of any external factors leading to a review of targets, such as those set out in paragraph 4.2.3, will also be required prior to any approval. Any reports monitoring progress against targets should be submitted to NH for review prior to approval. Furthermore, any revised or updated interventions, to address any targets that have not been met, particularly where they may impact on the SRN, will also need to be reviewed by NH prior to approval.	The Airport Transport Forum (including NH) will provide feedback to the airport operator on the proposed content of each Travel Plan (TP) and work with the airport operator on all activities and issues in relation to the surface transport serving the airport. The relevant planning authority's (LBC) role is to ensure that the feedback from the relevant highway authorities, National Highways, and the Airport Transport Forum (ATF) have been accounted for in the production of each Travel Plan (TP).
National Highways RR-1076	Traffic and transportation	5. Interventions and measures The long list of measures and proposed toolkit approach for future phased TPs to draw upon is noted. Prior to approval, each phased TP submitted should provide a more detailed assessment of the proposed measures to be implemented and the level of sustainable mode shift they are expected to deliver. Any subsequent monitoring reports should, where possible, clearly identify how each measure contributes to sustainable mode shift and vehicle reduction on and around the SRN. 25 of 38	<p>The Applicant will address this through the 5-yearly Travel Plan monitoring as outlined in the Framework Travel Plan [APP-229].</p> <p>If targets are not being reached, then the toolkit of interventions will be examined to select the most appropriate mitigation measure to change travel behaviours. This will be done in consultation with the LPA.</p> <p>The TRIMMA will manage highway mitigation matters. More information on highway monitoring and mitigation will be</p>

			provided in the TRIMMA which is currently being developed.
National Highways RR-1076	Framework travel plan	6. Survey and monitoring results National Highways should be consulted on the proposed staff survey, monitoring and data collection methodology prior to the approval of each subsequent phased TP to ensure a consistent approach is adopted. Any changes to the way data is collected and monitored from previous surveys, should be advertised with supporting reasons. As stated above, the targets only relate to % changes. NH will require additional information on how these translate into actual reductions in airport generated vehicle numbers (including freight), on and around the SRN, how these will be monitored and how they relate to any proposed highway interventions to be set out in the TRIMMA.	The operator will engage NH through the ATF. Travel Plans will contain the results of ongoing monitoring and consider comments and views from stakeholders including the ATF on their content and level of ambition. Each TP will set Targets for the next five-year period. They will also identify the interventions and measures to be implemented as part of the TP, including details of their delivery and how each will contribute towards achieving specific Targets. The TRIMMA is under consideration and will be reported on in due course; it will contain detail about how junctions and airport-related traffic will be monitored and reported on, as well as the governance associated with the delivery of mitigation measures.
National Highways RR-1076	Framework travel plan	7. Monitoring, management and governance of the TP As stated above, the proposed staff survey, monitoring and data collection methodology for each subsequent phased TP should be reviewed by NH prior to approval and to ensure a consistent approach is adopted. Any changes to the way data is collected and monitored from previous surveys, should be set out with supporting justification. The	The operator will engage with National Highways (NH) through the ATF on matters related to the Travel Plan and wider surface access issues, including monitoring processes and results. NH have also been offered a role on the Green Controlled Growth (GCG) Technical Panel for surface access, which will enable NH to review and

		FTP should also monitor and report on how any % changes translate into changes in actual vehicle numbers (including freight) generated by the Airport on and around the SRN. As highlighted in Table 7.2, NH should be engaged as a member of the ATF with the development and approval of any new phased TP. The contact details of the nominated TP Coordinator should be provided to NH.	comment on matters relating to Green Controlled Growth, which will include the annual submission of monitoring reports (which include surface access monitoring data).
National Highways RR-1076	Environmental Statement	ENVIRONMENTAL STATEMENT (TR020001-000765) 1. Introduction A statement refers to consultation throughout the Environmental Impact Assessment (EIA) process: 'Dialogue was maintained between the Applicant, the Planning Inspectorate and prescribed consultees in relation to the scope of the EIA throughout the EIA process to ensure a proportionate assessment that meets the requirements of the EIA Regulations was produced. A dialogue was also maintained with relevant stakeholders throughout the process in relation to non-material changes to scope. The agreed scope and any confirmed changes in scope are reported in each individual aspect chapter of this ES' In reality, there has been little to no engagement from the Applicant with NH regarding the scope of the EIA. National Highways did not receive any communication on the PEIR following its comprehensive response to the Statutory Consultation in May 2022. A meeting was	Paragraph 1.6.11 of Chapter 1 Introduction [APP-029] of the Environmental Statement (ES) is a general statement which covers the entire ES and all stakeholders. Responses to each consultation exercise, including responses from NH, are recorded in the relevant consultation reports at subsequent consultation or with the application. The NH representatives at the meeting mentioned in the comment were content that their comments be addressed in the ES submitted.

		held with the Applicant's environmental consultants in January 2023, following repeated requests by National Highways but no new information was provided, with a general explanation that the detail would be contained within the Environmental Statement (ES).	
National Highways RR-1076	Environmental Statement	<p>4. The proposed development The M1 Junction 10 upgrade works are classified as 'Off-site Highway Interventions' and are described as being restricted to within existing highway boundaries except for the construction compound. The proposed development chapter describes the specific work numbers, according to phase, for the M1 upgrades:</p> <p>6e(n) Phase 1, 'Widening to the northbound off-slip to provide a third lane on the approach to the roundabout, with the widening accommodated in existing verge and embankment. Widening to the western circulatory carriageway to provide four circulating lanes, with this widening accommodated in the existing landscaped area on the inside of the roundabout. Amendments to the exit from the roundabout onto the A1081, to allow three lanes to diverge from the roundabout. This widening would be accommodated within</p>	<p>A detailed design exercise has not been undertaken for the proposed mitigation measures at M1 J10, and as such there are currently no plans which set out specific areas of vegetation to be removed. However, all of the proposed works at each of the phases would remain within the existing highway boundary with the exception of the proposed temporary construction compound located south-west of J10 to the north of Half Moon Lane.</p> <p>It is anticipated that the occupation of the compound would be temporary as shown in the Land Plans and Crown Land Plans [AS-011], i.e. during the construction works period which itself will be defined as part of the ongoing detailed design process.</p>

		existing verge area.' 6e(o) Phase 2a, 'Widening to the A1081 westbound carriageway to enable two left turn lanes to continue onto the M1 southbound on-slip, where widening is also proposed.' and 6e(p) Phase 2b, 'Widening of the western circulatory carriageway to provide five lanes. Realignment of the A1081 exit to enable three lanes to exit roundabout onto A1081, with segregated left turn lane removed and junction of southbound off-slip signalised. Provision of two southbound merging lanes onto M1 through All-Lane Running'	
National Highways RR-1076	Environmental Statement	For Phase 1, 6e(n) is confirmed in the work order description above to fall entirely within the existing highway soft estate. However, the Phase 2a and 2b (6e(o) and 6e(p)) works do not specify this. The areas of land proposed for the Off-site Highway Interventions appear to be described as falling entirely within the highway limits, in all locations other than an area of land to the west of junction 10 of the M1 and immediately to the north of Half Moon Lane. Land use in this location comprises arable farmland and scrub woodland. It is expected that this land-take will be temporary for the duration of the construction period only. On review of the ES, it is not clear what the nature of temporary and permanent land take will be across the proposed junction upgrade works, i.e., plans depicting land parcel	<p>A detailed design exercise has not been undertaken for the proposed mitigation measures at M1 J10, and as such there are currently no plans which set out specific areas of vegetation to be removed. However, all of the proposed works at each of the phases would remain within the existing highway boundary with the exception of the proposed temporary construction compound located south-west of J10 to the north of Half Moon Lane.</p> <p>It is anticipated that the occupation of the compound would be temporary, i.e. during the construction works period which itself will be defined as part of the ongoing detailed design process.</p>

		ownership, specific loss of vegetation and boundaries of works restricted to the highway estate. High-level reference to 'Off-Site Highway Interventions' state that all works occur within highway estate boundaries, however specific work order descriptions do not explicitly confirm this. Confirmation of the nature of temporary and permanent land take across the proposed junction upgrade works is required.	
National Highways RR-1076	Environmental Statement	Management and operation of the construction compound, such as any Section 61 applications, expected Traffic Management arrangements, and site lighting (in the absence of other street light sources on Half Moon Lane) should be detailed.	The Code of Construction Practice referred to in Chapter 4 [APP-031] and provided as Appendix 4.2 to the ES [APP-049] describes the proposed measures to manage environmental effects of construction including Section 61 application, traffic management and lighting.
National Highways RR-1076	Environmental Statement	The construction compound, located on fallow farmland field, is variously referred to within the ES as 'Compound 6', but with other references also to Compounds 7, 14 and 15. It is unclear whether this refers to distinct phases of the construction period to be sited within the same compound boundary, or whether these are differing locations. This is not described clearly in the assessment reports. Therefore, confirmation is sought.	The Construction Method Statement and Programme Report referred to in Chapter 4 [APP-031] and provided as Appendix 4.1 to the ES [APP-048] sets out the potential location for construction compounds during the construction period of the Proposed Development. During Phase 1 construction compound 6 (J10/M1) will be a self-contained construction compound that would be used over different phases to carry out highways works to Junction 10. During Phase 2a construction compounds 14

			and 15 (Junction 10 M1) will be a construction compound from Assessment Phase 1 re-used in Assessment Phase 2a and a new self-contained compound to east side of roundabout is provided. During Phase 2b construction compound 7 (Junction 10 M1) will be a construction compound reused from Assessment Phase 2a..
National Highways RR-1076	Environmental Statement	5. Approach to the assessment The assessment makes note of the proposed ALR smart motorway upgrade: 'The Core Planning Case assumes the M1 south of Junction 10 will be upgraded to Smart Motorway, or other method, to provide all lane running and address current and predicted congestion on this stretch of the M1 in the future baseline without the Proposed Development, as agreed with National Highways. This sensitivity test assumes that all lane running is not delivered and the M1 continues to operate as is. Surface access traffic modelling has been undertaken and a quantitative assessment has been undertaken for those environmental aspects that employ traffic data where relevant'.	Noted.
National Highways RR-1076	Highways mitigation	As previously described within the Transport Assessment, this assumption is no longer valid, due to the recent Government announcement on Smart Motorway schemes. Please see comments on the Transport Assessment in relation to	The Applicant undertook scenario testing in Chapter 14 of the Transport Assessment [APP-206] . This considered the impacts of the Proposed Development in the scenario where no upgrade to the M1 mainline was included

		highways modelling at the beginning of this Annex.	and this confirmed that in the absence of ALR and as concluded in the sensitivity test the mitigation strategy continues to mitigate the impacts of the scheme.
National Highways RR-1076	Agricultural land and soils	6. Agricultural land quality and farm holdings. In reviewing the PEIR it was noted that this chapter did not refer to agricultural land affected by the M1 Junction 10 works, only to the 'main application site' and areas of 'offsite planting'. The ES chapter specifically references 'agricultural land required to construct off site Highway Interventions to the west of Junction 10 of the M1 and immediately to the north of Half Moon Lane'. Clarification of the agricultural land affected by the M1 Junction 10 works is required.	Noted, the document was updated in response to feedback and addressed. There is no permanent land take for the construction compound at J10 of the M1. Further detail on land to be impacted temporally and/or permanently is shown in Chapter 6 Agricultural Land Quality and Farm Holdings [APP-033] of the Environmental Statement (ES) and the Land Plans and Crown Land Plans [AS-011] .
National Highways RR-1076	Agricultural land and soils	It is noted that 'approximately 0.6ha of agricultural land to the west of Junction 10 of the M1 highway intervention would be affected by the Proposed Development, some of which is no longer being farmed'. However, there is a lack of clarity regarding which land parcels this affects, as the highway verges are non-agricultural land within the highway boundary (NH ownership).	Further detail on land to be impacted temporally and/or permanently is shown in Chapter 6 Agricultural Land Quality and Farm Holdings [APP-033] of the Environmental Statement (ES) and the Land Plans and Crown Land Plans [AS-011] .
National Highways RR-1076	Compounds	The precise footprint of the construction compound(s) is not clear, nor the nature of any permanent land-take. Clarification of which land parcels are affected by the Proposed Development, including the construction compounds, is required.	Further detail on land to be impacted temporally and/or permanently is shown in Chapter 6 Agricultural Land Quality and Farm Holdings [APP-033] of the Environmental Statement (ES) and the

			Land Plans and Crown Land Plans [AS-011].
National Highways RR-1076	Biodiversity	8. Biodiversity The biodiversity chapter assessed a range of potential impacts on protected species, habitats, and sites. With regard to the M1 J10 works, only the loss of neutral semi-improved grassland was applicable, wherein 0.53 ha would be lost as part of these works. Within the Arboricultural Report, it is noted that off-site highway works are not included within the assessment and 'are to be considered separately;' no inclusion is given therefore to tree retention or facilitative clearance/removal, and it is unclear where or if the impacts on the highway tree estate are assessed. Given the nature of the existing junction circulatory being surrounded by mixed deciduous woodland cover, it would be assumed some level of tree and scrub clearance would be required to accommodate the widening and/or construction compound establishment. This should be clarified.	Tree removal has not been identified within the M1 J10 to date, and it is anticipated that the mature tree line to the west of the site compound would be retained. The site clearance drawings (LLADCO-3C-ACM-WHS-SCL-DR-IN-0001 to 03) within Appendix 4.1 Construction Method Statement and Programme Report [AS-082] identify areas of other vegetation clearance within semi-improved neutral grassland with encroaching scrub. Pre-construction surveys will be conducted following detailed design.
National Highways RR-1076	Biodiversity	Biodiversity mitigation delivered on highway estate should conform to the specific targets and objectives outlined in the NH Biodiversity Plan, which includes enhancement under improvement schemes. The latest Biodiversity Plan, published in 2015 and valid through 2020 (under Highways England at the time) has since been withdrawn. The Applicant should cross-check the proposals against	Where mitigation is required to be provided within the Highway Estate, the Applicant will seek to consult with National Highways to ensure alignment on published guidance available at the time.

		the strategic objectives of any updated NH Plan as the asset landowner, or through direct consultation.	
National Highways RR-1076	Water Resources and Flood Risk	<p>9. Climate Change Resilience The chapter notes that: 'All surface access transport infrastructure will be designed to EA guidance on flood risk assessments: climate change allowances (Ref. 9.59) and the principles set out in the Luton Local Transport Plan (Ref. 9.60). Where applicable, the highway design has been developed to the standards set within the Design Manual for Roads and Bridges (DMRB).'... 'All surface access assets will either be designed for the climatic conditions projected for the end of their design life, using appropriate design guidance where available or adaptive capacity will be built into the designs. The Drainage Design Statement (Appendix 20.4 of this ES [TR020001/APP/5.02]) accommodates for surface water flows during 1 in 100 years storm event, accounting for an increase in precipitation of 40% due to climate change.' In particular, National Highways requires that the final M1 Junction 10 design is or can be compliant with appropriate drainage standards and climate change scenarios as described above.</p>	<p>The final M1 Junction 10 design will be designed to be compliant with appropriate drainage standards and climate change scenarios. The detailed drainage design must reflect the principles of the Drainage Design Strategy under Requirement 13 of the Draft Development Consent Order [AS-067].</p>

		<p>13. Health and Community There is no reference to Pepperstock or Slip End, two settlements immediately west of M1 Junction 10. These two settlements are also outside the study areas shown on Figure 13.1. There is reference to a generalised wider study area, into which these two settlements would presumably fall. Significant effects would not be expected on Pepperstock or Slip End as a result of the SRN works, but there should be a justification as to why they are excluded from the core study area.</p>	<p>As stated in the comment significant effects would not be expected at these locations. The study areas for this aspect, identified and agreed through Environmental Impact Assessment (EIA) scoping and engagement, are the areas in which potential significant effects have been identified for this aspect and were therefore included in the assessment. As significant effects are not expected, they are not in the study area and not specifically assessed. The areas are considered in other aspects of the EIA if appropriate.</p>
National Highways RR-1076	LVIA	<p>14. Landscape and Visual Impact The chapter specifically assesses the impact of the M1 Junction 10 construction compound and works on users of Bridleway Slip End BW1 and Half Moon Lane. These users are adjudged to be significantly affected during the construction period due to the temporary introduction of a compound and removal of visible vegetation. The combination of a high value visual receptor and high sensitivity but low adverse impact results in an overall significance of moderate adverse.</p>	<p>Noted.</p>

National Highways RR-1076	PROW	<p>The nearby public right of way FP12 is shown on figures as being close to the M1 Junction 10 works but does not appear to be specifically assessed in the chapter. As a result of consultations in 2022 with Central Bedfordshire Council and the Applicant, two additional visual receptors affected by the M1 Junction 10 works were agreed for inclusion within the ES scope. There is no apparent reference to the additional receptors requested by the Council incorporated within the visual assessment chapter</p>	<p>FP12 is to the south east of J10 of the M1. Users are not expected to experience impacts due to the Proposed Development therefore were not included within the assessment.</p> <p>The receptors considered within the landscape and visual assessment were agreed with Central Bedfordshire Council (CBC) and the wider LVIA Working Group and are described in section 14.4 of Landscape and Visual [AS-079] of the Environmental Statement (ES).</p>
	Noise	<p>16. Noise and Vibration. With regard to the M1 Junction 10 works, during construction: The nearest receptors to work areas are located approximately 100m away (to the west of the Junction 10 slip road). At this distance, construction noise from typical road work activities is unlikely to exceed the Lowest-Adverse-Effect- Level (LOAEL).</p>	<p>The methodology for the construction noise assessment is based on current industry standard approach and is presented in section 16.5 of Chapter 16 Noise and Vibration [AS-080] of the Environmental Statement (ES) and details of the works that are included in the assessment are presented in section</p>

		<p>Although the LOAEL is unlikely to be exceeded, mitigation measures secured in the Code of Construction Practice (CoCP) will ensure that construction noise is minimised at all times. Consequently, noise from assessment Phase 1 M1 (J10) works will be not significant. The same conclusion was also found for out of hours work and the other assessment phases. Out of hours work would be subject to a Section 61 application (as secured in the CoCP); it is expected that with the adoption of suitable mitigation measures the impacts would not be significant. Regarding construction traffic noise and vibration to the airport expansion site from access routed along the SRN, 'the primary access route to the Main Application Site would be via Junction 10 of the M1... [Construction traffic along this route would cause only] a negligible impact which is not significant' For operational (permanent) effects, it is anticipated the effect would be negligible. It is assumed that this assessment examined only the effects of the construction of the highway improvements and did not include the effects of the construction compound. Confirmation of this is sought. 30 of 38</p>	<p>5 of Appendix 16.1 Noise and Vibration Information [AS-096] of the ES. As set out in this appendix, the assessment is based on reasonable worst-case activities that are likely to generate the highest noise levels during construction. In line with this methodology, the construction compound has not been assessed due to the relatively minor works required, limited duration of noisy works and distance to the nearest sensitive receptors. Measures included within the Code of Construction Practice [APP-049] will be sufficient to manage noise and vibration emissions from the construction compound.</p>
--	--	---	--

	Water Resources and Flood Risk	20. Water Resources and Flood Risk. This chapter refers to 'M1 Junction 10 – small area of low surface water flood risk on the carriageway of the M1 northbound lanes' although the resultant effect was not deemed to be significant. The Highways England Water Risk Assessment Tool (HEWRAT) assessment has been undertaken for M1 Junction 10 and identified the requirement for additional surface water and pollutant management measures to manage impacts on water quality. It is noted that these measures will be specified during the detailed design stages and should be agreed with NH, in consultation with the local authority and Environment Agency (secured by surface and foul water drainage).	National Highways will be consulted on the drainage design for the highway works at J10 of the M1, as well as the planning authority and Environment Agency as described in Requirement 13 of the Draft Development Consent Order [AS-067] .
National Highways RR-1076	OCTMP	ENVIRONMENTAL STATEMENT APPENDIX 18.3 OUTLINE CONSTRUCTION TRAFFIC MANAGEMENT PLAN (TR020001-000765-5.02) The outline Construction Traffic Management Plan (CTMP) provides a high-level framework in advance of a detailed CTMP to be approved following DCO consent, once a lead contractor has been appointed and prior to commencement of works. In the first instance, this approach will need to be secured through a planning condition stating that prior to the commencement of the development, a CTMP and phasing plan shall be agreed and approved in	Noted . Requirement 14 of the Draft Development Consent Order [AS-067] requires that development of any part of the Proposed Development may not commence until the Construction Traffic Management Plan (CTMP) for that part has been approved by the relevant planning authority, following consultation with the relevant highway authority.

		writing with the Local Planning Authority / highways authorities / National Highways.	
National Highways RR-1076	OCTMP	<p>The approved CTMP should include, and not be limited to, the following details:</p> <ul style="list-style-type: none"> • A detailed phasing plan of the development with updated estimates of construction and delivery vehicle volumes • Programme of traffic management measures, expected duration, supporting safety assessments / audits, updated traffic modelling and implications for all road users • Restricted routes for construction vehicles, including sensitive environmental receptors and communities • Plans for abnormal loads and mitigation • Strategy and commitment towards net-zero for construction traffic emissions • Strategic diversions, carriageway restrictions, speed limits and closures • Times, routes and means of access and egress for construction traffic and delivery vehicles (including any new access points and the import of materials and the removal of waste from the site) • Signing strategies and variable messaging • Footpath/footway/cycleway closures and impacts on vulnerable road users • Communications and engagement plan • Site compound, parking and access arrangements • Safety measures • Risk management • Implications of seasonal traffic or significant events • Loading, unloading and storage of plant and materials used in the development • Details of the responsible person(s) to be 	<p>This comment appears to be a generic list of matters that should be considered when developing a CTMP. It has not been tailored to this specific application. All points in the list will be considered in the development of the CTMP.</p>

		<p>contacted in the event of a complaint •</p> <p>Monitoring strategy for review, management and updating of the CTMP •</p> <p>The impact of potential conflicting construction periods, and therefore construction traffic and operative movements, if other applications within the area proceed While it is acknowledged that this is an outline CTMP, given the complexity of the scheme, more detailed information on the following would provide confidence that the impact of construction traffic is being given adequate consideration at this stage: •</p> <ul style="list-style-type: none"> Identification of key stakeholders, likely impacts on different groups and proposed mitigation • Identification and map of sensitive sites or locations • Information and plans/map of proposed construction traffic routes • Information, plans/map of potential construction traffic restrictions and strategic diversion routes • Information, plans/map of potential traffic monitoring locations and baseline data to be collected • Sample selection of potential traffic management options likely to be considered or implemented and their potential implications for other road users • Existing safety and collision analysis of likely construction traffic routes 	
National Highways RR-1076	OCTMP	Particular consideration will need to be given the construction methodology for the M1 Junction 10 mitigation works, as closures of the SRN may need to be	The Applicant agrees that particular consideration will need to be given the construction methodology for the M1 Junction 10 mitigation works.

		required. In addition to above, the following clarifications are sought for each of the outline CTMP sections:	
National Highways RR-1076	OCTMP	2. Local highway network An overview of network immediately adjacent to the airport is provided but it does not expand beyond this to the wider local network, particularly the SRN and adjoining routes likely to be affected by construction traffic and traffic management. It would be useful to have more information and mapping of any identified sensitive routes, areas or populations that could be restricted to construction traffic and have to potentially divert traffic onto the SRN. Further information on complex areas where traffic management could be needed on the SRN and adjoining local road network e.g. junctions, structures would be helpful.	<p>The Applicant does not agree that this information should be provided in the CTMP. It is relevant information for the development of the CTMP but is included elsewhere in the application such as Chapter 18 Traffic and Transportation [AS-030] of the Environmental Statement (ES) and the Transport Assessment [APP-203 to APP-206].</p> <p>The CTMP should concentrate more on actions rather than background information that has already been provided, some of which may well be out of date as the construction of the airport proceeds.</p>
National Highways RR-1076	OCTMP	3. Traffic Management Working Group (TMWG) It should be noted that the TMWG should also include emergency services. With reference to paragraph 3.2, it will be the responsibility of the Applicant and lead contractor to monitor the execution of the approved CTMP and report back to NH and others via the TMWG to advise on mitigation, updates to programme and any proposed changes to the CTMP for approval.	The lead contractor would consult with the emergency services regarding any closures/diversion that might affect their response times.

National Highways RR-1076	OCTMP	<p>4. Traffic Management Measures</p> <p>Paragraph 4.1.3 states 300 movements at peak but 'Construction Impacts on Strategic Road Network - Technical Note' (Arup, March 2023) talks of over 460 two-way movements during peak construction. Please clarify which is correct. Paragraph 4.1.3 translates this into 'the order of 30 HGV' maximum hourly movements based on 75% of all traffic being HGV and 75% of this traffic arriving in the 1000-1600 out of peak. If these assumptions are applied to 460 two-way movements, it would be nearer 43 HGV movements per hour out of the peak and 22 HGV movements per hour in the peak hours. Please can this be clarified. Section 4.2 Routeing of Construction Traffic. More details of routing on the SRN and local adjacent network, construction traffic volumes and times of delivery will need to be agreed through the eventual approved CTMP prior to commencement. Section 4.3 Temporary Traffic Management. More details of temporary traffic management on the SRN and local adjacent network will need to be agreed in the eventual approved CTMP. This will need to set out an approved communication / engagement plan, design, safety, proposed duration of works and mitigation to limit their impact. Further modelling may be required, once traffic volumes and measures are known, to fully understand the implications on the SRN</p>	<p>The figure of over 460 two-way movements during peak construction matches the figure for the daily number of construction vehicles shown in paragraph 18.9.45 of Chapter 18 Traffic and Transportation [AS-030] of the Environmental Statement (ES) when it is factored by two to reflect total movements on the highway network. Thus the values in the Technical Note and the ES should be taken as a more accurate indication of peak traffic levels. The figure in the Outline Construction Traffic Management Plan [APP-130] would be superseded when the CTMP is produced and the lead contractor's work programme is known. Typical distribution of construction traffic movements during busiest quarter is shown on Inset 18.10 of Chapter 18 Traffic and Transportation [AS-030], of the ES.</p> <p>The other matters raised in this comment will be addressed following the application being consented.</p>
------------------------------	-------	---	---

		and other road users. This could include assessment of the local network where there could be implications for the safe operation of the SRN. Section 4.4 Managing Site Deliveries. An approved monitoring plan of volumes, type, delivery times and numbers of arrivals outside of allocated slots will be required. The monitoring plan will need to be agreed in the approved CTMP and all information to be made available to National Highways via the TMWG. Section 4.5 Abnormal Loads. More details for proposed abnormal loads, communication / engagement plans and proposed mitigation will need to be agreed in the approved CTMP. This will need to be monitored and all information to be shared with NH via the TMWG. 33 of 38	
National Highways RR-1076	OCTMP	5. Highway Safety With reference to Paragraph 5.1, more details will be needed of where construction traffic and associated traffic management measures could impact on highway safety and vulnerable road users. The approved CTMP will need to set out how vulnerable road users will be managed and mitigated. Analysis of existing safety and collision data on key construction routes should be provided in the outline CTMP and then updated in the approved CTMP.	Section 5.1 of the Outline Construction Traffic Management Plan [APP-130] relates to specific measures associated with the operation of construction vehicles and does not cover general road safety that is common to all road users. Road safety on the local highway network is covered in both the Transport Assessment [APP-203 to APP-206] and Chapter 18 Traffic and Transportation [AS-030] of the Environmental Statement (ES). The conclusion of the Transport Assessment [APP-204] is that there is not a problem for the operational phases

			therefore given the very much lower level of construction traffic and its general restriction to the PRN there is no need for a further assessment as suggested by National Highways. All works on the public highway that form part of the mitigation for the airport expansion will be subject to the full Road Safety Audit process.
National Highways RR-1076	OCTMP	6. Monitoring of Construction Traffic Initial information should be provided now of proposed data to be collected, area of interest and specific locations within it. A detailed monitoring plan will then need to be agreed in the approved CTMP prior to commencement. This will need to include, but not be limited to: • Agreed monitoring area of interest • Pre-construction data collection • Volumes, type and speed of traffic • Safety • Reducing carbon emissions • Wider impacts of traffic management All data will need to be analysed and reported to National Highways via the TMWG.	Although the Applicant has proposed preferred construction routes in the Outline Construction Traffic Management Plan [APP-130] , these are subject to agreement with the relevant highway authorities. Until they have been agreed the monitoring area of interest cannot be defined. The Traffic Management Working Group, which National Highways will be invited to join, will have the opportunity identify the issues that should be included in the monitoring process.

National Highways RR-1076	OCTMP	<p>ENVIRONMENTAL STATEMENT APPENDIX 18.4 OUTLINE CONSTRUCTION WORKERS TRAVEL PLAN (CWTP) (TR020001-000765-5.02)</p> <p>The Outline Construction Workers Travel Plan (CWTP) provides high-level information for the proposed approach to minimise the impact of increased construction workers traffic on the road network, including the SRN, to support the roll out of implementation phases included in the DCO application as the airport expands. The Outline CWTP advises that a series of detailed CWTPs will be prepared for each phase of the proposed development. These will need to be approved following DCO consent, once a lead contractor has been appointed and prior to commencement of works. This approach will need to be secured through a planning condition stating that prior to the commencement of each phase of the development, a CWTP shall be agreed and approved in writing with the LPA / highways authorities / NH. Each approved CWTP should include, and not be limited to, the following details:</p> <ul style="list-style-type: none"> • Number of construction workers and shift patterns • Construction worker trip generation by mode and distribution • The identification of targets for trip reduction and modal shift • Access and parking arrangements to construction compounds • The measures to be implemented to meet these targets 	<p>The final Construction Traffic Management Plan (CTMP) will be submitted for the approval of the relevant planning authority following consultation with the relevant highways authorities. This will include National Highways in relation to the Strategic Road Network (SRN). This is secured by Requirement 14 in the Draft Development Consent Order [AS-005].</p>
------------------------------	-------	---	--

		<p>The timetable / phasing for the implementation of the CWTP measures •</p> <p>The mechanisms for monitoring, review and for reporting •</p> <p>The remedial measures to be applied where targets are not met •</p> <p>The mechanisms to secure variations to the CWTP following monitoring and reviews •</p> <p>Contact details of the appointed key individual responsible for the delivery of each CWTP e.g. Lead Contractor and Travel Plan Coordinator</p>	
National Highways RR-1076	Protective provision	<p>NATIONAL HIGHWAYS PROTECTIVE PROVISIONS National Highways is concerned that its interests are not adequately protected in respect of the proposed mitigation works at M1 Junction 10. National Highways will require their protective provisions to be included if there is to be any disapplication of any permits/licences/consents. It is normal practice for a set of “protective provisions” to be agreed as part of – or in advance of – the consenting process to ensure that the SRN is protected from a safety and operational efficiency perspective, users of the SRN are kept safe, and to safeguard the commercial interests of National Highways, as the government company responsible for its maintenance and operation.</p>	Draft protective provisions have been received and are under review.

National Highways RR-1076	Protective provision	<p>The Protective Provisions should address a range of matters, including;</p> <ul style="list-style-type: none"> • The requirements for agreeing the detailed design • Prior approvals required and security, including those relating to safety • The processes required before access to the SRN can be permitted to construct the mitigation works • Construction • Payments, including for design checking and approval, supervision and administrative support • Certification and approvals to enable the site(s) to reopen to traffic • A commuted lump sum for maintenance • What (if any) land/rights are required from National Highways; • What works (if any) are proposed to be carried out to the SRN; • What construction method is being carried out to complete the works which interface with the SRN (for example, horizontal directional drilling or open cut trench); • Are there any site-specific considerations (for example, geotechnical sensitivities); • Is the proposed project likely to impact on a National Highways major projects scheme and if so, are there construction timetabling or operational conflicts to resolve; • What are the traffic and transport impacts that we object to; • Will the works require a Temporary Traffic Regulation Order (TTRO); • If the road in question is subject to a Design Build Finance and Operator (DBFO) contract and do we need the DBFO contractor to have specific rights in 	Draft protective provisions have been received and are under review.
------------------------------	----------------------	---	--

		the protective provisions; In addition, it is noted that the Book of Reference includes the temporary possession and use of 21 locations that are under National Highways freehold. There is no permanent land- take although land under National Highways freehold will be required for the widening of the carriageway. This needs to be ratified by legal advisers as part of agreeing the Protective Provisions. Further, there is currently no provision in the design for the maintenance bay described in the comments above in relation to Chapter 8 of the Transport Assessment, which may necessitate additional land-take.	
National Highways RR-1076	Protective provision	NH submitted a draft Protective Provisions document to the Applicant on 22 February with a request for it to be included in the draft Order. The Applicant advised that it was too late to be included in the draft Order as the application documentation had been locked down for submission. However, it is understood that the draft Protective Provisions were passed on to the Applicant's legal advisors for consideration and discussion with National Highways. Despite requests for engagement on this matter, no response has been forthcoming from the Applicant.	Draft protective provisions have been received and are under review.
National Highways RR-1076	Protective provision	Agreement to a set Protective Provisions is essential to enable National Highways to discharge its duties under the Infrastructure Act (2015) on behalf of the Secretary of State for Transport. It is requested that	Draft protective provisions have been received and are under review.

		these are incorporated into the finalised DCO to afford National Highways with sufficient protection in respect of the safe operation of the SRN and its commercial position.	
The UK Health Security Agency (UKHSA) RR-1546	General	<p>Thank you for your consultation regarding the above development. The UK Health Security Agency (UKHSA) welcomes the opportunity to comment on your proposals at this stage of the project. Please note that we request views from the Office for Health Improvement and Disparities (OHID) and the response provided is sent on behalf of both UKHSA and OHID. This response should be read in conjunction with our responses to previous consultation stages:</p> <p>Non-Statutory Pre-Consultation: 31 August 2018 Request for Scoping Opinion: 29 April 2019 First Section 42 Stage: 16 December 2019 Additional Section 42 Stage: 01 April 2022 Environmental Hazards</p> <p>We have assessed the submitted documentation and wish to make the following comments. Our response focuses on the key areas of omissions from the information provided in the consultation material.</p>	Noted.

<p>The UK Health Security Agency (UKHSA) RR-1546</p>	<p>Air Quality Health</p>	<p>Air Quality & Population Impacts The applicant has undertaken a quantitative assessment of the effects of population health outcomes associated with changes in air pollution concentrations resulting from operational traffic, both on-airport and aircraft emissions. While the methodology used to assess long-term impacts is clearly set out, we recommend the applicant justifies the data and methodology used in prediction of the short-term impacts, including selection of short-term or long-term coefficients, for example, 1.008 used for PM10 attributable respiratory and cardiovascular hospital admissions is the correct short-term value. We expect use of the most up to date coefficient, for example a coefficient of 1.06 for PM2.5 attributable mortality has since been updated to 1.08 (95% CI: 1.06, 1.09) per 10 µg/m3 annual average PM2.5.</p>	<p>Chapter 13 Health and Community [AS-078] of the Environmental Statement (ES) calculated the effects of long-term and short-term exposure to air pollutants using concentration-response functions (CRFs) provided in <i>Air Quality damage cost update 2019, A Report for Defra</i>, which was the most up to date version of this report at the time of writing the ES.</p> <p>The 2019 CRFs for mortality associated with long-term exposure to PM_{2.5} and NO₂, expressed as % change in health outcome per 10µgm⁻³ change in pollutant, were for 6% PM_{2.5} and 2.3% for NO₂. These were converted to relative risks (RR) of 1.06 and 1.023 respectively.</p> <p>The 2019 CRFs for rates of hospital admissions resulting from short-term exposure to PM₁₀ were 0.8% for both cardio-vascular and respiratory admissions, which were converted to RRs of 0.008.</p> <p>In 2023, after the completion of the ES, Defra published an updated report on Air Quality damage cost which included the following amendments to the above CRFs:</p> <ol style="list-style-type: none"> Recommended CRF for mortality associated with long-term PM_{2.5} exposure has changed from 6% to 8%.
--	---------------------------	--	--

			<p>b. Hospital admissions associated with particulate exposure are now associated with PM_{2.5} rather than PM₁₀. The recommended CRFs are 0.96% for respiratory admissions and 0.90% for cardiovascular admissions.</p> <p>The 2023 CRFs for mortality and hospital admissions associated with PM_{2.5} have been applied to the air quality data and the % change in health outcome resulting from the Proposed Development compared with baseline is smaller in all cases, compared with the 2019 CRFs.</p> <p>A full description of the data and methodology used in the calculation of health effects of air pollution is provided in Appendix 13.4: Methodology for Health and Community Assessment [AP-086] of the ES.</p>
The UK Health Security Agency (UKHSA) RR-1546	Air Quality Health	The applicant should also set out how they have converted the percentage variation (as set out by COMEAP here) to a correlation coefficient. The applicant has determined the significance of potential air quality impacts through comparison with the current Air Quality Standards. The air quality assessment has predicted slight adverse impacts at two receptor locations for annual mean NO ₂ concentrations (Phase 2a and Phase 2b), and the applicant has concluded that this impact is	<p>Chapter 7 Air Quality [APP-034] of the Environmental Statement (ES) has provided an assessment of air quality in line with legislation. The commitment to continual improvement is clear with Appendix 7.5 Outline Operational Air Quality Plan [APP-065] of the ES, setting out the measures committed to via the DCO which will help to improve air quality.</p>

		<p>not significant, as there is predicted to be sufficient headroom below the AQS. Evidence suggests that health effects can still occur below limit values for air pollutants under regulation. Our position is that pollutants associated with road traffic or combustion, particularly particulate matter and oxides of nitrogen are non-threshold; i.e., an exposed population is likely to be subject to potential harm at any level and that reducing public exposures of non-threshold pollutants (such as particulate matter and nitrogen dioxide) below air quality standards will have potential public health benefits. We support approaches which minimise or mitigate public exposure to non-threshold air pollutants, address inequalities (in exposure), maximise co-benefits (such as physical exercise). We encourage their consideration during development design, environmental and health impact assessment, and development consent. Recommendation The applicant should review their assessment of the population health impacts using the appropriate coefficients for both short-term and long-term quantitative assessments of health outcomes, making clear the assumptions and methodology used.</p>	<p>A separate assessment of effects on population health resulting from changes in exposure to NO₂ and particulates was undertaken and reported in Chapter 13 Health and Community [AS-078] of the ES. The assessment considered changes in exposure at all concentrations, including below the AQS level, in line with evidence to suggest that health effects occur below limit values. This assessment concluded that the Proposed Development would have no significant impact on population health during operation.</p> <p>The ES used CRFs published by Defra in 2019, which were the most up to date at the time of writing. Defra 2023 CRFs have since been applied to the data, resulting in reductions in the size of change to health outcomes between the proposed development and the baseline in all cases.</p> <p>A full description of the data and methodology used in the calculation of health effects is provided in Appendix 13.4: Methodology for Health and Community Assessment [AP-086] of the ES. Other matters in this comment require further clarity and will be discussed with UKHSA as part of ongoing engagement.</p>
--	--	---	---

The UK Health Security Agency (UKHSA) RR-1546	Human health	<p>Human Health and Wellbeing</p> <p>This section of OHIDs' response identifies the wider determinants of health and wellbeing we expect the Environmental Statement (ES) to address, to demonstrate whether they are likely to give rise to significant effects. OHID has focused its approach on the determinants of health and wellbeing under four themes, which have been derived from an analysis of the wider determinants of health mentioned in the National Policy Statements. The four themes are:</p> <ul style="list-style-type: none"> • Access • Traffic and Transport • Socioeconomic • Land Use Having considered the submitted ES 	Noted.
The UK Health Security Agency (UKHSA) RR-1546	Noise	<p>OHID wish to make the following specific comments and recommendations: Noise Compensation Scheme and Support. The Report identifies the requirement for compensation or noise insulation grants, with existing schemes directed to property owners. Tenants of the private rented sector require landlord approval for noise insulation works. The preliminary environmental information report identified the presence of private rented sector housing in the local community, which varies from ward to ward. The tenants of these properties may have poor health or be considered vulnerable.</p>	<p>It is a fact that the Applicant will need the property owners' consent prior to installing mitigation under the Noise Compensation Scheme. Through the introduction of more generous measures, it is anticipated that more private sector landlords will be encouraged to take up the offer from the Applicant. The Applicant will also introduce a proactive roll out programme designed to encourage take up and minimise situations where tenants with poor health or who are vulnerable are potentially left without the mitigation on offer.</p>

The UK Health Security Agency (UKHSA) RR-1546	Compensation	The ES identifies the role for community engagement but makes no mention of the potential for supporting tenants in understanding and utilising uptake for compensation and noise insulation. Recommendation The compensation and noise insulation scheme literature should confirm the eligibility, approach and support to tenanted property occupants.	The Applicant will introduce a proactive programme to roll out the noise insulation scheme. This will involve delivering leaflets and knocking on doors, in particular to make sure tenants are aware of the need for landlord consent to benefit from the offer. In this way our teams on the ground will learn about the specific circumstances of tenants, report back cases of concern and directly approach landlords to encourage programme uptake to improve circumstances for tenants.
The UK Health Security Agency (UKHSA) RR-1546	Human health	Impact on Health Care - Local health care services are likely to experience additional demand from the influx of non home-based workers, increased airport employment and in particular the increase in passenger numbers. The ES does not consider the impact on local primary health care, acute services and emergency responders from the significant increase in passenger numbers. The current demands are not quantified to establish a baseline and future demand is also not quantified. Whilst at the wider study area effects may be diluted, the ES must address any localised effects.	<p>As outlined in Chapter 13 Health and Community [APP-039] of the Environmental Statement (ES), during construction, workers in rented housing will be accounted for in existing funding, based on population size. Any increase in population will be limited by the availability of additional accommodation such as B&Bs.</p> <p>Appropriate health surveillance will also be provided. Temporary workers are unlikely to register with local GPs.</p> <p>It is assumed that additional demand for A&E and minor injury services will be reduced by occupational healthcare facilities either on-site or in appropriate locations, as set out in the Code of Construction Practice (CoCP).</p>

			Any increase in population, resulting from increase in the operational workforce, will be limited by the availability of housing. The development of new housing would be expected to look at impacts on healthcare services as a result.
The UK Health Security Agency (UKHSA) RR-1546	Human health	The ES does not identify specific issues related to unaccompanied children arriving at Luton. The Local Authority will have the statutory responsibility where they first present on entry to the UK. When unaccompanied children arrive on inbound flights the Local Authority has a duty to assess such children and provide support.	Paragraph 13.3.22 of Chapter 13 Health and Community [APP-039] of the Environmental Statement (ES) addresses the potential issue of unaccompanied minors. It has been scoped out of the ES as the operator has confirmed that all airlines operating out of the airport do not accept unaccompanied minors on flights.
The UK Health Security Agency (UKHSA) RR-1546	Human health	The increase in passenger movements, from 18 MPPA to 32 MPPA, will have a proportionate increase in service demand subject to changes in the proportion of international flights and border control procedures. Recommendation The ES should assess the current and future demand on health and social care services and the subsequent assessment of significance as a result of the DCO.	The immediate requirements of passengers at the airport will be managed by the airport on site services through existing practices and will plan operational capacity and resources as appropriate.
The UK Health Security Agency (UKHSA) RR-1546	Human health	The ES should report on the results of engagement with the local healthcare system and any proposed embedded or additional mitigation.	Section 13.4, and specifically Table 13.7 of Chapter 13 Health and Community [APP-039] of the Environmental Statement (ES) provides a summary of engagement with the local healthcare system through the health working group. This includes any proposed mitigation.

The UK Health Security Agency (UKHSA) RR-1546	Noise	Health Impacts of Noise from the Development Scope of this response. This response looks specifically at whether the information provided is suitable to inform decision should be read in conjunction with previous comments provided by UKHSA at Scoping and PEIR stages.	Noted.
The UK Health Security Agency (UKHSA) RR-1546	Noise	<p>General Comments Specifically in relation to the human health impacts associated with noise, UKHSA welcomes:</p> <ul style="list-style-type: none"> • The Applicant's engagement with various stakeholders on the assessment methodology and noise envelope (Vol. 5 Table 16.8). • The Applicant's presentation of population exposure to air noise broken down by absolute exposure (between LOAEL and SOAEL and above SOAEL) and also by predicted increase from Do-Minimum to Do-Something. • The presentation (Vol. 5 Table 13.14) of the population exposed to levels above 45 dB LAeq,16hr (day), which is more closely aligned to the threshold at which adverse effects of aviation noise are likely to start. • The Applicant's acknowledgement of the strong link between transport noise and adverse health outcomes (Vol. 5 13.9.52). • The Applicant's quantification of health effects due to aviation noise, quantified as DALYs, and its assessment of noise-induced awakenings. An equivalent assessment for surface noise was not carried out. 	The Applicant acknowledges that the UKHSA welcomes several aspects of the noise and health assessment.

<p>The UK Health Security Agency (UKHSA) RR-1546</p>	<p>Noise</p>	<p>In multiple locations the Applicant has chosen to make comparisons against the 2019 scenario. This can be misleading – the purpose of this Application is to present the implications of the Proposed Development. Reductions in noise that will occur due to fleet modernisation are very welcome, however they are not due to the Proposed Development and should therefore not have been presented with such prominence.</p>	<p>The Applicant has undertaken an assessment of likely significant effects in Environmental Impact Assessment (EIA) terms by comparing the situation with the Proposed Development (the Do-Something scenario) to the situation without the Proposed Development (the Do-Minimum scenario) in each assessment year in Chapter 16 Noise and Vibration [AS-080] of the Environmental Statement (ES).</p> <p>For aircraft air and ground noise the assessment also compares the Do-Something scenario in each year to the 2019 Actuals baseline. This comparison is to demonstrate how noise impacts will reduce over time, in line with the government policy objective to limit, and where possible reduce, the total adverse impacts on health and quality of life from aviation noise.</p> <p>The Airports National Policy Statement (ANPS) (Ref 6, paragraph 5.58) provides clarity that this objective should be tested in relation to a historic baseline: “The noise mitigation measures should ensure the impact of aircraft noise is limited and, where possible, reduced compared to the 2013 baseline assessed by the Airports Commission.”</p>
--	--------------	--	--

The UK Health Security Agency (UKHSA) RR-1546	Noise	The Applicant carried out the main health analyses for noise using published IGCB(N) guidance, which is based on evidence that is approximately 20 years old. UKHSA welcomes the sensitivity analyses and the awakenings assessment using more recent evidence (Vol.5 13.9.54 and 13.9.74 – 13.9.77).	The Applicant acknowledges that the UKHSA welcomes the sensitivity test.
The UK Health Security Agency (UKHSA) RR-1546	Noise	Decisions on SOAELs and UAELs are largely based on legal precedent, rather than informed by the latest evidence on the health effects of noise. As noted in previous UKHSA responses, the Applicant should explain what its choices for LOAELs, SOAELs and UAELs mean in health terms, especially to a non-technical audience.	<p>The Applicant's justification on the LOAEL, SOAEL and UAEL assessment criteria are presented in Section 16.5 of Chapter 16 Noise and Vibration [AS-080] of the Environmental Statement (ES). The assessment criteria have been informed by relevant policy and guidance as well as project precedent.</p> <p>The Applicant has quantified what the LOAELs, SOAELs and UAELs mean in health terms in Section 7 of Appendix 13.4 Methodology for Health and Community Assessment [APP-086] of the ES.</p>

<p>The UK Health Security Agency (UKHSA) RR-1546</p>	<p>Noise</p>	<p>The ES noise aspects have several references to “precautionary” which UKHSA disagrees with. For example, “precautionary Unacceptable Adverse Effect” levels for air noise were defined at 69 dB LAeq,16h and 63 dB LAeq,8h (Table 16.13). From a health and quality of life perspective these choices are anything but precautionary. These levels are 20-25 dB higher than the likely threshold of adverse effects for aircraft noise, and approximately 15-20 dB higher than the levels where increased risks of cardiometabolic disease are believed to start.</p>	<p>The use of the word precautionary to describe the air noise Unacceptable Adverse Effect Levels (UAEL) is related to how the UAEL is defined in planning policy, and is not intended to relate to the seriousness of health effects at these noise levels. This is explained in Footnote 17 of Chapter 16 Noise and Vibration [AS-080] of the Environmental Statement (ES), as follows:</p> <p>NPPF (para 174e) states: “Planning ...decisions should contribute to and enhance the natural and local environment by: e) preventing new .. development from contributing to .. unacceptable levels of .. noise pollution ..”. The PPG(N) definition of unacceptable adverse effect is: “Extensive and regular changes in behaviour and/or an inability to mitigate effect of noise leading to psychological stress or physiological effects, e.g. regular sleep deprivation/awakening; loss of appetite, significant, medically definable harm, e.g. auditory and nonauditory” and that “this situation should be prevented from occurring” (para 005) The threshold for these effects is described as an Unacceptable Adverse Effect Level (UAEL). As an example of an action to prevent unacceptable adverse effects, the NPS for National Networks sets out that “the</p>
--	--------------	--	---

			<p>applicant may consider it appropriate to provide noise mitigation through the compulsory acquisition of affected properties in order to gain consent for what might otherwise be unacceptable development.” (para 5.199). The APF states “The Government continues to expect airport operators to offer households exposed to levels of noise of 69 dB LAeq,16h or more, assistance with the costs of moving.” 69 dB LAeq,16h may therefore be considered a ‘precautionary UAEL’ for daytime noise (because this is the threshold for assisting with the costs of moving rather than mandatory acquisition of homes that would be expected to be required at a high level of noise exposure where the actual UAEL is reached).</p> <p>The assessment in Chapter 16 Noise and Vibration [AS-080] of the ES shows that no properties are exposed above the UAEL for any noise source.</p>
The UK Health Security Agency (UKHSA) RR-1546	Noise	The PD briefly considers the potential implications of next generation aircraft (including electric or hydrogen powered) coming into service in the mid-2030s, and hence within the lifespan of the Proposed Development. The assessment of air noise effects for the Core Planning Case assumed that next generation aircraft would have a noise performance that is equivalent, and no better, than that of new	At this stage it is not possible to accurately predict the noise signature of new propulsion methods such that this could be directly accounted for. However, the Noise Envelope contains a mechanism for a Noise Limit Review as a result of International Civil Aviation Organization (ICAO) publishing a new ‘noise chapter’ for next-generation aircraft. This Noise Limit Review would

		generation aircraft. This was considered to be “a conservative approach” representing “a reasonable worst case”. The Applicant should clarify that this is not necessarily true – new propulsion methods could result in next generation aircraft having noise signatures that are significantly different, and potentially more annoying, for the same A-weighted decibel level. UKHSA encourages the Applicant to introduce safeguards in its Green Controlled Growth Framework to protect from such an eventuality.	test whether the Noise Limits can be reduced due to next generation aircraft. This review must be undertaken in consultation with the Noise Technical Panel and submitted to the Environmental Scrutiny Group for determination.
The UK Health Security Agency (UKHSA) RR-1546	Noise	In parts of the assessment, significant adverse effects were predicted but their significance was somewhat watered down due to uncertainties in the prediction. For example 16.3.21 states “As these effects are far into the future and depend on forecast traffic data, the effects will be reassessed using more up to date traffic data nearer the time, and noise insulation will be provided to avoid the significant effects should the reassessment confirm that they are likely to occur.” The Applicant should clarify what legally binding mechanisms will be put in place to ensure such reassessments take place in the future.	The mechanisms for the reassessment are described in Draft Compensation Policies, Measures and Community First [AS-128] and, as is set out in that document, will be secured via a Section 106 legal agreement.
The UK Health Security Agency	Noise	Summary of Population Exposure and Health Impacts from the Proposed Development PD = Proposed Development SOAEL – Significant Observed Adverse	This is a correct interpretation of parts of the assessment as presented in Chapter 16 Noise and Vibration [AS-080] of the Environmental Statement (ES).

(UKHSA) RR-1546		<p>Effect Level According to the Applicant's analysis , by 2043 (Phase 2b) there will be</p> <ul style="list-style-type: none"> • 500 people exposed to daytime aviation noise levels at or exceeding 63dB LAeq,0700-2300 (Applicant's choice of daytime SOAEL) – all of which are due to the PD • 3,250 people exposed to night-time aviation noise levels at or exceeding 55dB LAeq,2300-0700 (Applicant's choice of night-time SOAEL) – ~60% of which are due to the PD • ~38,000 people exposed to daytime aviation noise levels above 51dB LAeq,0700-2300 (Applicant's choice of daytime LOAEL); ~50% of which are due to the PD • ~63,000 people exposed to night-time aviation noise levels where adverse effects are known to occur; ~46% of which are due to the PD • ~118,000 people exposed to daytime aviation noise levels where adverse effects are known to occur. <p>Of the people exposed to daytime aviation noise levels where adverse effects are known to occur, by 2043 (Phase 2b)</p> <ul style="list-style-type: none"> • ~25,000 people will experience an increase of 2-3 dB in daytime noise due to the PD, • ~48,000 people will experience an increase of 2-3 dB in night-time noise; 	<p>The non-technical summary is, by definition, a summary and is not intended to repeat the detail of the assessment. Instead, section 16.3 of the Non-technical Summary [APP-165] of the ES provides a summary of the assessment conclusions in terms of significant adverse effects on health and quality of life and likely significant effects with cross-referencing provided for where further detail can be found.</p>
--------------------	--	---	--

		<p>• 3,100 people exposed to the Applicant's choice of night-time SOAEL (55dB LAeq,2300-0700) will experience an increase of 2-3 dB in night-time noise. Note: an increase of 2-3 dB is approximately equivalent to a 60-100% increase in the number of overflights (everything else remaining equal). An unspecified number of people will also experience at least one additional noise-induced awakening due to the PD (13.9.64 – 13.9.65).</p> <p>Between the years 2027 and 2043, approximately 1,500 (Vol. 5, 13.9.62) additional Disability Adjusted Life Years (DALYs) are predicted to be lost in total due to sleep disturbance from the Proposed Development when compared to without it. This number is likely to be a significant underestimate – sensitivity tests using more recent evidence suggest that the DALYs lost could be in excess of twice that number (Vol. 5, 13.9.77). In the same period 500 (Vol. 5, 13.9.67) additional DALYs are predicted to be lost due to annoyance, although that number could be higher than 1,000 (Vol. 5, 13.9.76) due to uncertainties in the exposure response functions.</p> <p>Of the households exposed to daytime surface access noise levels where adverse</p>	
--	--	--	--

		<p>effects are known to occur, by 2043 (Phase 2b)</p> <ul style="list-style-type: none"> • 31,000 and 25,000 are predicted to experience increases of up to 1 dB in daytime and night-time noise, respectively due to the PD. • Approximately 6,000 are predicted to experience an increase of 1-3 dB in daytime and night-time noise due to the PD. • Approximately 150 and 90 are predicted to experience an increases of more than 3dB in daytime and night-time noise, respectively due to the PD <p>For non-residential exposure, by 2043 (Phase 2b) 59 educational facilities and 28 healthcare settings will be exposed to aviation noise levels where adverse health effects (including cognitive impairment in children) are likely to occur (dependent on type of educational / healthcare setting).</p> <p>None of this information is mentioned in Vol.5 Non-technical summary. In UKHSA's view, this limits the ability of a non-technical audience to fully appreciate the scale of the noise impacts from the PD.</p>	
The UK Health Security Agency (UKHSA) RR-1546	Noise	<p>Mitigation and Noise Envelope The Proposed Development relies heavily on the air noise insulation scheme to mitigate significant impacts. UKHSA welcomes noise insulation as a last resort mitigation measure. However the Applicant should be</p>	<p>The Applicant confirms that noise insulation is the last resort in the mitigation hierarchy, as set out in section 2 of Appendix 16.2 Operational Noise Management (Explanatory Note) [APP-111] of the Environmental Statement</p>

		<p>transparent on the many limitations of such a mitigation measure, and on the significant uncertainties whether noise insulation will mitigate the adverse effects identified. For many decades large infrastructure projects in the UK have specified noise insulation measures as a mitigation measure, however none of them have evaluated their effectiveness to protect health. As a result, we still have very little good quality evidence to confirm whether sound insulations schemes are effective to protect health, and the extent of unintended consequences. For example, sound insulation may reduce indoor noise levels at the expense of poorer indoor air quality and increased risk of overheating. Partially funded schemes, such as the ones proposed by the Applicant (Vol. 5 16.10.5) may widen health inequalities (see also Human Health and Wellbeing section). Noise insulation will also do nothing to mitigate outdoor exposure, including at private and public amenity space and places of relative tranquillity.</p>	<p>(ES). The hierarchy therefore starts with mitigation at source and mitigation by intervention (which benefit both indoor and outdoor exposure) before mitigation by compensation (noise insulation) is provided.</p> <p>The noise insulation scheme (see Draft Compensation Policies, Measures and Community First [AS-128]) will provide a full package noise insulation where air noise exposure from the development exceeds the relevant SOAEL values. No likely significant effects have been identified below the air noise SOAEL. Therefore, the assessment only relies on noise insulation avoiding significant effects where a full package of noise insulation is provided. Whilst it is noted that there is little research on the effects of noise insulation schemes on health, this approach to avoiding significant effects on health and quality of life from noise using noise insulation (as a last resort) has been accepted in the decision making for several large infrastructure projects (e.g. HS2).</p> <p>The noise insulation packages will include suitable ventilation if required to allow windows to be kept closed.</p>
--	--	--	---

The UK Health Security Agency (UKHSA) RR-1546	GCG	On the noise envelope (Vol. 7.08), UKHSA is of the view that the Green Controlled Growth Framework is best discussed and agreed amongst local stakeholders, including local communities currently affected, and those that may be affected in the future due to airspace changes. The Applicant is ultimately responsible for communicating the latest evidence on the health effects of noise in these discussions.	The Applicant confirms that the Noise Envelope has been developed in consultation with local stakeholders and local communities through the Noise Envelope Design Group (see Chapter 16 Noise and Vibration [AS-080] of the Environmental Statement (ES) for further information).
The UK Health Security Agency (UKHSA) RR-1546	Noise	<p>UKHSA notes that the proposed Noise Envelope is defined in terms of the size of the 54 dB LAeq,day and 48 dB LAeq,night contours. The Applicant should communicate</p> <ul style="list-style-type: none"> • that its choice of thresholds does not capture all adverse health effects attributable to noise; • who will be responsible for controlling population growth, and hence potential increases in population exposure within these areas. • how the distribution of the noise exposure within these areas, and the associated health effects, will be managed. 	<p>As noted by UKHSA above, the Noise Envelope should be agreed with local stakeholders and local communities (the Noise Envelope Design Group).</p> <p>The choice of noise contour for the Noise Envelope Limits was defined by the Noise Envelope Design Group (NEDG) based on the current planning consent (which is based on 57dBL_{Aeq,16h} and 48dBL_{Aeq,8h} contours) and with reference to the Civil Aviation Authority (Ref 7) which notes that “The same percentage of respondents said by ANIS to be highly annoyed at 57 dB LAeq,16h now occurs at 54 dB.” The Noise Envelope is a noise control mechanism, rather than a measurement of all adverse health effects attributable to noise.</p> <p>The NEDG also agreed that the area of a defined contour should be the limiting value, rather than its shape or population exposure. Both the shape of the contour</p>

			<p>and the population exposed are influenced by factors outside of the airport's control.</p> <p>For further details, see the Noise Envelope Design Group reports in Annex A of Appendix 16.2 Noise and Vibration Information [AS-096] of the Environmental Statement (ES).</p>
The UK Health Security Agency (UKHSA) RR-1546	Human Health	<p>Monitoring The Applicant states that 13.13.1 Monitoring of health outcomes is not proposed due to practical difficulties in obtaining accurate health data for the population in the study area and attributing any changes in observed health outcomes to the Proposed Development. Accurately identifying changes in the health status of a population resulting from a specific intervention requires a large-scale study that is not proportionate in the context of an EIA. However, precursors to health effects will be monitored, including air quality, noise, local employment and apprenticeships. These monitoring measures are described within the relevant aspect chapters in this ES. UKHSA does not agree with this statement. Given the scale of the adverse impacts attributable to noise, the uncertainties associated with the Applicant's key mitigation strategy (noise insulation), and the ineffectiveness of this mitigation on noise exposure outdoors, UKHSA recommends that a commitment for monitoring the health and quality of life</p>	<p>The Applicant maintains the position set out in paragraph 13.13.1 of Chapter 13 Health and Community [APP-039] of the Environmental Statement (ES) which states that monitoring of health outcomes is not proposed due to practical difficulties in obtaining accurate health data for the population in the study area and attributing any changes in observed health outcomes to the Proposed Development. The level of monitoring suggested by UKHSA is not proportionate in the context of an Environmental Impact Assessment (EIA).</p>

		of local communities is made if the Application is granted. The scale of such monitoring, such as via social surveys, can be designed to be proportionate to the scale of negative environmental impacts and the predicted economic benefits.	
The UK Health Security Agency (UKHSA) RR-1546	Noise	<p>Conclusions The non-technical summary concludes that 13.3.5 During operation, prior to mitigation, likely significant adverse effects on health and wellbeing have been identified due to an increase in air noise. However, the provision of additional compensatory mitigation measures in the form of noise insulation to qualifying properties, where accepted, could help reduce the significant adverse health effect inside properties and would result in the adverse health outcomes reducing to minor adverse, resulting in an effect that would be not significant. UKHSA is of the view that this statement does not adequately reflect the scale of the noise exposure and attributable adverse health effects due to the Proposed Scheme, as outlined above. The wording chosen by the Applicant (“could help reduce ... inside properties”) correctly recognises the uncertainties on whether the provision of noise insulation (which in many cases would not cover the full costs) will indeed mitigate adverse effects on health and quality of life.</p>	<p>The Applicant confirms that noise insulation is the last resort in the mitigation hierarchy, as set out in section 2 of Appendix 16.2 Noise and Vibration Information [APP-111] of the Environmental Statement (ES). The hierarchy therefore starts with mitigation at source and mitigation by intervention (which benefit both indoor and outdoor exposure) before mitigation by compensation (noise insulation) is provided.</p> <p>The noise insulation scheme (see Draft Compensation Policies, Measures and Community First [AS-128]) will provide a full package noise insulation where air noise exposure from the development exceeds the relevant SOAEL values. No likely significant effects have been identified below the air noise SOAEL. Therefore, the assessment only relies on noise insulation avoiding significant effects where a full package of noise insulation is provided. This approach to avoiding significant effects on health and quality of life from noise using noise insulation (as a last resort) has been</p>

			accepted in the decision making for several large infrastructure projects (e.g. HS2).
The UK Health Security Agency (UKHSA) RR-1546	Human Health	UKHSA believes that the scale of adverse noise impacts from the PD warrants a commitment to monitor the health and quality of life of affected communities.	The Applicant has committed to noise monitoring, control, and mitigation measures and maintains their position that the level of monitoring suggested is not proportionate.
The UK Health Security Agency (UKHSA) RR-1546	General	We can confirm that we have registered an interest on the Planning Inspectorate Website. Please do not hesitate to contact us if you have any questions or concerns.	Noted.
NATS RR-1078	General	I refer to the application quoted above and to the correspondence received by surface mail dated 9th May. As indicated during the Scoping stage, the proposed development has the potential to affect NATS En Route's infrastructure located at Luton Airport and its provision of en-route air traffic services in the London area. While NATS is in principle supportive of the scheme, it has concerns around the impact of the proposed airfield works on its own infrastructure, as well as the impact of increased air traffic movements on the airspace system and its own air traffic service provision in the London Terminal Manoeuvring area (LTMA).	Noted. These concerns relate to the detailed design and implementation of the Proposed Development and will be addressed at the detailed design stage with appropriate technical safeguarding. The requirement for this safeguarding will be included within the Design Principles [APP-225] for the Proposed Development, which will be a certified document.

NATS RR-1078	Design	Furthermore, NATS has generic concerns in respect of various aspects of the application, which currently remain undefined. These include control tower lines of sight, airfield movements, air traffic control procedures, resourcing and the future tools required to support this growth.	<p>The Applicant recognises NATS concern to ensure that the detailed design of the scheme meets their operational requirements.</p> <p>In relation to the control tower line of sight, a detailed assessment was undertaken to ensure that the Proposed Development would not lead to line of sight issues, compared to the baseline position. This is set out at section 5.23 of the Design and Access Statement [APP-208]. Other matters such as procedures, resourcing and future operational tools will be a matter for agreement with the airport operator as part of the process of bringing the Proposed Development into use.</p>
NATS RR-1078	General	Notwithstanding its concerns, NATS is engaged with the Applicant and its agents on numerous fronts. It is NATS's view, that there is a mutual understanding that the high level proposal requires significant detail before a formal impact assessment can be undertaken, and a formal position taken. The high level details of the proposed development are currently insufficient for NATS to make a formal representation supporting, or raising concerns on specific elements.	The Applicant continues to engage with NATS to ensure that its operational concerns can be resolved at the appropriate time. The application for development consent is necessarily high level at this stage.
NATS RR-1078	General	To this effect, NATS and the Applicant's agent are in advanced discussions and collaborating on a "Statement of Common Ground" (SoCG) so that the areas of	Noted.

		agreement, and those requiring further work can be identified and communicated to the Inspectorate.	
NATS RR-1078	General	NATS expects the SOCG to be finalised in the near future. As soon as this has formally been approved by both parties, it will be submitted to the Inspectorate. In the interim, NATS is happy to reiterate its willingness to work with all stakeholders in order to understand the impact and identify any solutions that may be required in order to help deliver the proposal. I trust NATS's position is clear and acceptable to the Inspectorate, however should there be any further requests or queries, do not hesitate to revert back to us.	Noted.
Civil Aviation Authority RR-0257	Design	4.2 On Aerodrome certification, we have no principal areas of disagreement at this stage.	The CAA's confirmation that there are no principal areas of disagreement raised at this stage in terms of the prospective certification of the revised airfield layout is welcomed.
Civil Aviation Authority RR-0257	Airspace	4.3 On Airspace, it is still the case that it is too early in the Airspace Modernisation programme to say what trade-offs will be required to resolve any conflict between the sponsors of separate airspace changes, or between different objectives. Therefore, it is also too early to say what benefits individual airports might achieve from airspace modernisation, whilst recognising that one of the goals for the AMS is to provide greater capacity overall. However, we have no principal areas of disagreement at this stage.	<p>The CAA's confirmation that one aim of the Airspace Modernisation Strategy (AMS) is to increase capacity to facilitate growth is welcomed.</p> <p>The Applicant acknowledges that the precise outcome of the AMS cannot be known at this stage.</p>

Civil Aviation Authority RR-0257	Security	4.4 On Security, we have no further comments other than to note the CAA's duties and no principal areas of disagreement at this stage.	Noted.
Civil Aviation Authority RR-0257	Need Case	4.5 On Economic regulation, we have no further comments other than to note the CAA's duties and no principal areas of disagreement at this stage.	Noted.
Civil Aviation Authority RR-0257	Noise	4.6 On Noise, we are content with answers provided by LLAL since consultation on the points we raised in the statutory consultation and have no principal areas of disagreement at this stage.	Noted.
Civil Aviation Authority RR-0257	Carbon	4.7 On Carbon emissions, we are content with answers provided by LLAL since consultation and consider that other parties to the DCO are likely better placed than CAA to comment on this area. Therefore, we have no principal areas of disagreement at this stage.	Noted.
Civil Aviation Authority RR-0257	Accessibility	4.8 On Accessibility, LLAL has informed us that these matters will be considered at the detailed design stage. Therefore, we have no principal areas of disagreement at this stage.	Noted.
Civil Aviation Authority RR-0257	General	4.9 Consequently, the CAA has no principal areas of disagreement to report to PINS as part of this relevant representation.	Noted.

Cadent Gas RR-0171	General	<p>RELEVANT REPRESENTATION</p> <p>Representation by Cadent Gas Limited (Cadent) to the London Luton Airport Expansion Development Consent Order (DCO) Cadent is a licensed gas transporter under the Gas Act 1986, with a statutory responsibility to operate and maintain the gas distribution networks in North London, Central, East Anglian and North West England. Cadent's primary duties are to operate, maintain and develop its networks in an economic, efficient, and coordinated way. Cadent wishes to make a relevant representation to the London Luton Airport Expansion DCO in order to protect its position in light of infrastructure which is within or in close proximity to the proposed DCO boundary. Cadent's rights to retain its apparatus in situ and rights of access to inspect, maintain, renew and repair such apparatus located within or in close proximity to the order limits including should be maintained at all times and access to inspect such apparatus must not be restricted. The documentation and plans submitted for the above proposed scheme have been reviewed in relation to impacts on Cadent's existing apparatus located within this area, and Cadent has identified that it will require adequate protective provisions to be included within the DCO to ensure that its apparatus and land interests are adequately protected and to include compliance with relevant safety standards.</p>	<p>Noted.</p> <p>The Applicant is in discussion with Cadent to address matters raised in its Relevant Representation, including as regards a form of protective provisions for Cadent's benefit.</p>
-----------------------	---------	---	--

Cadent Gas RR-0171	Protective provision	Cadent has low, medium, and high pressure gas pipelines and associated apparatus located within and very close the order limits which are affected by works proposed, the extent to which is still being assessed and which may require diversions subject to the impact. Any Proposed diversions have not yet reached detailed design stage and so the positioning, land rights and consents required for these gas diversions are not confirmed. At this stage, Cadent is not satisfied that the DCO includes all land and rights required to accommodate such diversions as design studies will need to influence these requirements. Cadent will not decommission its existing apparatus and/or commission new apparatus until it has sufficient land and rights in land (to its satisfaction) to do so, whether pursuant to the DCO or otherwise. This is a fundamental matter of health and safety.	Noted. The Applicant is in discussion with Cadent to address matters raised in its Relevant Representation, including as regards a form of protective provisions for Cadent's benefit.
Cadent Gas RR-0171	Protective provision	At this stage, Cadent is not satisfied that the tests under section 127 of the PA 2008 can be met. Cadent has experience of promoters securing insufficient rights in land within DCOs for necessary diversions of its apparatus or securing rights for the benefit of incorrect entities. It is important that sufficient rights are granted to Cadent to allow Cadent to maintain its gas distribution network in accordance with its statutory obligations. As a responsible statutory undertaker, Cadent's primary	Noted. The Applicant is in discussion with Cadent to address matters raised in its Relevant Representation, including as regards a form of protective provisions for Cadent's benefit.

		concern is to meet its statutory obligations and ensure that any development does not impact in any adverse way upon those statutory obligations. Adequate protective provisions for the protection of Cadent's statutory undertaking have not yet been agreed but are in discussion between parties. Cadent wishes to reserve the right to make further representations as part of the examination process but will seek to engage with the promoter to reach a satisfactory agreement.	
East of England Ambulance Service (EEAST) RR-0401	General	Insufficient scoping work has been undertaken to date - to determine a suitable study area, baseline assessment & approach to identify the likely environmental, social & cumulative effects of the development on EEAST's operations	<p>The study area and baseline assessments for the Proposed Development were set out in the Environmental Impact Assessment (EIA) Scoping Report and further refined in the Environmental Statement (ES). Chapter 6 to Chapter 20 [APP-033, AS-076, AS-027, APP-035, AS-077, APP-037, APP-038, AS-078, AS-079, APP-041, AS-080, APP-043, AS-030, AS-081 and AS-031] of the ES describe the baseline and future baseline upon which each aspect assessment for the EIA is based.</p> <p>Assessments of relevance to EEAST within the ES include the following:</p> <ul style="list-style-type: none"> • Chapter 13 Health and Community [APP-039] of the ES with regards to effects on the health of the population;

			<ul style="list-style-type: none"> • Chapter 15 Major Accidents and Disasters (MA&D) [APP-041] of the ES with regards to the risk of a MA&D occurring; and • Chapter 18 Traffic and Transport [AS- 030] (including Appendix 18.3 Draft Outline Construction Traffic Management Plan [APP-130]) with regards to impacts on the local transport network and its users. <p>The Applicant has sought information on the current number of callouts to the airport from EEAST in order to further understand EEAST's operational needs. During further communication EEAST responded that "there is minimal activity for EEAST" at the airport as the on-site fire service attends to initial first aid issues.</p>
East of England Ambulance Service (EEAST) RR-0401	General	Insufficient measures are proposed to avoid, reduce, mitigate & compensate for the likely Project impact on EEAST's operations (summarised below) during the construction phase of the development	<p>Noted.</p> <p>Responses to individual points raised provided below.</p>
East of England Ambulance Service (EEAST) RR-0401	draft DCO	Omission to include suitable DCO Requirements &/or Heads of Terms of Agreement, either via a Section 106 planning obligation or Deed of Obligation - to provide funding & new facilities provision, as required, to increase the capacity, response capability & Project Preparedness for EEAST's staff, vehicle	The Applicant has endeavoured to engage with EEAST throughout the development of the Proposed Development and recognises that continued engagement with EEAST will be important going forward. A Statement of Common Ground is currently being progressed.

		fleet and estate assets to mitigate & manage the impacts arising	
East of England Ambulance Service (EEAST) RR-0401	Engagement	Omission to include suitable Terms of Reference, Membership or a Communications Strategy for a Transport, Community Safety, Health & Wellbeing Working Group to be set up - to inform & assist the management of relevant aspects of the construction, operational and decommissioning phases of the Scheme requiring a coordinated response from health & blue light partners, including EEAST, Bedfordshire, Luton and Milton Keynes Integrated Care System (BLMKICS) (or successor organisations) Bedfordshire Police and Bedfordshire Fire & Rescue Service	<p>Engagement with EEAST during the Pre-Application stage of the Proposed Development is detailed in the Consultation Report [AS-048]. The suggestion of setting up a Transport, Community Safety, Health & Wellbeing Working Group is being explored by the Applicant.</p> <p>The Applicant recognises continued engagement with EEAST will be important throughout the next stages, should a DCO be granted.</p>
East of England Ambulance Service (EEAST) RR-0401	draft DCO	Review of the LLA (Applicant's) environmental statement and related DCO documentation, indicates that the Scheme's potential effects (impacts) on EEAST's operational capacity, efficiency and resources (namely staff, vehicle fleet and estate assets) have not been baselined or sufficiently assessed to date. EEAST is therefore keen to work with the Applicant to ensure this omission is addressed by further information being prepared to inform a robust DCO Application for examination. In particular, EEAST wishes to agree and	The Transport Assessment [APP-203 to APP-206] of the Environmental Statement (ES), submitted by the Applicant as part of its application for development consent, report the findings of its robust assessment on the transport network and on the environment. The Applicant had sought information from EEAST in relation to the current number of callouts to the airport in order to further understand EEAST's operational needs and received a response that stated there was minimal activity for EEAST at the airport. The Applicant considers that

		secure suitable mitigation and management measures as part of the DCO Requirements and/ or via a Section 106 planning obligation (or Deed of Obligation) and reflect this position within a Statement of Common Ground by commencement (or at an early stage) of the forthcoming Examination.	its assessment is appropriate and robust, however, it does welcome further engagement with EEAST in order to understand their concerns.
East of England Ambulance Service (EEAST) RR-0401	Traffic and Transport	It is evident that a significant level of demolition and construction phase work involving large scale plant, equipment and machinery deployment/ use, engineering operations, waste material arisings/ deposition, import of construction material, HGV traffic generation and related road management measures are envisaged - leading to highway network impact, delay and route diversions. Information to determine the effect of increased HGV traffic and transport/ road network management and route diversion measures, and its impact on EEAST's operational capacity, resources and efficiency is currently absent from the EIA and associated DCO documentation. The impact of increased HGV traffic, transport/ road network management and route diversions on EEAST's operational capacity, resources and efficiency therefore needs to be presented and assessed - with appropriate mitigation and management measures secured within a Section 106 planning obligation or Deed of	An assessment of construction traffic and a transportation assessment was undertaken based on the Proposed Development's design and constructability information available at the time of writing, and reported in Chapter 18 Traffic and Transportation [AS-030] of the Environmental Statement (ES). Details on HGV routing and traffic management are not known at this stage. The CTMP will be agreed with the relevant highway authorities once a contractor is appointed and the works are planned in detail and prior to construction commencement.

		Obligation, as part of any Development Consent Order approval.	
East of England Ambulance Service (EEAST) RR-0401	Traffic and Transport	<p>The strategy for AILs incorporating an assessment of suitable traffic access routes, road closures and diversions for accommodating AIL and related HGV movements, is to be determined by the lead contractors in consultation with the highway authorities. Consequently, information to determine the nature, type/size, frequency, route management reliance on police escort, and expected time delays associated with AILs, which are likely to directly impact on EEAST's operational capacity, resources and efficiency is currently absent from the EIA and associated DCO documentation. This impact information therefore needs to be presented and assessed - with appropriate mitigation and management measures secured within a Section 106 planning obligation or Deed of Obligation, as part of any Development Consent Order approval.</p>	<p>A construction traffic assessment was undertaken based on the Proposed Development's design and constructability information available at the time of writing, and reported in Chapter 18 Traffic and Transportation [AS-030] of the Environmental Statement (ES). This was supplemented by Appendix 18.3 Outline Construction Traffic Management Plan [APP-130] and Appendix 18.4 Outline Construction Workers Travel Plan [APP-131].</p> <p>Detailed access and egress, plant type, movements and route management will be the responsibility of the lead construction Contractor as detailed in the Code of Construction Practice (Appendix 4.2 Code of Construction Practice[APP-049] of the ES).</p> <p>The requirement to carry out works in accordance with the Code of Construction Practice is secured through Requirement 8 of Schedule 2 of the Draft Development Consent Order [AS-005]. Pre-commencement requirements to prepare a Construction Traffic Management Plan (Requirement 14) and Construction Workers Travel Plan (Requirement 15) are also secured.</p>

			<p>The lead contractor will appoint a senior member of staff who will be the designated liaison officer responsible for the implementation, day-to-day management, and monitoring of the approved CTMP. That person's responsibilities would include being the principal point of contact on the site for all local groups, residents, and businesses regarding matters relating to transport (refer to section 3.2 of the Outline Construction Traffic Management Plan [APP-130]) This would provide a point of contact between the East of England Ambulance Service and the lead contractor.</p>
East of England Ambulance Service (EEAST) RR-0401	Major Accidents & Disasters	<p>A significant level and duration of demolition and construction phase work is envisaged, involving large scale plant, equipment and machinery deployment/use, hazardous and non- hazardous waste material arisings/ deposition, import of construction material, specialist construction/ engineering operations/ processes and product storage across the three construction periods. Information to determine the effect of the demolition and construction phase and its impact on EEAST's operational capacity, resources and efficiency is currently absent from the EIA and associated DCO documentation. HSE's construction statistic publications (for Great Britain) indicate that work related incidents, involving serious injury and</p>	<p>Detailed emergency contingency planning for the construction phase of the Proposed Development will be the responsibility of the lead construction Contractor as detailed in the Code of Construction Practice (Appendix 4.2 [APP-049] of the Environmental Statement (ES)). The requirement to carry out works in accordance with the Code of Construction Practice is secured through Requirement 8 of Schedule 2 of the Draft Development Consent Order [AS-005], including a pre-commencement requirement to prepare an emergency plan that is agreed in writing with relevant planning authority(ies).</p>

		<p>fatalities, are statistically significantly higher for the construction industry as compared to the 'all industry' rate. In the event of a construction phase accident, appropriate procedures would therefore need to be put in place for emergency access, on-site triage, medical assessment and patient identification, stabilisation and transfer to an appropriate healthcare setting. Plans and contingencies for emergency access, on-site triage, medical assessment, patient identification, stabilisation, clinical information, safe and efficient handover to EEAST responders within operationally optimal attendance times (noting the delay risks above) which in urgent cases may require Helicopter Emergency Medical Services (HEMS) access, are considered to be necessary. The incidence and impact of major accidents (and disasters) on EEAST and its HEMS partner operational capacity, resources and efficiency (including EEAST hazardous area response teams - HART) needs to be presented and assessed, with appropriate mitigation and management measures secured within a Section 106 planning obligation or Deed of Obligation, as part of any Development Consent Order approval.</p>	
--	--	---	--

<p>East of England Ambulance Service (EEAST) RR-0401</p>	<p>Health and Community</p>	<p>It is evident that during the three construction periods a significant number of construction workers are required to implement the demolition and construction stages of the Project. Information to determine the nature of the construction workforce, their home origin, health status, clinical dependencies, location of any temporary accommodation, which are factors likely to impact on EEAST's operational capacity, resources and efficiency, including its logistical response with healthcare partners, is currently incomplete and insufficiently assessed within the EIA and associated DCO documentation. This impact information therefore needs to be presented and assessed, with appropriate mitigation and management measures secured within a Section 106 planning obligation or Deed of Obligation, as necessary, as part of any Development Consent Order approval.</p>	<p>The full details of construction workforce will be determined once a lead construction Contractor is appointed.</p> <p>Section 7.3 of Appendix 4.1 Construction Method Statement and Programme Report [APP-048] of the Environmental Statement (ES) discusses the estimated number of operatives per assessment phase. It also details assumptions regarding the location and travel arrangements of the construction workforce. Information regarding health status, clinical dependencies is not available at this stage. Section 7.2 of the report details the Applicant's intention to establish a Safety Leadership Group to set strategic health and safety strategy and review performance including an occupational health programme.</p> <p>Requirements for the provision of occupational healthcare facilities at the construction site are set out within Appendix 4.2 Code of Construction Practice [APP-049] of the ES. This includes the provision of first aid and occupational healthcare service on site. Appropriate health surveillance will also be provided. No regular callouts to the ambulance service from the construction site are expected.</p>
--	-----------------------------	--	---

			<p>An assessment of relevant major accident and disaster hazards is provided within Chapter 15 Major Accidents and Disasters (MA&D) [APP-041] of the ES. The assessment concludes that, with the controls established through the DCO (e.g. in the form of the Draft Code of Construction Practice and the Construction Traffic Management Plan (CTMP)), no likely significant risks of MA&Ds remain. As such, no regular callouts to the ambulance service during the construction phase are expected.</p>
East of England Ambulance Service (EEAST) RR-0401	Engagement	<p>In the light of the above, EEAST recommend that appropriate Terms of Reference, Membership and a Communications Strategy for a Transport, Community Safety Health and Wellbeing Working Group is established, potentially in advance of the Examination. This would help to inform and assist the management of relevant aspects of the Project requiring a coordinated response from 'health and blue light partners', incorporating representatives from EEAST, the local Integrated Care Systems (ICS's) Bedfordshire Police and Bedfordshire Fire and Rescue Service.</p>	<p>The Applicant recognises continued engagement with EEAST will be important throughout the next stages and is considering the setting up of the requested Working Group.</p> <p>Further engagement through the development of a Statement of Common Ground with EEAST is currently underway</p>
East of England Ambulance Service	General	<p>EEAST considers that the Project is likely to give rise to significant effects on its operational capacity, efficiency and resources (incorporating its staff, vehicle fleet and estate assets) which have not</p>	<p>The Transport Assessment [APP-203 to APP-206] and Environmental Statement (ES) report the findings of the assessments on the transport network and environment as required to support</p>

(EEAST) RR-0401		been baselined or sufficiently assessed by the LLA Project to date. The Project is therefore considered to adversely affect EEAST's ability to meet and deliver its targets and priorities (statutory duties) as a key healthcare and emergency services provider.	the application for development consent in accordance with applicable legislation and planning policy. It is for EEAST to assess their operational capacity and resource requirements to deliver their statutory duties. The Applicant is happy to engage with EEAST to discuss these concerns when their assessment has been evidenced and provided.
East of England Ambulance Service (EEAST) RR-0401	General	<p>Identified impacts arising from the development should therefore be addressed by employing appropriate mitigation and management measures - to be secured and implemented through DCO Requirements, and/ or via a Section 106 planning obligation or Deed of Obligation, as part of any Development Consent Order approval.</p> <p>This approach ought to be reflected in a Statement of Common Ground to clarify the position reached and inform the forthcoming Examination process.</p> <p>The measures ought to include a process to assist EEAST and its health and blue light partners to plan for and implement co-ordinated responses to construction phase (and any operational and decommissioning phase) Project impacts and incidents, to optimise patient outcomes.</p>	The Transport Assessment [APP-203 to APP-206] and Surface Access Strategy [APP-228] set out the monitoring and mitigation measures proposed. As part of the ongoing review process, the Applicant intends to produce monitoring programs, assess any impacts, and then intervene accordingly if any issues persist as appropriate.
Bedfordshire Fire & Rescue Service RR-0142	General	Feedback Provided by Bedfordshire Fire & Rescue Service on the London Luton Airport Expansion The expansion of London Luton Airport LLA could potentially have an impact on Bedfordshire Fire and	Noted.

		Rescue Service. Here are areas for consideration:	
Bedfordshire Fire & Rescue Service RR-0142	General	An increased demand for emergency services: With the expansion of LLA, there is likely to be an increase in air traffic, passenger numbers and infrastructure. This could lead to an increase in the numbers of incidents requiring emergency response, including aircraft emergencies, fires and other incidents on the airport premises. Bedfordshire Fire and Rescue Service (BFRS) may need to allocate additional resources or alter its existing capabilities to handle the increased demand for emergency services.	The existing airport fire station, which is situated to the south-west of the airport, is being retained as it does not need upgrading to meet the requirements of the proposed fleet of aircraft. Its existing location remains suitable to provide an emergency response within the response time of 2 minutes not exceeding 3 minutes to any areas where aircraft land, take off, taxi or park.
Bedfordshire Fire & Rescue Service RR-0142	Major Accidents and Disasters	Airport specific training and equipment: The expansion of LLA may necessitate further specialised training and equipment for BFRS. Airport operations have unique challenges, such as aircraft fires, fuel spills, hazardous materials and the threat of marauder terrorist attacks. BFRS would need to ensure that their personnel continue to be trained and equipped to handle these specific scenarios effectively.	Noted the requirements for continuation of the current situation. The current airport fire training facility is to be retained and later relocated as part of the Proposed Development. Details can be found in Design and Access Statement Volume II [APP-208] and shown on General Arrangement Drawings (Part 1 of 3) [AS-018] .
Bedfordshire Fire & Rescue Service RR-0142	Major Accidents and Disasters	Mutual aid agreement: BFRS will need to strengthen its mutual aid agreements with the LLA Fire and Rescue Service. In the event of a major incident at the expanded LLA, additional resources may be required to manage these emergencies effectively. Any revised mutual aid agreement must	Discussions will continue to address any outstanding issues and will be captured through the initial draft SoCG, to be submitted under Deadline 2.

		ensure an adequate response capability that support all partnership responders.	
Bedfordshire Fire & Rescue Service RR-0142	Planning	<p>Infrastructure planning: The expansion of LLA will involve the construction of new buildings, runways and other infrastructure. BFRS will need to continue to work closely with the airport authorities and local planning departments to ensure that adequate fire safety measures are incorporated into the design and construction of new structures. This may involve reviewing fire safety plans, conducting inspections and providing recommendations to mitigate potential risk. It is important that this is continually considered and reviewed during all phases of any expansion.</p>	<p>The Applicant has considered the points raised by BFRS and would like to direct BFRS to the following documents. Noting that the expansion will not include the construction of new runways.</p> <p>Design Principles [APP-225] document has been prepared to assure stakeholders that the design of the Proposed Development will be developed to be compliant with all relevant safety and security standards.</p> <p>Appendix 4.2 Code of Construction Practice [APP-049] to the Environmental Statement (ES) describes the proposed measures to manage environmental effects of construction including accident and incident prevention and controls.</p> <p>Scheme Layout Plans [AS-010] includes an emergency assembly area within the design north of T2, following discussions with emergency services. It should also be noted that the existing Rendezvous Points (RVP) next to the existing fire station is to remain for coordination of airside incidents</p>

Bedfordshire Fire & Rescue Service RR-0142	Surface access	Traffic management: The increased passenger and cargo traffic associated with the airport expansion may have implications for traffic management in the surrounding areas of Luton and more specifically Stopsley. BFRS may need to coordinate with other agencies such as the police and transportation authorities to ensure efficient emergency response times to all areas of the new expanded LLA.	The Transport Assessment [APP-203 to APP-206] and Surface Access Strategy [APP-228] set out the monitoring and mitigation measures proposed. As part of the ongoing review process, the Applicant intends to produce monitoring programs, assess any impacts, and then intervene accordingly if any issues persist as appropriate.
Thames Water RR-1499	General	London Luton Airport Expansion DCO Thames Water Utilities Limited Relevant Representations Thames Water Utilities Limited ("TWUL") is appointed under Chapter 1 of Part II of the Water Industry Act 1991 ("WIA") as water and sewerage undertaker for the Thames region, which includes sewerage only at the location of the London Luton Airport Expansion DCO. In principle, TWUL does not object to the London Luton Airport scheme but has concerns relating to the increase in sewage discharge as a result of the expansion, both during and beyond the development. TWUL requires assurances that this can be delivered and managed without having a detrimental impact to TWUL's existing customers and assets. TWUL will need to work closely with London Luton Airport (the "Applicant") to alleviate these concerns. TWUL owns land, sewers and other apparatus throughout and surrounding the DCO boundary that will be affected by the scheme, which will either need to be	Noted.

		protected or diverted as a result. TWUL does not believe that the provisions of the draft Development Consent Order ("the Order") satisfactorily protect TWUL's existing and future apparatus and ability to comply with its statutory duties or exercise its statutory powers.	
Thames Water RR-1499	Draft DCO	Please find TWUL's objections (all clauses below are objected to), proposed amendments to specific provisions and additions to the protective provisions in order to alleviate the concerns below.	Noted.
Thames Water RR-1499	Draft DCO	General Objections: a) Asset Protection Review: This DCO affects TWUL sewerage assets. We would require an asset protection review prior to any works within 5 meters of our assets. This would ultimately lead to either a letter of no further comment being issued, or the affected assets being diverted.	Noted. The Applicant is in discussion with Thames Water Utilities Ltd (TWUL) with regards a form of protective provisions or contractual commitment to address this aspect of the representation.
Thames Water RR-1499	Drainage/Water	b) Foul Water Discharge: TWUL needs to be provided with Luton's modelled foul water flows and needs to understand the impact of the change in these (as a result of the development) on our network. This information should be provided a minimum of 36 months before flows come in to allow for any necessary upgrades in our network. TWUL will also need to understand how wastewater from aircraft will be managed as a result of the development, with emphasis on its chemical composition, average periodic volumes and points of discharge into TWUL's network.	Noted. This will be provided during the detailed design and relevant package submissions to Thames Water. There is ongoing engagement with TWUL in relation to modelling of the foul water flows.

Thames Water RR-1499	Drainage/Water	c) Surface Water Discharge: TWUL needs assurance that any surface water discharge as a result of the development will not be contaminated and will adhere to the London Plan and associated discharge hierarchy. If there is any proposed increase in surface water runoff TWUL will need to know this in advance (with the same timescales as for the foul flows).	Noted. Mitigation measures have been proposed in 5.02 Environmental Statement - Appendix 20.4 Drainage Design Statement [APP-137] to control contaminants before being discharged to surface water systems.
Thames Water RR-1499	Drainage/Water	d) Trade Effluent Discharge: There are particular concerns as to how glycol contaminated surface water will be managed. Prior to the development, TWUL will need the trade effluent (including the discharge of glycol contaminated surface water) monitored to understand the impact the development will have on TWUL's network. Once this monitoring is established TWUL will then need to understand the proposed increase or changes to the trade effluent discharge. ?	Noted. Should trade effluent be directed by Thames Water Utilities (TWUL), the approach would be similar to that explained in 5.02 Environmental Statement - Appendix 20.4 Drainage Design Statement [APP-137] . The strategy and details will be further developed and discussed with TWUL during the detailed design stage in order to agree the details of the trade effluent consent and/or agreement..
Thames Water RR-1499	Draft DCO	Specific Objections: With respect to the DCO Proper: Article 6(2) As noted above, the Applicant must be aware that the change in ground levels that are proposed and the possible deviations in Article 6 may prompt the requirement to divert assets. In order for TWUL to be aware of the possible diversions necessary, the Applicant must highlight where the ground level (above a	Noted. The Applicant is in discussion with Thames Water Utilities (TWUL) with regards a form of protective provisions or contractual commitment to address this aspect of the representation.

		<p>TWUL asset) shall be altered beyond 300mm. TWUL propose to add the following clause 18 within the protective provisions, see below: "The Applicant agrees to inform the utility undertaker as soon as practically possible if they determine to alter the ground level more than 300mm within 3 metres laterally of the outside face of the asset. Subsequently the utility undertaker shall determine if a diversion is necessary."</p>	
Thames Water RR-1499	Draft DCO	<p>Article 10 & 11 TWUL have land and asset interests in and adjoining to the DCO boundary that will be affected if streets are altered, temporarily or permanently. In order for TWUL to understand the impact on TWUL land and assets, TWUL would need to be fully informed of the street alterations required by the development.</p>	<p>Articles 9 and 10(3) of the Order apply the provision of New Roads and Street Works Act 1991 (NRSWA) which regulate street works to street works carried out under its authority. As regards advance notice, art. 9(4) and (5) and 10(3) provide that sections 54 (advance notice of certain works) and 55 (notice of starting date of works) apply.</p>
Thames Water RR-1499	Draft DCO	<p>Article 14 As noted for clause (4) of the protective provisions below, TWUL request the standard wording be reinstated and use of 'streets' in the place of 'public right of way' be retained.</p> <p>Article 16 As stated above, TWUL have land and asset interests in the DCO boundary and surrounding area therefore TWUL will need to be fully informed of changes in traffic access required by the development.</p>	<p>The wording in article 14 (and para. 4(1) of the Order PPs) correctly refers to permanent stopping up of public rights of way rather than streets. The equivalent articles in other DCOs have referred variously to streets, public rights of way and/or private means of access (see e.g. article 17 of the M42 Junction 6 Development Consent Order 2020 which refers to all three). On the Proposed Development, no streets are proposed to be permanently stopped up, hence the proposed wording is deemed appropriate.</p>

			Article 16 provides for this: Para. (3)(b) requires the undertaker to advertise its use of the powers as specified by the traffic authority; Para. (6) provides that the undertaker “must consult such persons as it considers necessary and appropriate and must take into consideration any representations made to it by any such person.” As set out in the Explanatory Memorandum (AS-007), this complies with the consultation and publicity requirements for Traffic Regulation Orders under the Secretary of State's Traffic Orders (Procedure) (England and Wales) Regulations 1990/1656.
Thames Water RR-1499	Draft DCO	Article 19(1) There has been a change of wording from the standard wording from ‘construction’ to ‘carrying out’. This new phrasing creates unnecessary ambiguity and may lead to the inclusion of the operation of the development which TWUL would object to as this should be covered in a separate agreement. TWUL require construction/standard wording to be retained as follows: “(1) The Undertaker may use any watercourse or any public sewer or drain for the drainage of water in connection with the construction or maintenance of the authorised works and for that purpose may lay down, take up and alter pipes and may, on any land within the Order limits, make openings into, and	<p>The wording used in the DCO is consistent with that in the Infrastructure Planning (Model Provisions) (England and Wales) Order 2009, Schedule 1, General model provisions, article 14(1), which are applicable to DCOs:</p> <p><i>14.—(1) The undertaker may use any watercourse or any public sewer or drain for the drainage of water in connection with the carrying out or maintenance of the authorised project and for that purpose may lay down, take up and alter pipes and may, on any land within the Order limits, make openings into, and</i></p>

		connections with, the watercourse, public sewer or drain.”	<p><i>connections with, the watercourse, public sewer or drain.</i></p> <p>There are two changes in the DCO from the model clause:</p> <ol style="list-style-type: none"> the addition of the words “subject to paragraphs (3) and (4)”, which has been added for clarity, as paras. (3) and (4), to which para. (1) is subject, appear in the model clauses; and change from authorised project to authorised development consistent with the DCO terminology.
Thames Water RR-1499	Draft DCO	<p>Article 19(2) There have been further unnecessary changes in the wording, TWUL require that the standard wording is retained: “(2) Any dispute arising from the exercise of the powers conferred by paragraph (1) to connect to or use a public sewer or drain is to be determined as if it were a dispute under section 106 (right to communicate with public sewers) of the Water Industry Act 1991(a).”</p> <p>Article 19(9) TWUL requires “a person who receives an application” on behalf of the statutory undertaker to be more clearly defined as a condition of valid notice of the application. TWUL are happy to provide the correct contact details for this person to ensure the 28 day deadline can be complied with.</p>	<p>The wording used in the DCO is consistent with that in the Infrastructure Planning (Model Provisions) (England and Wales) Order 2009, Schedule 1, General model provisions, article 14(2) which are applicable to DCOs:</p> <p><i>“(2) Any dispute arising from the making of connections to or the use of a public sewer or drain by the undertaker pursuant to paragraph (1) shall be determined as if it were a dispute under section 106 of the Water Industry Act 1991(10) (right to communicate with public sewers).”</i></p> <p>The only changes are to use “is to be” rather than “shall be” in accordance with</p>

			<p>modern drafting practice and guidance, and a slight change to the order of wording in relation to the statutory reference to the Water Industry Act 1991.</p> <p>The comment in respect of Article 19(9) is noted.</p> <p>The Applicant is in discussion with Thames Water Utilities Ltd (TWUL) with regards to a form of protective provisions or contractual commitment to address this aspect of the representation.</p>
Thames Water RR-1499	Draft DCO	Article 19(11) This subclause is not present in any previous DCO or TWAO due to the impossibility of its aim. TWUL, or any other statutory undertaker, is not able to consent to the discharge of Trade Effluent into watercourses, public sewers (specifically public surface water sewers) or drains under any circumstances. Trade Effluent can only be discharged to foul water sewers. Therefore, this subclause is redundant and needs to be removed.	The Applicant is seeking clarification from Thames Water Utilities Ltd (TWUL) with regards this aspect of its representation as s.118 WIA appears on its face to allow TWUL to consent to the discharge of trade effluent into TWUL's public sewers.
Thames Water RR-1499	Draft DCO	Article 21 Surveys are singled out in Article 21 and these works may take place far in advance of the main works. At this stage TWUL cannot determine if they may impact our assets. We consider the definition of 'plan' in the protective provisions Schedule 8(2) to incorporate information from surveys and therefore consider surveys to be part of the works and therefore covered by the protective	<p>Noted.</p> <p>The Applicant is in discussion with Thames Water Utilities Ltd (TWUL) with regards to a form of protective provisions or contractual commitment to address this aspect of the representation.</p>

		provisions. TWUL propose the following new clause 19 within the protective provisions: "Surveys are to be considered part of the works. The Undertaker agrees to inform the utility undertaker as soon as practically possible if they intend to survey using ground intrusive methods within 3 metres laterally of the outside face of an asset. Subsequently the utility undertaker shall determine if protection of the asset is necessary"	
Thames Water RR-1499	Draft DCO	Articles 24, 27, 30 and 35 TWUL object as TWUL have assets and land within and adjoining the DCO boundary which are necessary to fulfil our statutory function. If TWUL were not to be in possession of those assets, the ability to perform TWUL's statutory function would be restricted. Furthermore, the restrictions contained in these articles should not impact TWUL's ability to access TWUL's assets or carry out TWUL's statutory function.	<p>The powers to compulsorily acquire land and rights in the DCO, such as in the articles identified, are necessary to secure the land and rights necessary for the implementation of the Order, are based on the model clauses, and are widely precedented. Note that in the case of Statutory Undertakers like Thames Water, art. 36(1) provides that the compulsory acquisition of land and rights is subject to the PPs contained in the Order, of which—</p> <ul style="list-style-type: none"> a. para. 6 states "Regardless of any provision in this Order or anything shown on the land plans, the undertaker must not acquire any apparatus otherwise than by agreement." b. paras 7 and 8 provide that agreed alternative apparatus and agreed facilities and rights must first be

			<p>provided in respect of apparatus in land acquired (or otherwise to be moved);</p> <ul style="list-style-type: none"> c. para. 9 provides for the protection of retained apparatus; d. para. 15 (as agreed to be inserted, see below), makes provision in respect of access; and e. the remaining PPs make related provision in respect of costs and indemnities. <p>The Applicant is in discussion with Thames Water Utilities Ltd (TWUL) with regards to a form of protective provisions or contractual commitment to address this aspect of the representation.</p>
Thames Water RR-1499	Draft DCO	Article 36 (1)(d) Building over TWUL assets contravenes the building regulations that recognise that doing so interferes with TWUL's statutory undertaking as TWUL will be unable to repair or maintain TWUL's assets once they are built over. Therefore, the undertaker should seek to reposition TWUL's apparatus rather than building over them. Therefore, TWUL object to this article and it needs to be removed.	See above in respect of Articles 24, 27, 30 and 35 and the protection afforded by the PPs.
Thames Water RR-1499	Draft DCO	Article 36 (1)(e) Similarly to the above, the behaviour described in (e) has the potential to damage our assets. If the Applicant damages TWUL's assets then this will interrupt TWUL's statutory duties. Therefore, TWUL object to this article and it needs to be removed.	See above in respect of Articles 24, 27, 30 and 35 and the protection afforded by the PPs.

Thames Water RR-1499	Draft DCO	Article 38 TWUL objects to this clause and references the objection in respect of 11(1) of the protective provisions (Schedule 8).	Noted. The Applicant is in discussion with Thames Water Utilities Ltd (TWUL) with regards to this aspect of the representation.
Thames Water RR-1499	Draft DCO	Sch 2 Clause 13 As utility undertakers, TWUL would need to be consulted on the drainage strategy and approve the strategy, in addition to the planning authority.	Noted. The Applicant is in discussion with Thames Water Utilities Ltd (TWUL) with regards to this aspect of the representation.
Thames Water RR-1499	Draft DCO	With respect to the Protective Provisions for Sewerage Undertakers (Schedule 8) Sch 8 Clause (2) TWUL considers that the definition of 'alternative apparatus' should include the words 'and effective' after the words 'no less efficient'. Efficiency relates to cost and productivity whereas effectiveness relates to ensuring the same output. TWUL's general duty under section 37(1) WIA refers to an 'efficient and economical' system and its general duty under section 94(1)(a) WIA refers to 'effectually' draining an area. In TWUL's opinion, alternative apparatus could be no less efficient than the asset which it replaces i.e. it might cost the same to maintain, but may be less effective, because it does not deal with the same quantity of water/effluent. On that basis, TWUL requests an amendment to paragraph 2 accordingly so that it is	Noted. The Applicant is in discussion with Thames Water Utilities Ltd (TWUL) with regards a form of protective provisions or contractual commitment to address this aspect of the representation.

		consistent with TWUL's obligations under WIA.	
Thames Water RR-1499	Draft DCO	Sch 8 Clause 2(c) The definition of water apparatus in 2(c) does not refer to 'accessories' but to apparatus. Accessories are defined in section 219(1) WIA and constitute the parts of the apparatus that are integral to the apparatus, such as manholes, ventilating shafts, stopcocks etc. Furthermore, the definition in 2(c) does not include apparatus which may be adopted by a water undertaker under section 51A WIA.	Noted. The Applicant is in discussion with Thames Water Utilities Ltd (TWUL) with regards a form of protective provisions or contractual commitment to address this aspect of the representation.
Thames Water RR-1499	Draft DCO	Sch 8 Clause 2(d) In relation to the definition in 2(d), it is not clear why 2(d)(i) only covers drains and works, and 2(d)(ii) only refers to sewers. Sewers, drains and disposal works can be vested in TWUL and can also be subject to vesting under section 102(1) and section 104(1) WIA. TWUL proposes the following amendment to paragraphs 2(c) and (d) for the purpose of clarity and consistency with WIA: "(c) In the case of a utility undertaker within paragraph (c) of the definition of that term (i) any mains, pipes, other water apparatus or accessories (as defined in section 219 of the Water Industry Act 1991) belonging to maintained or used by the utility undertaker for the purposes of water supply: and (ii) any water mains or service pipes which are the subject of a notice of intention to adopt under section 51A of the Water Industry Act 1991; and (d) in the case of a utility	Noted. The Applicant is in discussion with Thames Water Utilities Ltd (TWUL) with regards a form of protective provisions or contractual commitment to address this aspect of the representation.

		<p>undertaker within paragraph (d) of the definition of that term (i)any sewer. drain or disposal works vested in the sewerage undertaker under the Water Industry Act 1991; and (ii)any sewer, drain or disposal works which are the subject of a notice of intention to adopt given under section 102(4) of that Act or an agreement to adopt made under section 104 of that Act, and includes a sludge main, disposal main (within the meaning of section 219 of that Act) or sewer outfall and manholes, ventilating shafts, pumps, inspection chambers or other accessories (as defined in section 219(1) of the Water Industry Act 1991) forming part of any such sewer, drain or works, and in each case includes any structure in which apparatus is or is to be lodged or which gives or will give access to apparatus;”</p>	
Thames Water RR-1499	Draft DCO	<p>Sch 8 Clause (4) There has been a change of wording from the standard wording, specifically ‘streets’ to ‘public right of way’ and also a change from ‘highway’ to ‘street’ in 4(2). The reasoning behind this is unclear and significantly changes the subject matter. We request the standard wording to be used. “Apparatus in stopped up streets 4.—(1) Where any street is stopped up under article 14 (permanent stopping up of streets and private means of access), any utility undertaker whose apparatus is in the street has the same powers and rights in respect of that</p>	<p>The Applicant is in discussion with Thames Water Utilities Ltd (TWUL) with regards a form of protective provisions or contractual commitment to address this aspect of the representation.</p>

		<p>apparatus as it enjoyed immediately before the stopping up and the undertaker must grant to the utility undertaker legal easements reasonably satisfactory to the utility undertaker in respect of such apparatus and access to it, but nothing in this paragraph affects any right of the undertaker or of the utility undertaker to require the removal of that apparatus under paragraph 7 or the power of the undertaker to carry out works under paragraph 9. (2) Regardless of the temporary closure, alteration, diversion and restriction of use of any highway under the powers conferred by article 12 (temporary closure, alteration, diversion and restriction of use of streets), a utility undertaker is at liberty at all times to take all necessary access across any such stopped up highway and to execute and do all such works and things in, upon or under any such highway as may be reasonably necessary or desirable to enable it to maintain any apparatus which at the time of the stopping up or diversion was in that highway.”</p>	
--	--	---	--

Thames Water RR-1499	Draft DCO	Sch 8 Clause 7(2) TWUL believe the Applicant has incorrectly inserted “a utility” in the highlighted section. This should be “an undertaker” as the powers provided in this order are for the benefit of the Applicant as undertaker. TWUL also requires comfort in the relevant paragraphs that the Applicant will consult about any required diversion or protection works and agree the technical solution before notice is served. Currently, the provisions are unclear and suggest that the Applicant could in practice serve only 28 days' notice of their requirements without any prior consultation or agreement as to their requirements. In addition to imposing a requirement to consult and agree on technical solutions before serving notice, TWUL would like to increase the notice period to not less than 56 days, which would at least accommodate the statutory notice period for alteration of apparatus where necessary and appears to be the standard timescale agreed with other utility undertakers.	<p>Noted.</p> <p>The Applicant is in discussion with Thames Water Utilities Ltd (TWUL) with regards a form of protective provisions or contractual commitment to address this aspect of the representation.</p>
----------------------	-----------	--	---

Thames Water RR-1499	Draft DCO	<p>Sch 8 Clause 7(3) This clause relates to rights and facilities for constructing alternative apparatus. It says that where the alternative apparatus is to be constructed elsewhere than in other land of the Applicant or if the Applicant cannot afford such rights and facilities, TWUL must, on receipt of written notice to that effect from the Applicant, as soon as reasonably practicable use reasonable endeavours to obtain the necessary facilities and rights in the land in which alternative apparatus is to be constructed. TWUL has statutory powers to lay, alter and maintain apparatus under sections 158 and 159 WIA as set out above. However, these powers are not unlimited in the sense that the powers are not exercisable in Crown land or in land owned by the undertakings listed in Schedule 13 WIA without consent. Furthermore, although TWUL has the power to enter land where it has served the relevant notice and that notice has expired, it is not entitled to enter land by force and landowners can refuse entry to land. This can result in having to obtain warrants of entry from Magistrates' Courts, with consequent unrecoverable costs and reputational issues.</p>	<p>Noted.</p> <p>The Applicant is in discussion with Thames Water Utilities Ltd (TWUL) with regards a form of protective provisions or contractual commitment to address this aspect of the representation.</p>
----------------------	-----------	--	---

Thames Water RR-1499	Draft DCO	Sch 8 Clause 7(6) The following amendment is necessary because if the undertaker is in a position to remove our asset without TWUL's consent or prior to providing an effective and efficient alternative this leaves the utility undertaker vulnerable to failing to discharge its own statutory obligations. The below text is suggested to replace this clause: "Regardless of anything in sub-paragraph (5), and subject to sub-paragraph (7), if the undertaker gives notice in writing to the utility undertaker that the undertaker desires itself to execute any work, or part of any work in connection with the construction or removal of apparatus in any land of the undertaker, and the utility undertaker gives its consent in writing (which shall not be unreasonably withheld or delayed), that work, instead of being executed by the utility undertaker, may be executed by the undertaker without unnecessary delay under the superintendence, if given, and to the reasonable satisfaction of the utility undertaker."	Noted. The Applicant is in discussion with Thames Water Utilities Ltd (TWUL) with regards a form of protective provisions or contractual commitment to address this aspect of the representation.
Thames Water RR-1499	Draft DCO	Sch 8 Clause 7(7) & (8) TWUL object to this clause as deemed consent is not appropriate. Deemed consent of removal of assets has the potential to prevent TWUL from discharging its statutory obligations such as conveying sewerage or potable water. There needs to be assets or replacement assets which are operating in	Noted. The Applicant is in discussion with Thames Water Utilities Ltd (TWUL) with regards a form of protective provisions or contractual commitment to address this aspect of the representation.

		order for TWUL statutory duties to be fulfilled.	
Thames Water RR-1499	Draft DCO	Sch 8 Clause 8(1) With respect to subsection 8(1) we believe there has been a typing error and this clause should have been drafted as follows: (using London Resort's DCO numbering) "Sch 10, 8(1) Where, in accordance with the provisions of this Part of this Schedule, the undertaker affords to a utility undertaker facilities and rights for the construction and maintenance in land of the undertaker of alternative apparatus in substitution for apparatus to be removed, those facilities and rights are to be granted upon such terms and conditions as may be agreed between the undertaker and the utility undertaker in question or in default of agreement settled by arbitration in accordance with article 46 (arbitration)." In respect to subsection 8(2), the following should be added as a subsection (c): "(c) the arbitrator will also give effect to the statutory obligations of the utility undertaker."	<p>Noted.</p> <p>The Applicant is in discussion with Thames Water Utilities Ltd (TWUL) with regards a form of protective provisions or contractual commitment to address this aspect of the representation.</p>

Thames Water RR-1499	Draft DCO	Sch 8 Clause 9 (1) & (5) Firstly, TWUL require the following underlined wording to be inserted into subsection (1): (1) Not less than 28 days before starting the execution of any works in, on or under any land purchased, held, appropriated or used under this Order that are near to, or will or may affect, any apparatus (or any means of access to it) the removal of which has not been required by the undertaker under paragraph 7(2), the undertaker must submit to the utility undertaker in question a plan of the works to be executed. These clauses refer to a 28 day notice period. 28 days is insufficient to arrange potentially significant infrastructure works. Arranging infrastructure works, including but not limited to the diversion of apparatus, can take many years to arrange. For example, the timescale for diverting apparatus includes considering the requirement to divert, considering the options for diversion, design of the preferred option, tender, procurement, construction and commissioning. Furthermore, the statutory notice period for laying a relevant pipe otherwise than in substitution for an existing pipe of the same description is 3 months (s159(5)(a)), and 42 days for the purpose of altering an existing pipe (s159(5)(b)). As such, depending on the required work, TWUL may have to give up to 3 months' notice to the landowner (this may not be the Applicant, as the Applicant	<p>Noted.</p> <p>The Applicant is in discussion with Thames Water Utilities Ltd (TWUL) with regards a form of protective provisions or contractual commitment to address this aspect of the representation.</p>
----------------------	-----------	---	---

		<p>has not arranged to acquire sufficient interest in land to accommodate diversion works) before it can exercise its powers (s159(5)). Additional notices will need to be given where works are in the street. TWUL may also have to coordinate works with local authorities/in line with other work being undertaken in the street, which would result in further delays. The Applicant and TWUL's technical departments are already in communication. TWUL believes that the timescale noted in this subclause needs to at least be able to accommodate the statutory notice periods set out in WIA, TWUL also requires comfort in the relevant paragraphs that the Applicant will consult about any required diversion or protection works and agree the technical solution before notice is served. Currently, the provisions are unclear and suggest that the Applicant could in practice serve only 28 days' notice of their requirements without any prior consultation or agreement as to their requirements. In addition to imposing a requirement to consult and agree on technical solutions before serving notice, TWUL would like to increase the notice period to not less than 56 days, which would at least accommodate the statutory notice period for alteration of apparatus where necessary, and appears to be the standard timescale agreed with other statutory undertakers.</p>	
--	--	---	--

Thames Water RR-1499	Draft DCO	Sch 8 Clause 9(6) TWUL proposes this clause be removed. There should not be a situation where our assets are or may be affected without consent from TWUL. If accepted, this could lead to TWUL breaching its statutory duties as a water and sewage undertaker. In addition, there may be health and safety ramifications which at the time would be unknown or not within the capability of the undertaker or TWUL to recognise or address. The application must be properly considered and therefore consent is essential.	<p>Noted.</p> <p>The Applicant is in discussion with Thames Water Utilities Ltd (TWUL) with regards a form of protective provisions or contractual commitment to address this aspect of the representation.</p>
Thames Water RR-1499	Draft DCO	Sch 8 Clause 10 (1) Clause 10(1) relates to reimbursement by the Applicant of any 'proper and reasonable expenses' incurred by TWUL in connection with the inspection, removal, alteration or protection of any apparatus. The words 'proper and reasonable' suggest that the Applicant will challenge both the reasonableness of the expense and whether it was properly incurred. TWUL should also be able to recover compensation properly paid in relation to any work it carries out under the Order, as under Schedule 12 WIA it is obliged to pay compensation to landowners and business owners in relation to specific losses incurred (diminution in value of land, disturbance and loss of business profits) in exercise of its pipe laying powers under sections 158 and 159 WIA. In TWUL's view, the protective provisions relating to recovery of expenses should be consistent	<p>Noted.</p> <p>The Applicant is in discussion with Thames Water Utilities Ltd (TWUL) with regards a form of protective provisions or contractual commitment to address this aspect of the representation.</p>

		for all undertakers, should be consistent with TWUL's statutory right to recover sums under s185(5) and should cover TWUL's obligations to pay compensation under Schedule 12 WIA. TWUL proposes the following amendment to clause 10(1): "Subject to the following provisions of this paragraph, the undertaker must repay to the utility undertaker in question all expenses, costs and charges reasonably incurred and any compensation properly paid by that utility undertaker in, or in connection with, the inspection, removal, alteration or protection of any apparatus."	
Thames Water RR-1499	Draft DCO	Sch 8 Clause 11(1) TWUL has not been provided with any indemnity by the Applicant relating to damage to apparatus or alternative apparatus, property or any interruption of services or supply, despite the fact that it is also a utility undertaker whose apparatus, alternative apparatus or property could be damaged by works carried out under the Order or whose supply and services could be interrupted by reason of or in consequence of the construction, use, maintenance or failure of the authorised development. TWUL refer you to Silvertown DCO (Protective Provisions) – the below was inserted. TWUL require the wording for 11(1) contained in the Luton DCO to be substituted for the following: (Silvertown numbering) 10.—(1) Subject to sub-paragraphs (2) and (3), if by reason or in	<p>Noted.</p> <p>The Applicant is in discussion with Thames Water Utilities Ltd (TWUL) with regards a form of protective provisions or contractual commitment to address this aspect of the representation.</p>

		<p>consequence of the construction, maintenance or failure of any of the works referred to in paragraph 6(2), any damage is caused to any apparatus (other than apparatus the repair of which is not reasonably necessary in view of its intended removal for the purposes of those works) or property of a statutory undertaker, or there is any interruption in any service provided, or in the supply of any goods, by any statutory undertaker, the Undertaker must— a) bear and pay the cost reasonably incurred by that statutory undertaker in making good such damage or restoring the supply; and b) indemnify the statutory undertaker against all reasonable claims, penalties, demands, proceedings, costs, damages and expenses which may be made or taken against or recovered from, or reasonably and properly incurred by, the statutory undertaker, by reason or in consequence of any such damage or interruption.</p>	
--	--	--	--

Thames Water RR-1499	Draft DCO	<p>Proposed new Clauses to Protective Provisions for Sewerage Undertakers (Schedule 8): Sch 8 Clause 15 It would be useful to include an additional paragraph in this schedule to cover situations where TWUL's access to apparatus and land is materially obstructed. TWUL have a number of land parcels directly adjacent to the DCO boundary which TWUL will need to continue to have access to. The scheme provides for accessing assets that lie within land that the undertaker is occupying, but it doesn't make similar provisions for accessing TWUL's assets that are situated in land that may become 'landlocked' or severed by the scheme or effectively so if the only other access were via a river or railway, etc. TWUL simply need the same rights for access to assets as if they were in the occupied land. This may be unnecessary, but the information provided so far is insufficient to decide. We request that a Clause 15 be inserted: "If in consequence of the exercise of the powers conferred by this Order the access to any apparatus and/or land of the utility undertaker is obstructed the undertaker must provide such alternative means of access to that apparatus and/or land as will enable the utility undertaker to maintain or use the apparatus and/or land no less effectively than was possible before the obstruction."</p>	<p>Noted.</p> <p>The Applicant is in discussion with Thames Water Utilities Ltd (TWUL) with regards a form of protective provisions or contractual commitment to address this aspect of the representation.</p>
----------------------	-----------	--	---

Thames Water RR-1499	Draft DCO	Sch 8 Clause 16 TWUL have a number of assets and land interests either within or adjacent to the DCO boundary that could be significantly impacted by the proposed works. As a result, TWUL require assurance that there will be limited impact to TWUL's statutory functions. We request that a Clause 16 be inserted: "At all times the undertaker shall procure that its employees, contractors and subcontractors take all reasonable and proper precautions in exercise of powers conferred by this Order to ensure that as little damage, obstruction or interference as reasonably practicable is caused to the undertaking of the utility undertaker. The undertaker shall use its reasonable endeavours during the exercise of powers conferred by this Order to ensure that such works do not cause any interruption to the exercise by the utility undertaker of its statutory functions."	<p>Noted.</p> <p>The Applicant is in discussion with Thames Water Utilities Ltd (TWUL) with regards a form of protective provisions or contractual commitment to address this aspect of the representation.</p>
----------------------	-----------	---	---

Thames Water RR-1499	Draft DCO	<p>Sch 8 Clause 17 The below addition highlights that if TWUL have to use their powers then these shall be done so not through the DCO but through TWUL's statutory powers and not through the power of the DCO. (17(1)) (17(2)) Is there to provide comfort to the Applicant that if TWUL were to carry out works it would be done under compliance of the Protective Provisions. In addition (17(3)) again provides comfort to the Applicant concerning any works that may be carried out by TWUL. We propose that a Clause 17 be inserted: Authority for the works (1) Any works involving the laying or construction of pipes or accessories thereto to form part of the utility undertaker's undertaking, or inspection, adjustment, repair or alteration (including moving or removing and replacing) of such apparatus, or any works requisite for or incidental to the purpose of any such works, shall, unless otherwise agreed in writing by the utility undertaker, be undertaken pursuant to the utility undertaker's statutory powers following the service of statutory notice of entry onto land, such notice to be served by the utility undertaker. (2) In the event that utility undertaker carries out any works involving new or existing TW assets under its own statutory powers then the Protective Provisions shall apply to such works and utility undertaker covenants to observe and</p>	<p>Noted.</p> <p>The Applicant is in discussion with Thames Water Utilities Ltd (TWUL) with regards a form of protective provisions or contractual commitment to address this aspect of the representation.</p>
----------------------	-----------	---	---

		<p>comply with the Protective Provisions irrespective of whether it is carrying out the works under its own statutory powers or in reliance on the powers conferred by the Order. (3) In the event that utility undertaker carries out any works involving new or existing utility undertaker assets under its own statutory powers but then fails to carry out those works in accordance with the Protective Provisions or within a reasonable timeframe (including in accordance with such programme for the carrying out of those works as may be agreed in writing between Highways England and utility undertaker) then this shall not prevent or otherwise prejudice the exercise of the powers to carry out the works conferred by the Order.</p>	
Thames Water RR-1499	Draft DCO	<p>Sch 8 Clause 18 As noted above, the Applicant must be aware that the change in ground levels that are proposed and the possible deviations in Article 6 may prompt the requirement to divert assets. In order for TWUL to be aware of the possible diversions necessary, the Applicant must highlight where the ground level (above a TWUL asset) shall be altered beyond 300mm. We propose that a Clause 18 be inserted: "The Undertaker agrees to inform the utility undertaker as soon as practically possible if they determine to alter the ground level more than 300mm within 3 metres laterally of the outside face of the</p>	<p>Noted.</p> <p>The Applicant is in discussion with Thames Water Utilities Ltd (TWUL) with regards a form of protective provisions or contractual commitment to address this aspect of the representation.</p>

		asset. Subsequently the utility undertaker shall determine if a diversion is necessary.”	
Thames Water RR-1499	Draft DCO	Sch 8 Clause 19 Surveys are singled out in Article 21 and these works may take place far in advance of the main works. At this stage TWUL cannot determine if they may impact our assets. We consider the definition of ‘plan’ in the protective provisions Schedule 8(2) to incorporate information from surveys and therefore consider surveys to be part of the works and therefore covered by the protective provisions. We propose that a Clause 19 be inserted: “Surveys are to be considered part of the works. The Undertaker agrees to inform the utility undertaker as soon as practically possible if they intend to survey using ground intrusive methods within 3 metres laterally of the outside face of an asset. Subsequently the utility undertaker shall determine if protection of the asset is necessary”	Noted. The Applicant is in discussion with Thames Water Utilities Ltd (TWUL) with regards a form of protective provisions or contractual commitment to address this aspect of the representation.
Bedfordshire Fire & Rescue Service RR-0142	Economics	Economic benefits: The LLA expansion will bring economic benefits to the County, more specifically Luton. Increased employment opportunities and revenue generation may lead to increased tax revenues, helping authorities such as BFRS to support its diverse communities and ensuring people remain safe. It is important to note that the specific impact on BFRS would depend on the scale and nature of the airport expansion. Global ambitions to move towards a “lower carbon	Noted.

		<p>footprint” will mean BFRS will need to continually review its resources and their deployment to ensure it keeps “pace” with any new risks foreseen. BFRS is committed to engaging in detailed planning and collaboration with relevant stakeholders to ensure they are adequately prepared to respond to emergencies at the expanded LLA. Thank you for the opportunity to provide feedback on behalf of Bedfordshire Fire and Rescue Service.</p>	
<p>Affinity Water RR-0019</p>	<p>General</p>	<p>This relevant representation is submitted on behalf of Affinity Water Limited (“AW”). AW is the largest water-only supplier in the UK and the appointed water undertaker under the Water Industry Act 1991 for certain areas in the south-east of England comprising Bedfordshire, Berkshire, Buckinghamshire, Essex, Hertfordshire, Surrey, the London Boroughs of Harrow and Hillingdon and parts of the London Boroughs of Barnet, Brent, Ealing and Enfield. AW also supplies water to the Tendring peninsula in Essex and the Folkestone and Dover areas of Kent. As a result, AW is subject to a number of strict statutory duties for the supply of c. 950 million litres of water each day to a population of more than 3.83 million people.</p>	<p>Noted.</p>

Affinity Water RR-0019	General	AW is therefore a statutory undertaker for the purposes of sections 127 and 138 of the Planning Act 2008. Should the proposed Development Consent Order ("the DCO") be made to authorise London Luton Airport Limited ("Luton Rising") to construct, operate and maintain the London Luton Airport Expansion project ("the Scheme"), it would permit extensive development within the Order limits in areas where AW is responsible for providing water supply services.	Noted.
Affinity Water RR-0019	Protective provision	To fulfil its statutory duties, AW maintains a wide range of apparatus that is critical to the continuing efficacy of its services. If made, the DCO would authorise the exercise of powers over or near land in which AW maintains assets and/or has other rights for the purposes of discharging its statutory duties. Unchecked, the exercise of such powers in respect of AW's interests would cause severe detriment to it. AW notes the 'standard' set of protective provisions for the benefit of statutory undertakers contained in Part 1 of Schedule 8 to the draft DCO [AS-005]. However, AW considers these to fall short of providing it with the necessary protections. No detailed engagement between AW and Luton Rising has taken place on these to date (albeit it is acknowledged that Luton Rising has engaged with AW on wider matters during the pre-application and pre-examination	Noted. The Applicant is in discussion with Affinity Water with regards a form of protective provisions or contractual commitment to address this aspect of the representation.

		<p>stages) – such engagement is encouraged by AW. Subject to such engagement commencing in a positive manner in short order, AW sees no impediment at this stage to it being able to reach a satisfactory arrangement with Luton Rising during the course of the examination. However, absent such an arrangement having been formalised, AW is obliged at this stage to formally object to the DCO application on the basis of the Scheme causing serious detriment to AW's apparatus and operations.</p>	
Affinity Water RR-0019	Protective provision	<p>In addition to the protective provisions, on a preliminary review of the DCO application documents, AW has identified various areas of concern on which it seeks further engagement with Luton Rising. This includes (but is not limited to) (a) the proposed exercise of certain DCO powers that could impact AW's interests; (b) further information being required on the potential impacts to AW's water sources and proposed mitigation measures (and how those are to be secured); (c) AW's role in relation to relevant construction control measures (for example, in relation to management plans to be produced under the code of construction practice); and (d) the treatment of water-related matters during the operation of the Scheme, given these do not appear to be covered in Parts 3 and 4 of Schedule 2 to the DCO.</p>	<p>Noted.</p> <p>The Applicant is in discussion with Affinity Water with regards a form of protective provisions or contractual commitment to address this aspect of the representation.</p>

Historic England RR-1086	Cultural Heritage	We are aware the proposed development lies in a highly sensitive area for the historic environment. Although there are no designated heritage assets within the actual site, there are various heritage assets in relative proximity whose settings may be affected. Of particular pertinence to our statutory remit are the impacts in terms of setting upon Luton Hoo Registered Park and Garden (grade I); and Someries Castle (Scheduled Monument). It was agreed during the pre-application process that detailed assessment of the historic environment would be required for the application, and a number of specific measures were recommended and undertaken. This includes a Desk Based Assessment of the impact of the proposal on the settings of heritage assets and supporting material including visualisations and noise/vibration studies.	Noted.
Historic England RR-1086	Cultural Heritage	The information provided is of a high standard and we broadly accept the conclusions and, further detailed comments will also be provided in our written representation. 3. Summary Historic England's primarily concern is to ensure that the historic environment is adequately and appropriately considered within the submitted ES, and that any concerns we have previously raised have been addressed. Likewise, that the DCO is worded to ensure appropriate mitigation for the historic environment and the	<p>Historic England's response is acknowledged.</p> <p>Engagement undertaken with Historic England is reported in Chapter 10 Cultural Heritage [AS-077] of the Environmental Statement (ES) and matters agreed are provided in an initial Statement of Common Ground (SoCG), to be submitted under Deadline 2.</p>

		dissemination of the result. Our full written representation will therefore make further, detail comment with regards to the impact of the scheme upon.	
--	--	---	--

6.0 Applicant's response to additional submissions

Table 6.1: Response to additional submissions accepted at the discretion of the Examining Authority

Interested Party and Examination Library Reference	Summary of Matters Raised in Relevant Representation(s)	Luton Rising's Response
<p>Graham Bellamy</p> <p>AS-132</p>	<p>The planned expansion of Luton airport to allow the current permitted cap of 18 million passengers per annum to 32 million passengers per annum is totally unacceptable. Did no-one associated with this planned expansion notice that the world faces an extinction level crisis the details of which have been well presented in the Climate Change conferences and I believe fundamentally accepted by most countries world wide?.....</p> <p>The world cannot continue to squander resources in the way we do. Earth overshoot day is now in August the day when the earths biocapacity is exceeded. Climate change and its consequences are frighteningly apparent and have been for decades.</p>	<p>The Applicant has carefully considered climate change and related matters, including GHG emissions, in bringing forward the Proposed Development.</p> <p>Targets have been set for the aspects of the Proposed Development over which the Applicant has some control, including a goal of zero emission airport ground operations¹ and carbon neutral surface access by 2040.</p> <p>The UK government has set a legally binding target, under section 1 of the Climate Change Act 2008, to achieve net zero GHG emissions by the year 2050 and to meet their 5-yearly carbon budgets. It has introduced a range of measures to control carbon. For example, the Jet Zero Strategy is the government strategy on how aviation will contribute to meeting the UK's climate change commitments. Paragraph 3.57 sets out that "we can achieve Jet Zero without the Government needing to intervene directly to limit aviation growth". The modelling behind the Jet Zero Strategy (and the update) incorporated growth at London Luton Airport in its assumptions at the same level as that proposed by the application.</p>

¹ This is a Government target, for which the precise definition will be subject to further consultation following the Jet Zero Strategy, and which will require further mitigations beyond those secured under the DCO.

	<p>This application should be rejected. Eyes and hearts need to be opened.</p> <p>We cannot afford to enable this increase in passenger numbers with the associated increase in damaging climate changing emissions. It is like trying to put a fire out by throwing petrol at it.</p> <p>Please .. please .. think hard about the legacy we are leaving our children and grandchildren.</p>	<p>The UK Emissions Trading Scheme and the Carbon Reduction Offsetting Scheme for International Aviation are other tools to control carbon emissions.</p> <p>Government policy supports the continued growth of aviation to 2050, as confirmed in its Jet Zero Strategy. Government has stated it will follow the High Ambition Scenario presented in this policy document, whilst explaining in the Sixth Carbon Budget how this is consistent with reaching net zero by 2050. The application for development consent is consistent with the approach to aviation carbon in the Jet Zero Strategy.</p> <p>The Proposed Development includes additional mitigation measures where possible. These include measures to facilitate the use of Sustainable Aviation Fuels (SAF) and to encourage the use of the most efficient and low-emission aircraft. Outside of the commitments made as part of the Proposed Development, the Applicant retains a keen interest in progressing sustainability within the aviation sector and will continue to engage with, and work with, others on measures which advance the journey to zero carbon aviation.</p>
<p>Graham Bellamy</p> <p>AS-132</p>	<p>This notice should surely be considering achieving zero emission ground operations to service not 32 million passengers but zero emission with at least the existing level of usage with the ultimate aim of cutting existing passenger numbers by 50%.</p>	<p>All major airports are required, by the Jet Zero Strategy <i>to achieve zero emission ground operations by 2040. This applies to London Luton Airport whether or not the DCO is approved. However, the Jet Zero Strategy</i> also sets out the steps that the Government intends to take to achieve net zero emissions from aircraft operations by 2050 without the need to restrict passenger numbers.</p>
<p>Wizz Air UK</p> <p>AS-133</p>	<p>On behalf of Wizz Air UK, I would like to express our support for the planned expansion of London Luton Airport, currently being reviewed under the Development Consent Order (DCO) process by the Department for Transport. We believe that this project will</p>	<p>Support noted.</p>

	significantly contribute to sustainable growth, job creation, and bolster the economy of the area.	
Wizz Air UK AS-133	London Luton has always been the home station of Wizz Air in the UK, since the start of operations in 2004, and remained so since the launch of Wizz Air UK AOC in 2017. We currently serve 67 destinations in 30 countries from London Luton, offering affordable travel choice to people, connecting them with their loved ones and business opportunities.	Noted
Wizz Air UK AS-133	The planned expansion of Luton Airport ensures the right balance between maximizing the socio-economic benefits of the increased air connectivity, while minimizing the environmental impact on nearby communities. Based on experience from elsewhere in our network, we believe that the expansion will result in job creation, support local economy and boost tourism. As Europe's most sustainable airline ¹ , Wizz Air will continue to contribute to the sustainable growth of Luton Airport, and support the mitigation of air greenhouse gas emissions and noise pollution.	Details of the job creation and economic benefits expected from the Proposed Development are set out in Section 8 of the Need Case [AS-125] .
Wizz Air UK AS-133	We firmly believe that supporting the expansion plan of Luton Airport aligns with the longterm interests of the United Kingdom and its citizens. As an airline, we are committed to being a responsible corporate citizen and contributing	The specific benefits to Luton and the surrounding communities are set out in Section 8 of the Need Case [AS-125] .

	positively to the communities we serve. We pledge our full cooperation and dedication to the success of this significant project. Taking into account the considerations above, I recommend the approval of the Luton Airport expansion plan.	
Tushar Ravishankar AS-134	I would like to strongly oppose the expansion of the Luton airport I am based in Stevenage and currently there is a high volume of flight noise that we hear now and then. Expansion would just make it more frequent and noisy all together,	The impact of aircraft 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 Noise and Vibration of the Environmental Statement [AS-080] .
Three Rivers District Council AS-135	Please accept the following comments from Three Rivers District Council outlining our main Environmental Health views: 1) The impact on air quality- Regarding air quality they have provided research on the impact of the aircraft on air quality and agreed to follow World Health Organisation (WHO) guidelines. In addition, a daily air pollution report shows that air around Luton airport air pollution is low	Noted
Three Rivers District Council AS-135	2) The noise impact on surrounding areas- They will adhere with WHO guidelines regarding noise limits and want to further reduce the impact of noise over the years. As their proposal states "The Noise Envelope also contains a mechanism for the Noise Limits to be reviewed and reduced in future years (beyond the 2030s) if and when quieter	Noted

	‘next generation’ aircraft become available, or an airspace change is approved that would enable lower noise levels to be achieved and benefits shared between the airport and communities.	
Three Rivers District Council AS-135	The impact on biodiversity- e.g., Chilterns of Outstanding Natural Beauty (AONB). They have considered the noise receptors in Chilterns AONB and they have decided to include this area in the study to see the impact of noise pollution as they stated that “The study area for the LVIA includes, for the purpose of considering impacts on tranquillity, land within the Chilterns AONB where aircraft would be below 7,000 ft.” It appears that the most important areas have been addressed in the proposal. It also seems that they have clear guidelines to deal with air and noise pollution as well as their impact on human health and biodiversity.	Noted
Network Rail Infrastructure Limited AS-136	We act for Network Rail Infrastructure Limited (Network Rail) and have been instructed to submit relevant representations on its behalf. As a statutory undertaker affected by the proposed DCO we respectfully request the Examiner exercise it's discretion and accept Network Rail as an interested party for the purposes of the Examination process. We note that other parties have been permitted to submit representations until 21 July 2023.	Noted.

<p>Network Rail Infrastructure Limited</p> <p>AS-136</p>	<p>The draft DCO proposes the use of compulsory acquisition powers in relation to operational land of Network Rail and this poses significant issues for the safe operation of the railway. We also note that the DCO does not include any protective provisions for the protection of the railway which will be necessary given the proximate location of the works to the railway. We reserve our client's position to expand on this representation.</p>	<p>The Applicant and Network Rail are discussing the requirement for land acquisition powers so that any impact on the operational railway can be understood and assessed.</p> <p>The Applicant will continue this dialogue to resolve any ongoing concerns, where reasonably required, and the Applicant is able to do so.</p> <p>A requirement for protective provisions is an ongoing matter of discussion between the parties.</p>
--	---	--

REFERENCES

-
- ¹ Defra (2021) Emissions Factor Toolkit v11.0 [online]
- ² Civil Aviation Authority (2021) CAP1616: Airspace change: Guidance on the regulatory process for changing the notified airspace design and planned and permanent redistribution of air traffic, and on providing airspace information. Online
- ³ Department for Transport (2017), Air Navigation Guidance 2017
- ⁴ <https://www.standardsforhighways.co.uk/dmrb>
- ⁵ <https://www.ciht.org.uk/media/9351/manual-for-streets-2.pdf>
- ⁶ Department for Transport (2018), Airports National Policy Statement: new runway capacity and infrastructure at airports in the South East of England
- ⁷ Civil Aviation Authority (2021), CAP1506 Survey of Noise Attitudes 2014: Aircraft Noise and Annoyance, Second Edition