

Application by Highways England for the M25 Junction 28 improvement scheme (the Proposed Development) The Examining Authority's Written Questions and Requests for information (WQ1) Issued on Wednesday 13 January 2021

The following table sets out the Examining Authority's (ExA's) Written Questions and requests for information - WQ1. If necessary, the Examination timetable enables the ExA to issue a further round of written questions in due course. If this is done, the further round of questions will be referred to as WQ2.

Questions are set out using an issues-based framework derived from the Initial Assessment of Principal Issues provided as Annex C to the Rule 6 letter of 12 November 2020. Questions have been added to the framework of issues set out there as they have arisen from representations and to address the assessment of the application against relevant policies.

Column 2 of the table indicates which Interested Parties (IPs) and other persons each question is directed to. The ExA would be grateful if all persons named could answer all questions directed to them, providing a substantive response, or indicating that the question is not relevant to them for a reason. This does not prevent an answer being provided to a question by a person to whom it is not directed, should the question be relevant to their interests.

Each question has a unique reference number which starts with an alphabetical code and then an issue number (indicating that it is from ExQ1) and a question number. For example, the first question on air quality is identified as AQ 1.1. When you are answering a question, please start your answer by quoting the unique reference number.

If you are responding to a small number of questions, answers in a letter will suffice. If you are answering a larger number of questions, it will assist the ExA if you use a table based on this one to set out your responses. An editable version of this table in Microsoft Word is available on request from the case team: please contact the case mailbox M25Junction28@planninginspectorate.gov.uk and include 'M25 Junction 28' in the subject line of your email.

Responses are due by Deadline 2: Thursday 4 February 2021



Contents

General Questions	
Air Quality	14
Biodiversity and Habitats Regulations	24
Compulsory Acquisition	35
Draft Development Consent Order (draft DCO)	
Flood Risk, Drainage and Water	68
Geology and Soils	77
Historic Environment	79
Landscape and Visual	
Noise and Vibration	
Minerals and Waste	97
People and Communities	98
Traffic and Access	107

GQ	General Questions		LB Havering Responses
GQ 1.1	Approach to Mitigation The Applicant	As will be set out in more detail in the individual subject areas below, the ExA is concerned with the Applicant's overall approach to mitigation in this application. The Applicant's approach relies heavily on those identified issues and a series of statement commitments to mitigation contained the Register of Environmental Assessment Commitments (REAC) [APP-097]. The REAC itself relies on a series of documents, such as the Construction Environmental Management Plan (CEMP) to detail such mitigation.	LB Havering share the concerns of the ExA and have set these out in our Local Impact Report specifically paras 24.2.1, 24.2.2, 24.2.3 and 24.2.4.
		However, the CEMP is considered light in detail and heavily reliant on matters being resolved at the detailed stages and crucially, after consent would have been granted. There are further concerns, such as the commitment to provide an Arboricultural Method Statement (AMS): this is not listed as a document to form part of the CEMP, nor is it secured in the draft DCO [APP-015].	
		The ExA is concerned that the approach fails to provide adequate details of how the Applicant intends to mitigate the impacts of the Proposed Development, and the ExA cannot be certain at	

		this stage that mitigation measures or practices would be adequate. The Applicant is required to take note of the ExA's initial view and either provide a statement response here, and/ or respond to the individual concerns in questions below and submit the additional documents required.	
GQ 1.2	Scope and Assessment in the ES The Applicant	Chapter 4 of the Environmental Statement (ES) [APP-026] sets out the assessment methodology. In its Relevant Representation (RR) [RR-028], Transport for London (TfL) states that "no reference has been made to environmental policy within London, particularly the London Environment Strategy and Mayor's Transport Strategy. This is relevant for the topics of air quality, noise and vibration, biodiversity, drainage and water, materials and waste, and climate". i) Provide a response, explaining why, if TfL is correct, this document was not included within the assessment. ii) Amend the relevant ES chapters accordingly and explain whether such changes would have any bearing on the significance of its findings.	
GQ 1.3	Alternatives – Do Nothing	Table 3.1 of Chapter 3 of the ES [APP-026] sets out a description of a 'do nothing' scenario which would include introducing traffic signals on the	

	The Applicant	A1023 Brook Street approach, lane markings and signage. Paragraph 3.2.3 states that this option was discarded because it "would not address the problems at the junction". No explanation is given for this assertion. Provide this explanation.	
GQ 1.4	Alternatives – Option 5B The Applicant	Table 3.4 of Chapter 3 of the ES [APP-026] sets out the three short-listed options for the proposed A12 eastbound off slip. These were Options 5B, 5C and 5F. Option 5F was chosen as the preferred option.	
		Paragraph 3.2.19 states that Option 5B "would have the least visual impacts, people and communities and biodiversity[and be the]smallest [in] scale and so would have fewer components effecting the water environment". Paragraph 3.2.21 suggests that Option 5F (the Proposed Development route) was selected as the preferred option primarily as a result of support from non-statutory bodies.	
		Table 3.5 further explains that Option 5B was discarded because it "involves a departure from safety standards relating to the substandard distance between the successive diverges on the M25 anti-clockwise carriageway. This presents a significant concern over operational safety of the road user". Paragraph 3.3.2 further states that Option 5B would be expected to approach and	

		exceed capacity beyond the design year and could not be made two lanes.
		i) If this is the case, explain how it could possibly have made the short list given its obvious flaws.
		ii) That it did make the short list suggest that it was a viable alternative. Given that Option 5B was the least environmentally harmful option, explain how the decision-making process led to Option 5F being selected, and how much the popular support proved determinative.
		iii) Where it is said Option 5B "would have the least visual impacts" explain whether this assessment also included effects on trees and set out the differences in effects between Option 5B and 5F.
GQ 1.5	Railway Operations Network Rail	In its RR [RR-002], Network Rail states that it wishes to object to the Proposed Development on the ground that the proposed works <u>might</u> [ExA emphasis] interfere with the safe and efficient operation of the railway. The Works Plans [APP-006] show Work No.7 (M25 northbound improvement works) commencing northwards of

		the Network Rail bridge (i.e. not underneath it) towards the development site. Explain in more detail how the Proposed Development (other than Compulsory Acquisition (CA) matters which are asked in the section below) would affect the operation of the railway.	
GQ 1.6	Construction Practices The Applicant	The application does not make provision for a Code of Construction Practice (CoCP). This document provides a consistent approach to the control of construction activities and mitigates potential impacts on people and the environment. Such a document sits alongside a CEMP / Landscape and Ecology Management and Monitoring Plan (LEMP) etc and is equally secured in a DCO. The absence of a CoCP is telling, as TfL in its RR [RR-028] expresses concerns about a lack of information on the construction programme and timing of works. i) Explain why the application omits a CoCP. Or; ii) Provide a CoCP into the Examination and secure it with a Requirement in the draft DCO.	
GQ 1.7	Construction Practices The Applicant	In its RR [RR-024], The Gardens of Peace Muslim Cemetery (Gardens of Peace) considers that it has had insufficient information to determine the likely effects of the construction period on its	

Gardens of
Peace Muslim
Cemetery

operation, and it will be unable to fully operate and will be "entirely in the hands of [the Applicant's] contractors". At Procedural Deadline B [PDB-009] the Gardens of Peace stated that limited engagement has taken place [with the Applicant].

For the Applicant:

- i) Explain the anticipated effects of the Proposed Development on the Gardens of Peace.
- ii) Explain where such effects have been assessed and mitigated in the application documents and how this is secured in the draft Development Consent Order (draft DCO) [APP-015].

For the Gardens of Peace Muslim Cemetery:

- iii) Set out in more detail specifically why Work No.29 [APP-006] (diversion of high-pressure gas pipeline) and its timescale would detrimentally affect the future operation of the cemetery and its targeted opening date of 2022.
- iv) Explain why it is said that the Proposed Development must be amended and provide details of the amendment you seek.

GQ 1.8	Outline
- (Construction Environmental Management Plan
	Environmental
	Management Plan

All Relevant Planning Authorities

- i) Comment on the adequacy of the outline CEMP.
- ii) Comment on those plans listed in Paragraph 4.4.3 of the outline CEMP [APP-096] which the Applicant has stated may or may not form part of the final CEMP to be submitted under Requirement 4 of the draft DCO [APP-015].

[N.B – The ExA has asked specific questions elsewhere in respect to an Arboricultural Method Statement, the Archaeological Control Plan, the Dust, Noise and Nuisance Management Plan, the Surface Water Management Plan (SWMP) and the General Ecology Plan. Parties may wish to reserve responses to those questions].

LB Havering has raised a number of concerns regarding the outline CEMP and these can be found in paras 10.6.2 and 10.6.3 of the Local Impact Report.

LB Havering is concerned that statement 4.4 in the outline CEMP (APP-096) states that "it is expected...." that a number of documents will be prepared "if appropriate", as part of a final CEMP, which will be produced by the appointed contractor.

This is concerning because
Requirement 4 of the draft DCO
states that the final CEMP will be
prepared substantially in accordance
with the outline CEMP. LB Havering
is concerned with the language used
in Requirement 4 "substantially in
accordance", as this could mean that
the documents set out in paragraph
4.4.3 may not be produced, or may
be substantially different from
submitted draft DCO documents.

GQ 1.9	Description of Works The Applicant	Section 2.4 of Chapter 2 of the ES [APP-026] is entitled 'scheme description'. While some of the Works are prescriptive as to what they would comprise, others are either very limited in detail or not explained at all. This is particularly the case for Works Nos. 11 to 32. Schedule 1 of the draft DCO [APP-015] does not provide these answers. The ExA wishes to have a greater understanding of the Works proposed in the draft DCO in respect of their need, what they would comprise, and an explanation as to why they are made necessary by the Proposed Development.	
		Provide an addendum report to Chapter 2 of the ES in which this is set out in more detail.	
GQ 1.10	Work No.29 The Applicant	 i) Explain how the signing off of Work No.29 is secured in the draft DCO [APP- 015]. ii) Comment on TfL's RR [RR-028] in which it requests to be consulted on the detailed design works. 	
GQ 1.11	Views on Application Forestry Commission	In its response to Procedural Deadline A [PDA-001], the Applicant provides an email dated 27 November 2020 in which it is stated that the Forestry Commission have no outstanding issues and has that there is no necessity to undertake a	

		Statement of Common Ground (SoCG) with the Applicant.
		i) Confirm this in writing.
		ii) Set out whether Crown consent is to be given for the CA Freehold of land identified in the Land plans [APP-005].
GQ 1.12	Climate Effects	Table 14.13 of Chapter 14 of the ES [APP-036]
	The Applicant	states that carbon emission from the Proposed Development would increase by 358 tonnes of carbon dioxide emissions (tCO ₂ e) to 2022 against a 'do something' scenario and by 4,877 tCO ₂ e to 2037. Paragraph 14.1.10.9 states these increases would be minor.
		i) Explain whether modelling has been undertaken to compare the Proposed Development against a 'do nothing' scenario.
		ii) Explain why the modelling was limited only to 2037 and not beyond.
		iii) Tables 14.9 and 14.10 set out the construction and operation emissions mitigation measures. Set out precisely where these are explained in further detail, the effect they would have in reducing climate effects and how they are secured in the draft DCO [APP-015].

		iv)	Paragraph 14.2.13.1 explains that monitoring and evaluation of the Proposed Development's 'major assets' resilience to climate change be part of regular asset inspections to inform climate change adaptation decisionmaking in the future. Explain how this is secured in the draft DCO.	
GQ 1.13	Climate Effects The Applicant	i)	Confirm that both the construction stage and opening year will still fall within the period of the third Carbon Budget ¹ (2018 to 2022)	
		ii)	If not, confirm what assessment has been carried out for the Proposed Development against the fourth Carbon Budget ² (2023 to 2027).	
		iii)	Explain how the Proposed Development contributes to, or offsets, the target carbon dioxide emissions (CO ₂ e) figure within the fourth Carbon Budget.	
GQ 1.14	Climate Effects The Applicant	petrol ar	whether the phasing out of sales of new nd diesel vehicles by 2030 to accelerate sition to electric vehicles would affect the	

¹ Third carbon budget as defined in The Climate Change Act 2008 (Credit Limit) Order 2016: https://www.legislation.gov.uk/uksi/2016/786/introduction/made ² Fourth Carbon Budget as defined in The Carbon Budget Order 2011: https://www.legislation.gov.uk/uksi/2011/1603/made

		assessment set out in Chapter 14 of the ES [APP-036].	
GQ 1.15	Lower Thames Crossing The Applicant	The Lower Thames Crossing Nationally Significant Infrastructure Project (LTC) was submitted for Acceptance on 23 October 2020 and subsequently withdrawn on 20 November 2020. At the time of writing, it is the ExA's understanding that the application is to be resubmitted for Acceptance in early 2021. The ExA will need to be certain that the Proposed Development was not designed to meet potential traffic increases from a scheme which does not yet benefit from a DCO.	
		 Provide a response and explain whether the LTC scheme has had any bearing on the scope and assessment in the ES [APP-026 to APP-088]. 	
		ii) Provide a statement confirming, if it is the case, that should the Secretary of State (SoS) grant the Order, the Proposed Development would proceed irrespective of whether LTC is to be resubmitted and / or consent was withheld for it.	
GQ 1.16	Notification of Change Request The Applicant	In its response to Procedural Deadline A [PDA-001], the Applicant stated that it was intending to make a Change Request to:	

 Remove Work No.17. Replace Work No.18 from the storage of materials to an environmental bund. Undertake works to Maylands Golf Course. Amend the lateral limits of deviation for the high-pressure gas pipeline. The ExA will expect the change request to be supported by draft Land plans, Work plans and other plans in advance of the ExA's decision as to whether or not to accept such changes. The ExA will further expect a detailed explanation of the changes and a statement as to whether they would have any bearing on the scope and assessment in the ES [APP-026 to APP-088]. Confirm a statement to this effect would be forthcoming. 	

AQ	Air Quality		LB Havering Responses
AQ 1.1	Baseline Assessment The Applicant	Figure 5.2 of the Air Quality Figures accompanying Chapter 5 of the ES [APP-040] presents receptors sensitive to	
		construction dust and highlights the ancient woodland surrounding the site. However,	

		some of the highlighted ancient woodlands are outside of the construction dust study area so it is unclear if these are included as receptors or not. Furthermore, Figure 5.2 does not illustrate other ecological receptors, such as Local Nature Reserves (LNR) and Local Wildlife Sites (LWS) that are within the study area. These receptors are shown on Figure 7.3 [APP-042].	
		In addition to information provided within Chapter 5 of the ES [APP-027], clarify where receptors sensitive to construction dust and other ecological receptors that have been assessed are with respect to the Proposed Development, provide a figure that contains the following:	
		- The Order limits.	
		 The construction and dust air quality assessment study areas. 	
		 Relevant sensitive human and ecological receptors. 	
AQ 1.2	Baseline Assessment The Applicant	Chapter 5 of the ES [APP-027] makes no reference to consultation with Statutory Consultees, stakeholders or IPs in regard to the baseline data. However, paragraphs 5.7.25 and 5.7.26 state that some receptors (listed in paragraph 5.7.25) have	

		been incorporated into the assessment at the request of stakeholders and that no additional ecological sites were requested for assessment by Local Authorities. Confirm whether the baseline data has been agreed on with the relevant Statutory Consultees.	
AQ 1.3	Methodology The Applicant	The Air Quality assessment [APP-027] and [APP-052] is based on the Design Manual for Roads and Bridges (DMRB) HA 207/07 guidance and "associated Interim Advice Notes"; Interim Advice Note (IAN) 170/12 V3 is stated, but it is unclear whether other IANs have been used. State what other Interim Advice Notes have been used as guidance for the Air Quality assessment, besides IAN 170/12.	
AQ 1.4	Methodology The Applicant	Explain whether the assessment methodology for air quality is based upon the most up-to-date guidance contained within the DMRB, and what bearing it would have on the ES if it were not.	
AQ 1.5	Methodology The Applicant	Section 5.1 of the Air Quality Appendix [APP-052], concludes that no significant particulates (PM2.5) effects are likely based on the consideration of a monitoring station	

		in Rainham (located approximately 10km from the Proposed Development) and therefore no assessment of PM2.5 has been conducted. Clarify why it is considered that the monitoring station at Rainham is representative of all of the receptors within the air quality study area, and confirm why it is considered that this is an adequate reason for not assessing the impact of increased PM2.5 on receptors within the air quality study area.	
AQ 1.6	Methodology The Applicant	Air quality modelling has been undertaken based on IAN 170/12 v3 and is detailed in Appendix 5.1 [APP-052]. The Applicant has not explained why the monitoring stations shown on Figure 5.1 [APP-040], especially those within the Brentwood Air Quality Management Area (AQMA) which are exceeding the nitrogen dioxide (NO ₂) 40ug/m³ (micrograms per cubic metre) limit have not been modelled for the 2022 operation year.	
		Explain why the air quality monitoring stations shown on Figure 5.1 have not been included within the air quality model for the operation year of 2022, considering these	

		receptors are within the Havering and Brentwood AQMA's.	
AQ 1.7	Methodology The Applicant	Paragraph 5.7.25 of Chapter 5 of the ES [APP-027] states that Maylands Golf Club will be included as a receptor, and Maylands Golf Club is stated to be receptor R79 in Table 5.1 of the Air Quality Appendix [APP-052]. However, R79 does not appear on Figure 5.8 [APP-040]. Moreover, the coordinates stated for R79 appear to be within the Order limits of the Proposed Development, and therefore is unlikely to be an area of use by the golf club once construction has commenced. It is also noted that receptor R47 is not depicted on Figure 5.8.	
		Explain the anomalies and provide the exact location of R79 and R47 on a figure which also includes the Proposed Development's Order limits.	
AQ 1.8	Methodology The Applicant	Table 5.8 of the Air Quality Appendix [APP-052] states that R47 and R79 are selected for comparison with the 1-hour mean NO ₂ air quality objective, and / or 24-hour mean PM10 UK National Air Quality Strategy (AQS) objective.	

		Explain why these two receptors were chosen over other receptors.	
AQ 1.9	Methodology The Applicant	The construction air quality assessment in Chapter 5 of the ES [APP-027] omits a methodology detailing how the magnitude of impact and the significance of effect are categorised.	
		Explain in detail how the assessment of construction impacts, with regards to the emission of dust to nearby receptors, has been undertaken in terms of categorising the magnitude of impacts and significance of effect.	
AQ 1.10	Assessment of Effects The Applicant	Provide a dust assessment for each of the construction sequences. For example, the quantity / volume of dust to be produced by the early works, site mobilisation, utilities diversions and construction phases 1 to 5 as described in paragraphs 2.6.15 to 2.6.24 of Chapter 2 of the ES [APP-026].	
AQ 1.11	Assessment of Effects The Applicant	A methodology for determining the impact magnitude and significance of effect from dust arisings on human and ecological receptors is omitted from the assessment. Furthermore, the conclusion in paragraph 5.10.1 of Chapter 5 of the ES [APP-027] states that, "Any adverse air quality effects"	

due to construction will be temporary and can be suitably minimised by the application of standard and appropriate mitigation measures. On this basis, there is unlikely to be a significant effect on air quality due to the construction of the Scheme."

However, no description of the magnitude of impact or likely significant effect (LSE) prior to the implementation of mitigation measures is stated. Additionally, for receptors R6, R71, R72, R73 and R74, Figure 5.8 [APP-040] located in the middle of the new junction layout, and which could be subject to increased dust emissions throughout the two-year construction phase, it is unclear how the conclusion of no LSEs has been reached for these receptors.

Furthermore, an increase in dust emissions has potential to also increase PM10 levels, but this has not been factored into the assessment.

Justify the conclusion of no LSEs for receptors R6, R71, R72, R73 and R74, Figure 5.8 [APP-040] located in the middle of the new junction layout, with regard to potentially being subject to dust emission and consequently a potential increase in

		PM10 levels for the entire duration of the construction phase.	
AQ 1.12	Assessment of Effects The Applicant	The ExA notes the air quality monitoring data for the year 2015 at monitoring sites CP7, HE01 and HE22 are 46.9, 58.0 and 45.4 NO ₂ ug/m3 respectively, as presented in Tables 5.6 and 5.7 of Chapter 5 of the ES [APP-027]. It is also noted that the closest human receptors R26 and R69, which appear to be located in close proximity to CP7, HE01 and HE22, have a modelled 2015 NO ₂ baseline data stated to be 37.9 and 36.2 ug/m³ respectively. Explain why the modelled NO ₂ values for 2015 differ by nearly 10ug/m³ from the monitored NO ₂ data at the same location.	
AQ 1.13	Assessment of Effects The Applicant	Provide a response to the air quality concerns raised by the London Borough of Havering in its RR [RR-017], which notes that increase in traffic levels around the Gallows Corner junction is highly likely to lead to a deterioration in air quality within the local authority AQMA and which requests traffic modelling of Gallows Corner and the local road network.	
AQ 1.14	Cumulative Impacts	With regard to Figures 5.2 and 15.1 contained within the Air Quality Figures	

	The Applicant	[APP-040] and Assessment of Cumulative Figures [APP-048] respectively, state which other developments in conjunction with the Proposed Development have been included within the cumulative dust assessment, and provide a further figure(s) that identifies the receptors, human and ecological, that have potential to be affected by cumulative dust affects.	
AQ 1.15	Cumulative Impacts The Applicant	Provide an explanation of the cumulative construction dust impact assessment methodology.	
AQ 1.16	Cumulative Impacts The Applicant	Paragraph 5.11.12 of Chapter 5 of the ES [APP-027] states "additional traffic from specific committed developments was taken into account within the traffic model" but no further information on the developments are provided. Furthermore, the traffic model forecasts developments (as shown in Figure 5-2 of the Transport Assessment [APP-098]) that are outside of the study area of the air quality assessments, and these developments differ from those stated in the Assessment of Cumulative Effect in Chapter 15 of the ES [APP-037] and Figure 15.1 [APP-048]. Provide a list and a figure that depicts the location of the Proposed Development and	



		the other developments that have been used in the traffic model and the local operational air quality cumulative assessment.	
AQ 1.17	Cumulative Impacts The Applicant	State how the Proposed Development in conjunction with the other developments depicted on Figure 15.1 of the Assessment of Cumulative Effects Figures [APP-048] may affect the local air quality with regards to the Havering and Brentwood AQMAs.	
AQ 1.18	Mitigation and Monitoring The Applicant	State whether mitigation measures specific to demolition, earthworks, construction, and track out, such as those stated within the Institute of Air Quality Management: Guidance on the assessment of dust from demolition and construction ³ , will be utilised to minimise and mitigate dust arisings during the construction phase.	
AQ 1.19	Mitigation and Monitoring The Applicant	Paragraph 5.13.1 of Chapter 5 of the ES [APP-027] states that as the Proposed Development "is not expected to have any adverse significant effects on air quality, no monitoring is required". i) Considering the air quality construction assessment's	

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³ https://iaqm.co.uk/text/guidance/construction-dust-2014.pdf

	conclusion of no significant effects is dependant on the successful implementation of mitigation measures; state whether the air quality construction mitigation measures will be monitored to ensure their successfulness.	
ii)	If no monitoring of the mitigation measures is to take place, provide a robust reason as to why this is the case.	

BHR	Biodiversity and Habitats Regulations		LB Havering Responses
	Biodiversity		
BHR 1.1	General Ecology Plan The Applicant	Paragraph 4.4.3 of the outline CEMP [APP-096] indicates that an Environmental Control Plan (ECP) for General Ecology may or may not form part of the final CEMP to be submitted under Requirement 5 of the draft DCO [APP-015].	

		Explain the circumstances in which, and the reasons why, this document would not form part of the final CEMP.	
BHR 1.2	Baseline Assessment - Great Crested Newts Natural England	Ordnance Survey (OS) maps were used to identify all ponds within 250m of the Proposed Development for confirmation during field surveys, in order to establish if the land within and immediately surrounding the Proposed Development could be used as terrestrial habitat for great crested newts (GCNs). In Chapter 7 of the ES [APP-029], it states that GCNs typically use suitable terrestrial habitat up to 500m from a breeding pond, but they have followed research that notes a decrease in GCNs abundance beyond a distance of 250m from a breeding pond and because of the presence of the M25 and A12 corridors. Ponds were scoped out of further survey where no potential impacts were identified due to the distance between the pond and Proposed Development works.	
		Confirm Natural England (NE) were consulted on these findings and that they were content with this approach.	
BHR 1.3	Assessment of Effects	Set out the reversibility (e.g. reversible / irreversible), frequency and timing of	

	The Applicant	impacts on ecological features resulting from the Proposed Development.	
BHR 1.4	Assessment of Effects The Applicant	Air quality has been considered as part of the ecological assessment of effects in the Biodiversity chapter. It is assumed in the ES that impacts on designated sites due to changes in air quality are unlikely to extend more than 200m from the Affected Road Network (ARN). Reference is made to the Air Quality Assessment, Chapter 5 [APP-027] for further information regarding the ARN.	
		Air quality immediately adjacent to the new loop road or realigned slip roads may decrease and there may be impacts on existing and replacement habitats within close proximity to the new road but no cross referencing is made directly to the Air Quality assessment in Chapter 5 of the ES [APP-027] (paragraphs 7.8.18, 7.8.24 and 7.8.25).	
		Confirm how the findings within the Air Quality assessment affect existing and replacement habitats in close proximity to the Proposed Development.	
BHR 1.5	Assessment of Effects	The Reptile Survey [APP-066] states that the survey did not cover the entire area	

	Natural England	covered by the Order limits because of access restrictions. However, it considers that the optimal habitats to be affected by the Proposed Development were assessed. Provide a response as to the accuracy and acceptability of this assessment.	
BHR 1.6	Mitigation and Monitoring The Applicant	To mitigate the impact of the Proposed Development on the adjacent Maylands Golf Club, paragraph 7.8.60 of Chapter 7 of the ES [APP-029] states that "it is necessary to redesign a section of the course in proximity to pond P2, including a new green and fairway created south (down slope) of P2. This would be created downslope to avoid any potential for fertiliser to enter P2. The design should include the creation of rough grassland/scrub habitat on existing green and fairway areas that will become redundant to result in no net loss of foraging and sheltering opportunities for great crested newt in connection with the golf course mitigation." Confirm where this work is secured within the draft DCO and which work number the mitigations works falls within.	
BHR 1.7	Mitigation and Monitoring	The Proposed Development includes lighting along the loop road and crosses Weald	

	The Applicant	Brook twice. Paragraph 7.8.74 of Chapter 7 of the ES [APP-029] states that these features could affect bat foraging routes and access to foraging habitat within the loop road. The ES does not refer to a lighting strategy and the Proposed Development's effects of lighting on biodiversity. Explain what assessment has been made with respect to the impact of lighting on bat foraging routes and habitat and any mitigation measures that might be considered necessary.	
	Habitats Regulations Assessment (HRA)		LB Havering Responses
BHR 1.8	Typographical Error The Applicant	The ExA notes that page 9 of the Habitats Regulations Assessment No Significant Effects Report (HRA NSER) [APP-093] contains an apparent typographical error in which text is missing. Investigate and update.	
BHR 1.9	Description of Development The Applicant	The HRA NSER [APP-093] omits within its description the diversion of other utilities infrastructure within the highway boundary, including water supply, telecommunications	

		and a sewer, and protection work to an existing fuel pipeline. All such works are included within ES description of works [APP-026]. Explain the omission.	
BHR 1.10	Description of Development The Applicant	Work No.31 is missing from the description of works in the ES [APP-026] and in the HRA NSER [APP-093]. i) Explain the omission. ii) Explain whether and how it has been considered as part of the HRA NSER.	
BHR 1.11	Methodology The Applicant	Benfleet and Southend Special Protection Area (SPA) and Benfleet and Southend Ramsar site are shown on HRA NSER [APP-093] Appendix A Figure 2 (European designated sites) but are not referenced elsewhere in the HRA NSER. These sites do not appear to have been included as part of the Habitats Regulations Assessment (HRA) screening because of their distance from the Proposed Development. Clarify why these sites have been omitted from the HRA screening process.	

BHR 1.12	In-Combination Effects The Applicant	In the HRA NSER [APP-093], references are made to 'cumulative' rather than incombination effects and there is no direct reference to effects on European sites incombination effects other than in the conclusion in paragraph 3.3.3. 22 developments were identified with potential for in-combination effects of which three were identified as potentially having cumulative (in-combination) effects on biodiversity. Nineteen of these sites were screened out from the in-combination assessment. Explain the basis for screening the other projects out, and confirm that their references to 'cumulative' effects should be to 'in-combination' effects'.	
BHR 1.13	In-Combination Effects The Applicant	In the HRA NSER [APP-093], it states that sites were identified by their scale, proximity, and overlapping period of construction relative to the Proposed Development. The HRA NSER states that no in-combination LSEs have been identified and the risk of both construction and operational phase effects has been discounted for the reasons set out in section 3.3 and in the conclusions in section 4. It is not made clear from the HRA NSER how the	

		in-combination effects of the sites identified were assessed by the Applicant. Table 3.1 states that the LTC will have a 'slight adverse to neutral' effect in combination with the Proposed Development improvements but does not explain how this conclusion has been reached. It is stated that the LTC would affect similar habitats so there is potential for in-combination effects during construction.	
		Explain in more detail how the incombination effects for the developments identified in Table 3.1 of the HRA NSER have been assessed.	
		Clarify how the conclusion that the LTC will have a 'slight adverse to neutral' effect on European sites in combination with the Proposed Development was reached.	
BHR 1.14	Screening Matrices The Applicant	The Applicant submitted its screening matrices at Procedural Deadline B in Appendix A of the HRA screening matrices document [PDB-001].	
		The Thames Estuary and Marshes Ramsar site matrix provided has omitted details	

		from the designated features set out in the site description on the NE website ⁴ . The ExA considers that the Applicant should revise the features set out in the matrix in Appendix A to reflect all of the designated features as shown on the NE website for the Thames Estuary and Marshes Ramsar site, to include the nationally important invertebrate species occurring on the site and the missing bird species (under birds occurring at levels of national importance: Little egret and Ruff (peak counts in spring/autumn); Common shelduck (peak counts in winter). The ExA also considers that the Applicant	
		should also show the likely effects of the Proposed Development on these missing features as set out for the other features in the matrix, to be submitted in a revised version of the screening matrices document. Provide a response.	
BHR 1.15	Screening Matrices	In the HRA NSER [APP-093], the ExA notes that the older Joint Nature Conservation	

https://designatedsites.naturalengland.org.uk/SiteGeneralDetail.aspx?SiteCode=UK11069&SiteName=thames&countyCode=&responsiblePerson=&unitId=&SeaArea=&IFCA Area=

	The Applicant	Committee designated site information has been used rather than the more current information on the NE website. Appendix B provides the qualifying features / interests of the Thames Estuary and Marshes SPA and Appendix C provides the Ramsar Information Sheet (RIS) details for the Thames Estuary and Marshes Ramsar site. Confirm that the HRA has considered all of the qualifying features according to the latest updated version of the RIS for the Thames Estuary and Marshes Ramsar site published on the NE website, and provide	
		an updated assessment if not.	
BHR 1.16	Referencing The Applicant	Footnotes have not been provided as references to support the evidence in the HRA NSER [APP-093], Chapter 7 of the ES [APP-029] or other application documents. The footnotes should refer to the specific paragraph numbers of the application documents where the evidence can be found. Provide these footnotes.	
BHR 1.17	Response to HRA NSER Natural England	i) Provide a response to the HRA NSER [APP-093] having specific regard to:	The approval of the HRA No Significant Effects Report (NSER) is a matter for Natural England to ensure compliance with the Conservation of Habitats and

	Other Interested Parties	 An adequate evidence plan was used at the Pre-application stage. 	Species Regulations 2017 (as amended).
		 Whether the correct qualifying features have been identified for the two European sites considered. 	LB Havering notes that the NSER has been prepared with specific regard to all of the bullet points listed for i) and
		 The appropriateness of the methodology and conclusions of the 	looks forward to seeing the feedback from Natural England.
		Applicant's HRA in-combination effects assessment.	LB Havering also submitted comments on the HRA matrices at Deadline One
		 The appropriateness of the methodology used for the HRA and whether there is agreement with the conclusions in the HRA NSER of no LSE on any European site. 	(REP1 -034)
		ii) Confirm that a SoCG will be signed with the Applicant which will confirm the above.	
BHR 1.18	Updated Guidance The Applicant	The Department of the Environment, Food and Rural Affairs (DEFRA) published a policy paper on 1 January 2021 ⁵ relating to changes to the Habitats Regulations 2017 following the United Kingdom's (UK) departure from the European Union.	

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 $^{^{5}\} https://www.gov.uk/government/publications/changes-to-the-habitats-regulations-2017$

Development.

CA	Compulsory Acquisition		LB Havering Responses
CA 1.1	CA Updates The Applicant	The ExA notes Appendix B of the Statement of Reasons (SoR) [APP-019] in respect to progress of negotiations with parties affected by CA. The Applicant is requested to provide regular updates as to the position in respect to signed agreements with all Affected Persons (AP) during the Examination.	
CA 1.2	Protective Provisions All Statutory Undertakers	A number of Statutory Undertakers have raised concerns regarding Protective Provisions. i) If there are substantive concerns with the wording of Protective Provisions as set out in the draft DCO [APP-015] provide a clean and tracked changed version of the Protected Provisions required	Havering notes that the previous draft DCO was defective and expects all statutory undertakers (SU) to be identified. Havering seeks assurance that all SU have been taken into account.



		together with an explanation for the need for the change. Or; ii) If the changes are not substantive, set out where there are differences of opinion and what changes would be required.	
CA 1.3	CA Objections The Applicant	Annex B to these questions sets out the APs who have written to object to CA of their land. The Applicant is requested to update the table on the objection.	
CA 1.4	Availability of Funding The Applicant	The Applicant is reminded that the Department for Communities and Local Government (as it then was) Guidance related to procedures for CA (September 2013) ⁶ states that: "Applicants should be able to demonstrate that adequate funding is likely to be available to enable compulsory acquisition within the statutory period following the order being made, and that the resource implications of a possible acquisition resulting from blight notice have been taken account of."	
		The Funding Statement [APP-020] indicates that the estimated costs of the Proposed	

⁶ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/236454/Planning_Act_2008_-_Guidance_related_to_procedures_for_the_compulsory_acquisition_of_land.pdf

		Development would be £124m. The figure includes an allowance for compensation payments relating to the CA of land interests in, and rights over, land and the temporary possession (TP) and use of land. However, it is not clear what proportion of those costs includes CA matters and whether it is sufficient.	
		Confirm the CA costs separately from the project costs and explain how the figure for CA costs was arrived at.	
CA 1.5	Availability of Funding	The Funding Statement [APP-020] sets out that funding would be underwritten by the	
	The Applicant	Government as set out in the Department of Transport's "Road Investment Strategy for the 2015/16 to 2019/20 Road Period", which was updated in March 2020 for the period 2020-2025. The ExA notes that an updated Delivery Plan from the Applicant is stated as not yet being available. However, the UK has been subjected to a significant and costly pandemic and the ExA requires confirmation that the stated £27.5bn for road improvements remains available.	

 $^{^7\} https://www.gov.uk/government/publications/road-investment-strategy-for-the-2015-to-2020-road-period$

		In light of recent events, confirm to the best of available knowledge, that the funds remain available for the Proposed Development.
		[N.B – the ExA is aware the SoS for Transport is both the underwriter and the competent authority for this Proposed Development and that they will need to satisfy themselves of the funding before considering whether to grant consent. Nevertheless, the question remains valid for information purposes and transparency for Interested Parties].
CA 1.6	Public Interest vs. Private Loss	The SoR [APP-019] states that there is a compelling case in the public interest for
	The Applicant	the CA. i) Set out what assessment, if any, has been made of the effect upon individual APs and their private loss that would result from the exercise of CA powers in each case.
		ii) Demonstrate within the application that the public benefits of the Proposed Development outweigh any residual adverse effects including private loss

		suffered by individual landowners and occupiers. iii) Demonstrate how such a conclusion has been reached and how the balancing exercise between public benefit and private loss has been carried out.
CA 1.7	Human Rights The Applicant	The SoR [APP-019] includes a section on human rights. i) Explain how it is demonstrated that interference with human rights in this case would be proportionate and justified. ii) Explain how the proportionality test has been undertaken and explain how this approach has been undertaken in relation to individual plots.
CA 1.8	Maylands Golf Course Plots 1/12, 1/13, 1/14, 3/21 and 3/22 The Applicant	The Book of Reference (BoR) [AS-021] identifies plots 1/12, 1/13, 1/14, 3/2, 3/21 and 3/22 as being part of Maylands Golf Course. The Land plans [APP-005] and the Works plans [APP-006] identify varied powers and proposed works over these plots but it is not clear how such works correspond with one another and it is difficult to deduce which plot is required for

		what works without considerable cross- referencing. The ExA would find it beneficial if a visual plan combining the Works plans and Land plan plots for Maylands Golf Course could be submitted. Provide a response.	
CA 1.9	CA Freehold Powers Maylands Golf Course The Applicant	Chapter 13 of the ES [APP-035] states that plots 1/13 and 3/22 are required for ecological mitigation. Confirm that CA freehold powers are sought over these plots as opposed to CA new rights is in connection with Work No.29 (diversion of high-pressure gas pipeline).	
CA 1.10	CA Freehold Powers Plot 1/10, 1/12, 3/20 and 3/22 The Applicant	In its RR [RR-020], Glebelands Estates Limited raise concerns regarding the extent of land required for CA freehold on its plots 1/10, 1/12, 3/20 and 3/22. The ExA notes particularly that the size of plots 1/10 and 3/20 for the works specified in Table A.1.1 of the SoR [APP-019] and as indicated on the Works plans [APP-006] and Scheme Layout plans [APP-010] appears considerably large. i) Justify the extent of land required for the above plots.	

		ii) Explain why plot 3/20 is required for CA freehold for Work No.17 in respect for the deposit of construction materials when Work No.18, also for the deposit of materials is only required for TP on plot 1/11.
		iii) Respond to Glebelands Estates Limited's comments in its RR that "HE could achieve its objectives in an alternative less intrusive manner by reducing the extent of the landtake[by]taking less land or alternatively[increase] temporary powers."
		[N.B – the ExA is aware of the Applicant's request at Procedural Deadline A [PDA-001] of its intention to submit a change request which would delete Work No.17 from the Application. However, until such a change is formally requested, the question remains relevant. In any event, the Applicant has stated that there would be no change to the powers required over plot 3/20].
CA 1.11	CA Freehold Powers Plot 3/5 The Applicant	Appendix A Table A.1.1 of the SoR [APP-019] indicates that the CA freehold is required for plot 3/5 in connection with Works Nos.7, 8 and 10 in respect to M25

		northbound carriageway works, on slip realignment and signage. However, the Works plans [APP-006] indicate that these works concern only the northbound carriageway (with the exception of Work No.10) yet CA is required for the southbound carriageway as well. Explain why the southbound carriageway forms part of the request for CA freehold powers.	
CA 1.12	CA Freehold Powers Plots 4/2 to 4/11 The Applicant	These plots are shown as required for the CA freehold. They are illustrated on Sheet 4 of the Land plans [APP-005]. The Applicant states at various points in the SoR [APP-019] that the plots are required to either:	
		- Ensure any rights inconsistent with the Proposed Development can be removed (plots 4/2, 4/3, 4/4, 4/5, 4/6, 4/7a, 4/9 and 4/11); and	
		- To rationalise into the Applicant's ownership (plots 4/7, 4/8 and 4/10).	
		The Works plans [APP-006] show that there are no works proposed to take place on these plots and as such, they have no connection with the Proposed Development.	
		The ExA does not consider the inclusion of plots 4/2 to 4/11 are related to the	

concerned attempti Planning 'tidy up' rights and is concerned	d Development. The ExA is ed that the Applicant may be ing to use the powers in the Act 2008 (PA2008) unlawfully to its other land interests by removing indicationalising ownership. The ExAmend that the request for CA of these plots are unjustified.	
i)	Explain and justify why the inclusion of plots 4/2 to 4/11 meets the tests in the PA2008 given that no works are proposed for these plots.	
ii)	Explain how the CA of plots 4/2 to 4/11 are necessary to implement the Proposed Development.	
iii)	Explain why the rights of plots 4/2, 4/3, 4/4, 4/5, 4/6, 4/7a, 4/9 and 4/11 are inconsistent with the Proposed Development.	
iv)	Explain why plots 4/7, 4/8 and 4/10 need rationalising.	
v)	If the SoS were not convinced that the inclusion of these plots were justified, explain whether deleting the plots from CA would	

		have any bearing on the delivery of the Proposed Development. [N.B – if the Applicant subsequently accepts that the CA freehold of plots 4/2 to 4/11 are not justified by the PA2008, the ExA requests that plots 4/2 to 4/11 are removed from the Land plans [APP-005] and the draft DCO [APP-015] at Deadline 2.	
CA 1.13	CA Freehold Powers Plot 4/2, 4/4 and 4/9 The Applicant	Should the ExA and the SoS be satisfied with the justification provided by the Applicant in response to WQ1 CA 1.12, plots 4/2, 4/4 and 4/9 are indicated in the BoR [AS-021] as being co-owned by Network Rail, Essex County Council and the London Borough of Havering respectively.	
		 i) Provide evidence that those parties have consented to its land being CA for the freehold. ii) Explain how the draft DCO [AS-015] ensures those parties would be able to continue to operate and manage the railway line. 	
CA 1.14	CA Freehold Powers Plots 4/2, 4/3, 4/4, 4/5 and 4/9	Provide a response to the Applicant's request to CA the freehold of plots 4/2, 4/3, 4/4, 4/5 and 4/9.	

	Statutory Undertakers		
CA 1.15	CA Freehold Powers Plot 4/6 The Applicant	Plot 4/6 is indicated in the BoR [AS-021] as having an unknown owner of the bridleway which underpasses the motorway. Explain what measures have been undertaken to identify the owner of the plot.	
CA 1.16	CA Rights Plot 1/8 The Applicant	In its RR [RR-024], the Gardens of Peace states that the extent of land of plot 1/8 sought for CA of new rights "is excessive and can be redesigned to have a lesser impact on Gardens of Peace's land, or, be moved entirely off Gardens of Peace's land to minimise the disruptions caused by the Scheme's and allow for the proper running of their intended use".	
		 i) Set out what alternatives were considered to the use the Gardens of Peace land. ii) Respond to the criticism regarding the extent of land required. 	
CA 1.17	Crown Land Plots 4/5, 4/6 and 4/7	The BoR [AS-021] indicates that the Crown, administered by the Forestry Commission, holds interests in plots 4/5, 4/6 and 4/7. The PA2008 does not authorise CA for	

	The Applicant DEFRA Forestry Commission	Crown land. The SoS can only authorise the CA of these plots with the consent of the relevant Crown authorities. Set out whether, and if so when, Crown consent would be forthcoming.	
CA 1.18	Temporary Possession Powers Plots 1/9, 1/11, 3/2, 3/16 3/18 and 3/21	The Land plans [APP-005] indicate plots 1/9, 1,11, 3/2, 3/16, 3/18 and 3/21 are required for TP. Table A.1.3 of the SoR [APP-019] lists the reasons as follows:	
	The Applicant	- Plot 1/9: Connection with Work No.29 (diversion of high-pressure gas pipeline).	
		 Plot 1/11: Connection with all works and Work No.18 for the deposit of surplus materials. 	
		 Plot 3/2: Connection with Works Nos.7, 8 and 10 for improvements and realignment of M25 northbound. 	
		 Plot 3/16: Connection with Works Nos.8, 14 and 17 realignment works for M25 on slip road, new access and deposit of surplus materials. 	
		 Plot 3/18: Connection with Work No.17 for the deposit of surplus materials. 	

		 Plot 3/21: Connection with Works Nos.17 and 25 for the despot of surplus materials and environmental works. 	
		The ExA notes that the land take area required for TP exceeds the area for their respective works by some margin and it is not convinced such an area is justified. Provide a response.	
CA 1.19	Protective Provisions Network Rail Cadent Gas Environment Agency	It is stated in the respective RRs [RR-002], [RR-006], [RR-009], [RR-022] that adequate Protective Provisions are required in the draft DCO [APP-015]. To date, these have not yet been agreed with the Applicant.	
	National Grid Electricity / National Grid Gas	The ExA requires a regular update to this position. If, by Deadline 5, Tuesday 13 April 2021 , Protective Provisions have not been agreed, the ExA requests the relevant Statutory Undertaker's preferred wording, clean and tracked changed, together with an explanation of where the difference(s) of opinion lie(s).	
CA 1.20	Protective Provisions for Eastern Power Networks	In its RR [RR-008], Eastern Power Networks states that it objects to the Proposed Development as the relocation of the power lines "will be detrimental to the carrying on	

	The Applicant	of its undertaking. No alternative land, rights and apparatus for those proposed to be acquired under the above Order are in place." From its wording, it appears agreed Protective Provisions wording would not resolve the objection. Provide a response.	
CA 1.21	Protective Provisions for the Environment Agency The Applicant	In its RR [RR-009], the Environment Agency (EA) states that the wording in Part 3, Schedule 9 of the draft DCO [APP-015] reflects its standard wording with some deviations and that such changes will unlikely be acceptable to it. Explain why such changes have been made.	
CA 1.22	Book of Reference The Applicant	Respond to, and if necessary, update the BoR [AS-021] in respect to the concerns raised by TfL in its RR [RR-028] on the ownership of the local highway network.	
CA 1.23	Notification of Potential Change Request The Applicant Glebelands Estate Thames	In its response to Procedural Deadline A [PDA-001], the Applicant stated that it was intending to make a Change Request which will, amongst other things, amend Work No.18 from the storage of materials to an environmental bund. This would involve a change of plot 1/11 from TP to the CA freehold. For the purposes of the PA2008,	

	Water Utilities Cadent Gas	this would amount to a request for additional land to which Regulations 4 to 19 of the Infrastructure Planning (Compulsory Acquisition) Regulations 2010 would apply. The ExA requests a statement from the parties as to the state of negotiations and any draft or signed agreement as part of the evidence base for this request, which may have a bearing on how Regulations 4 to 19 apply. Confirm a statement to this effect would be forthcoming.	
DCO	Draft Development Consent Order (draft DCO)		LB Havering Responses
	Articles		
DCO 1.1	Part 1, Article 2 Various definitions The Applicant	The ExA notes an inconsistent approach to document identification. For example, the "environmental statement" is identified as meaning "the document of that description" where others e.g. "the engineering drawings and sections" is identified as meaning "the drawings and sections". Consider a consistent approach and alter to read "the document of that description"	

DCO 1.2	Part 1, Article 2 Definition of "Commence" The Applicant	The Explanatory Memorandum (EM) [APP-016] states that it is envisaged that works which are de-minimis and have minimal potential for adverse effects are excluded from the definition of commence. It is not clear from the draft DCO [APP-015] that the works excluded from the definition of commence are limited in this way. Provide a response.	
DCO 1.3	Part 1, Article 2 Definition of "Commence" The Applicant	Archaeological investigations and mitigations are excluded from the definition of "commence". The ExA is concerned that such works could undermine the purpose of Schedule 2, Requirement 9 if such unregulated works had a detrimental effect on any potential archaeological remains discovered which the Requirement is seeking to protect.	LBH supports the questions set out by the ExA to the applicant concerning Archaeological Investigations. LB Havering also support the request from the ExA that Archaeological Investigation works are included within schedule 2 Requirement 9 of the draft DCO.
		 i) Justify why archaeological investigations are excluded from commencement works. 	
		ii) Explain how archaeological investigations would be regulated in the draft DCO. Or;	
		iii) Include "archaeological investigation works" within Schedule 2, Requirement 9 or	

		control these works in another way.	
DCO 1.4	Part 1, Article 2 Definition of "Commence" The Applicant	Ecological surveys, mitigation and habitat creation works are excluded from the definition of "commence". The ExA is concerned that such works could undermine the purpose of Schedule 2, Requirements 4 and 5 if such unregulated works had a detrimental effect on species and habitats which the Requirements are seeking to protect, particularly as site clearance works are also stated as being outside of commencement works.	
		 i) Justify why these works are excluded from commencement works. 	
		ii) Explain how ecological works, mitigation and habitat creation would be regulated in the draft DCO. Or;	
		iii) Include "ecological surveys, mitigation and habitat creation" within Schedule 2, Requirements 4 and / or 5 or control these works in another way.	
DCO 1.5	Part 1, Article 2	The ExA considers that works excluded from the definition of commencement should not	

	Definition of "Commence" The Applicant	permit works outside those assessed in the ES. Consider whether pre-commencement works should be limited to those assessed in the ES.	
DCO 1.6	Part 1 Article 2 - Definition of "Maintain" The Applicant	The ExA notes the Applicant's explanation for the definition of "maintain" as set out in the EM [APP-016]. While the ExA accepts the need for the Applicant to undertake maintenance works, the ExA is concerned with the wording "insofar as such activities are unlikely to give rise to any materially new or materially different environmental effects from those assessed in the environmental statement". As currently worded, the ExA is concerned that maintenance activities could exceed the Rochdale Envelope of the ES. i) Explain what is meant by "materially new or materially different". ii) Who would be the arbiter or assessor to determine whether such maintenance works were or were not "materially new or materially different", and how would this be secured in the draft DCO [APP-015].	

		 iii) Explain whether the relevant planning authority would have any role in checking whether maintenance works, individually or collectively, would be "materially new or materially different" and how would this be secured in the draft DCO. iv) Explain how the definition as worded would prevent the renewal, reconstruction or replacement of the entirety of the authorised works. The ExA recommends the Applicant insert suitable wording in the draft DCO to ensure maintenance works do not allow point iv) 	
		above from occurring.	
DCO 1.7	Part 1, Article 2 Absence of "Secretary of State" definition The Applicant	Explain whether a definition for the "Secretary of State" should be imposed to mean "the Secretary of State for Transport".	
DCO 1.8	Part 2, Article 6 Planning Permission The Applicant	This Article as worded would permit the undertaker to obviate the need to apply to change the DCO through s153 of the PA2008. The ExA does not find this is justified.	

		Provide an explanation or justification for this Article or amend accordingly.	
DCO 1.9	Part 2, Article 7 Limits of Deviation The Applicant	The EM [APP-016] states that the ability to deviate within the prescribed limits of deviation is important to ensure that, if the precise 'as-built' alignments or elevations are slightly different to those indicatively shown on the Works plans, then no question arises as to whether or not the Works are permitted by the Order.	
		The ExA is concerned with that explanation, as it does not explain or justify why these vertical limits have been set at 1m, 1.5m in connection with Work No.18 and 2m for Work No.17. The ExA is unclear why additional flexibility is required to that already incorporated with the limits of the deviation as indicated on the Works plans [APP-006] or whether the limits requested represent "a proportionate degree of flexibility".	
		i) Justify the need for additional 1m/ 1.5m / 2m of additional limits of deviation.	
		ii) Explain what process is in place for the SoS to determine whether exceeding the vertical limits would not give rise to any materially	

		new or materially worse adverse environmental effects. [N.B - the ExA is aware of the Applicant's request at Procedural Deadline A [PDA-001] of its intention to submit a change request which would delete Work No.17 from the application. However, until such a change is formally requested, the question remains relevant.]
DCO 1.10	Part 2, Article 9 Transfer of benefits etc. The Applicant	The ExA is concerned that this power is too broad and should at least be subject to approval before any such transfer to grant took place. TfL in its RR [RR-028] expresses similar concerns.
		 i) Explain the circumstances in which Article 7 is likely to apply. ii) Explain why it is considered unnecessary to obtain the consent of the SoS prior to a transfer or grant to the specified companies.
		iii) Respond to the comments raised by TfL in its RR on this matter.
		iv) As the CA and TP powers can be transferred to these bodies without consent, explain how the SoS can be satisfied that the future companies would have

		sufficient funds to meet these costs.	
DCO 1.11	Part 3, Article 13 Temporary alteration, diversion and restrictions of the use of streets. The Applicant	The ExA considers the powers conveyed in this Article are broad and imprecise. i) Explain why the power is necessary for this specific project. ii) Set out in a Schedule which streets this power would apply to. iii) In any event, justify why the power is appropriate and proportionate having regard to the impacts on pedestrians and others of authorising temporary working sites in these streets.	
DCO 1.12	Part 3, Articles 11 and 16 Schedule 4, Part 2 GLA Roads The Applicant	In its RR [RR-028], TfL have a raised a number of concerns primarily regarding evidence to justify why TfL should assume ownership of the proposed A12 off slip road, and the confusing nature of Article 11(4) and to what in particular it refers to. TfL go on to say that a separate agreement will be required to deal with ongoing responsibilities between TfL and the Applicant. Provide a response.	

DCO 1.13	Part 4, Article 23 Trees and hedgerows The Applicant	The ExA is concerned regarding the Applicant's overall approach to tree felling and management. The ExA considers the Article is imprecise and ambiguous. The ExA considers that where it is known that specific trees need to be removed, they should be listed in a Schedule and this Article should be amended to refer to the Schedule. The SoS raised similar concerns in their consideration of the A63 Castle Hill Improvement Scheme [SI:2020 No.556]. Furthermore, an additional paragraph should also be added to this Article to the effect that any other trees should only be removed once the prior consent has been obtained. i) Justify the powers in the current drafting having regard to the	
		SoS's previous concerns at the use of such wide powers.	
		ii) Explain whether the term "cut back its roots" would only apply to roots within the Order limits. Or;	
		iii) Amend the wording in this Article accordingly to address the concerns raised.	

DCO 1.14	Part 5, Article 28 Compulsory acquisition of rights and imposition of restrictive covenants The Applicant	The ExA wants to be assured that this Article would not enable the creation of undefined new rights or restrictive covenants and must ensure that either a Schedule detailing each of these rights or restrictions is included in the draft DCO [APP-015], or the description of each right and restriction is clearly set out in the BoR [AS-021]. Provide this reassurance or amend accordingly.	
DCO 1.15	Part 5, Article 29 Compulsory acquisition and extinguishment of rights The Applicant	The ExA is concerned the powers conveyed by this Article are too wide in granting powers to create new rights and restrictive covenants over all the Order Land. Paragraph 62 of the M4 Motorway (Junctions 3 to 12) (Smart Motorway) [SI:2016 No.863] of the SoS's decision states: "The SoS considers that it is appropriate to remove the power to impose restrictive covenants and related provisions as he does not consider that it is appropriate to give such a general power over any of the Order land as defined in the absence of a specific and clear justification for conferring such a wideranging power in the circumstances of the	

			1
		proposed development and without an indication of how the power would be used".	
		i) Justify the power as worded; Or;	
		ii) Amend to reflect the M4 Motorway (Junctions 3 to 12) (Smart Motorway) DCO) as previously approved by the SoS.	
DCO 1.16	Part 5, Article 37	As no power exists for any party "to take"	
	Crown rights	Crown land, consider whether these words should be removed from the Article.	
	The Applicant		
DCO 1.17	Part 5, Articles 38 and 39	Where a representation is made by a Statutory Undertaker under s127 of the	
	Statutory undertakers and apparatus	PA2008 and has not been withdrawn, the SoS will be unable to authorise powers relating to Statutory Undertaker land unless	
	The Applicant	satisfied of specified matters set out in	
		s127. If the representation is not withdrawn by the end of the Examination,	
		confirmation will be needed that the "expedience" test is met. The SoS will also	
		be unable to authorise removal or	
		repositioning of apparatus unless satisfied that the extinguishment or removal is	
		necessary for the purpose of carrying out the development to which the order relates in accordance with s138 of the PA2008.	
		4555. 44/166 1/14/15155 51 4/16 1/120001	

		In these circumstances, justify the powers conveyed by this Article.	
DCO 1.18	Part 5, Article 41 Special category land The Applicant	As currently drafted, the draft DCO [APP-015] provides that special parliamentary procedure should not apply (before authorising CA of land or rights in land being special category land) with the Applicant relying on s132 of the PA2008. In these circumstances, the SoS will need to be satisfied that certain conditions under s132 (2) are met.	
		 i) Provide full details to the support the application of the relevant subsections in s132, for example: 	
		 Where it is argued that land will be no less advantageous when burdened with the order right, identifying specifically the persons in whom it is vested and other persons, if any, entitled to rights of common or other rights, and clarifying the extent of public use of the land; and 	
		 where it is argued that any suitable open space land to be given in exchange is available only at prohibitive cost, identifying specifically those costs. 	

		ii) Justify why such "so much of the special category land as is required" when the BoR [AS-021] only lists plot 1/8 as falling within this category.	
DCO 1.19	Articles 18, 19, 22, 35 and Schedule 2 Requirement 17 The Applicant	In its RR [RR-028], TfL considers the consultation dates as specified to be too short. It has cited the Silvertown Tunnel Order [SI:2018 No.574] as evidence of the SoS accepting longer timescales. Provide a response.	

	Schedules		
DCO 1.20	Schedule 2 The Applicant	The standard drafting for articles dealing with the discharge of requirement found in the Inspectorate's Advice Note 15 has not been used and the EM [APP-016] does not provide a reason for this. Respond particularly in respect to the 'deemed discharge' element.	
DCO 1.21	Schedule 2, Part 1 Interpretation The Applicant	The "HEMP" is identified as meaning "Handover Environmental Management" (Plan) referred to in Schedule 10. No such document is before the ExA and the HEMP is not listed in Schedule. It is not clear whether the HEMP is a standalone document or to form part of the CEMP secured by Requirement 4. Rectify.	
DCO 1.22	Schedule 2, Part 1 The Applicant All relevant Planning Authorities Transport for London	Requirements 3 through 12 requires the SoS to be the determining authority for the discharge of the said Requirements. Explain why the Local Authorities would not have responsibility for the discharge of these Requirements.	LB Havering support the questions from the ExA concerning discharge of requirements. The Council has set out its concerns in paragraphs 24.3.1 24.3.2 24.3.3 of the Local Impact Report.

			LB Havering supports the position Transport for London (TfL) have set out in its Relevant Representation to be a consultative body for the discharge of requirements and LB Havering would expect to be an approval body for matters that are within Havering's statutory responsibilities.
DCO 1.23	Schedule 2, Requirements 3, 4, 5, 6 and 8 The Applicant	In its RR [RR-028], TfL states that it should be a consultative body in discharging Requirements 3 (design); 4 (CEMP); 5 (LEMP); 6 (contaminated land) and 8 (drainage).	
		i) In pursuance of WQ DCO 1.22 above, explain whether this would be necessary if the relevant planning authority and not the SoS were to be the determiner.	
		ii) Respond to the request and amend if applicable.	
DCO 1.24	Schedule 2, Requirement 3(1) The Applicant	The ExA is concerned with the term "compatible". This is a broad and wide definition which potentially allows significant departures from the design documents and thus to the ES to occur without	

		justified.	the word " <i>compatible</i> " with " <i>in</i>	
DCO 1.25	Schedule 2, Requirements 4, 8, 9 and 10 The Applicant All Relevant Planning Authorities	sets out expected [Environ prepared part of the this state committe environ discharg	4.4 of the outline CEMP [APP-096] those documents where "it is at that some or all of the following mental Control Plans] ECPs will be at, as appropriate, for the Scheme as the final CEMP". The ExA considers ement to be weak and nonal and potentially allows for mental plans to be avoided when ing the Requirement 4. This is further in other questions. Explain why the HEMP does not form one of the listed documents in the outline CEMP yet is part of Requirement 4. Explain why the SWMP is to be discharged against Requirement 4	LB Havering supports the concerns raised by the ExA that a number of critical documents will only be prepared as part of the final CEMP. LB Havering has raised this as a significant concern within its Local Impact Report (LIR), in particular that LB Havering will only be a consultee on the final CEMP which will be produced post Consent being granted. LB Havering would like to draw the ExA panel's attention to paragraphs 24.2.1, 24.2.2 and 24.2.3 of the LIR. With regards to question iii)
		iii)	and not Requirement 8. Explain why the Archaeological Control Plan (ACP) is to be discharged against Requirement 4 and not Requirement 9.	LB Havering is concerned that statement 4.4 in the CEMP states that an Archaeological Control Plan (ACP) will only be prepared as part of a final CEMP, which will be produced by the appointed contractor. This is concerning because Requirement 4

		v)	Explain why the (Local Environmental Management Plan (LEMP) is to be discharged against Requirement 4 when it forms its own Requirement (Requirement 5). Consider listing in Requirement 4 those other documents which will form part of the suite of documents in the Construction Environmental Management PLAN (CEMP) to be approved. Explain whether such documents should be added to the list of Certified Documents in Schedule 10.	of the draft DCO states that the final CEMP will be prepared substantially in accordance with the outline CEMP. LB Havering is concerned with the language used in Requirement 4 "substantially in accordance" as this could mean that documents such as the ACP and Site Waste Management Plan may not be produced, or may be substantially different from submitted draft DCO documents. The applicants' preferred approach risks unnecessary harm to heritage assets. Should the ExA decide to grant the application in the absence of the results of pre-determination field survey work, it should nevertheless ensure that any consent includes much more robust and detailed archaeological measures than are currently provided.
DCO 1.26	Schedule 2, Requirement 4(1) The Applicant	"substar "Substar	is concerned with the wording ntially in accordance". Intially" is an interpretive word which lly allows significant departures	

		from the Outline CEMP and thus the ES to occur without examination. It is imprecise and not justified. Delete the word "substantially".	
DCO 1.27	Schedule 2, Requirement 4(4) The Applicant	The HEMP appears to form part of the CEMP yet no such document is included with the outline CEMP [APP-096]. The ExA is concerned the Requirement as worded is flawed as the approved HEMP cannot be "in accordance" with a document that does not exist. Provide a response.	
DCO 1.28	Schedule 2, Requirement 5(2) The Applicant	The ExA is concerned with the wording "must reflect". They are interpretive words which potentially allows significant departures from the Outline LEMP and thus the ES to occur without examination. It is imprecise and not justified. Replace "must reflect" with "must be in accordance with".	
DCO 1.29	Schedule 2, Requirement 5(4) The Applicant	The ExA is concerned with the wording "or other recognised codes of good practice". These words are uncontrolled and raises numerous questions on what the definition of "recognised" and "good practice" means and the appropriateness of such measures	

		in dealing with landscaping works. It is imprecise and not justified. Delete the tailpiece.	
DCO 1.30	Schedule 2, Requirement 15 (1) The Applicant	In the interests of clarity and to ensure such information is available online, and as accepted by the SoS in the Southampton to London Pipeline Project [SI:2020 No.1099] substitute:	
		"The undertaker must, as soon as practicable following the making of this Order, establish and maintain in an electronic form suitable for inspection by members of the public a register of those requirements"	
		With: "The undertaker must, as soon as practicable following the making of this Order, establish and maintain in a form suitable for inspection by members of the public an online register of those requirements".	
DCO 1.31	Articles 35, 36 and Schedule 6 The Applicant	In its RR [RR-028], TfL states that it is concerned with the proposed arrangement of TfL taking ownership of the proposed A12 eastbound off slip road while the Applicant maintains permanent rights to construct,	

		access and maintain works on it. TfL states that "the land referred to in Schedule 6 forming part of the Transport for London Road Network (TLRN) should be required for temporary possession only, given it is central to the local highway network and the safe operation of the same, save in relation to the permanent right needed for the diverted pipeline". Provide a response.	
DCO 1.32	Schedule 10 Documents to be certified The Applicant	Preliminary Environmental Design is listed as a certified document in Schedule 10, yet no such document is before the ExA. Schedule 2 Requirement 3 states that preliminary scheme design is shown on the Engineering Drawings and Sections, which is a document before the ExA. The ExA is therefore unclear why this is listed. For clarity, delete "Preliminary Environmental Design" from Schedule 10.	
FDW	Flood Risk, Drainage and Water		LB Havering Responses
FDW 1.1	Baseline Assessment The Applicant	Baseline information on surface water abstraction and surface water discharges are discussed in paragraphs 8.7.9 to 8.7.11	

		of Chapter 8 of the ES [APP-030]. It is noted that paragraph 8.7.9 states that the location of the one surface water abstraction is shown on Figure 8.1 of the Road Drainage and Water Environment Figures [APP-043], but this feature is not included on Figure 8.1 Provide a figure that shows the location of the surface water abstraction as described in paragraph 8.7.9 of the ES.	
FDW 1.2	Baseline Assessment The Applicant	Confirm that baseline information has been agreed with stakeholders during consultation.	
FDW 1.3	Methodology The Applicant	Paragraph 8.7.8 of Chapter 8 of the ES [APP-030] states that ponds within the study area could be impacted by the Proposed Development and the impact to the ponds is discussed in Chapter 7 of the ES [APP-029]. The paragraph continues and states that the ponds are "are not connected by watercourses, they are not anticipated to be affected through the water environment" and therefore an assessment of the ponds is omitted from Chapter 8 of the ES but is included within Chapter 7 of the ES.	

The ExA notes that Scoping Opinion Chapter 8 (Point ID 2) does not agree to scope out 'hydraulically isolated ponds' as no evidence within the Scoping Report adequately explained how these ponds wouldn't be impacted by potential changes to surface water or groundwater flows. The ExA does not consider the information within Chapter 8 of the ES to include sufficient evidence that shows these ponds will not be impacted by the Proposed Development. Furthermore, Chapter 7 of the ES and the GCN Survey [APP-065] show that ponds within the Proposed Development's Order limits and those within a 250m radius of the Proposed Development provide habitat for GCNs. As such, the potential effect on water quality within the ponds could be detrimental to the GCNs. It is considered that the Applicant should provide a statement that assesses the potential impact to these pond habitats.

Explain why an assessment of the potential effect the Proposed Development could have on water quality in ponds located within the study area has not been undertaken. In providing a response, the Applicant should make reference to Scoping Opinion Chapter 8 page 27 point ID 2 [APP-

		094], which did not agree that this matter could be scoped out of the ES.	
FDW 1.4	Methodology The Applicant	Chapter 7 of the ES [APP-029] and the GCN Survey [APP-065] state that GCNs are present in the ponds within the study area. Explain whether the Proposed Development has potential to impact the water quality of the ponds and the effect this could potentially have on the GCNs.	
FDW 1.5	Methodology The Applicant	If mitigation is to be implemented to prevent water quality impacts to the ponds inhabited by GCNs, state what these mitigation measures would be and how these are to be secured through the draft DCO [APP-015], or other legal mechanism.	
FDW 1.6	Assessment of Effects The Applicant	The flood risk assessment study area, as defined within paragraph 8.4.2 of Chapter 8 of the ES [APP-030], states that the Proposed Development has potential to cause impacts beyond a 1km boundary from the Proposed Development, but does not state the actual extent of the study area. Explain the extent of the flood risk assessment study area and clarify how it was identified.	

FDW 1.7	Assessment of Effects The Applicant	Paragraphs 8.7.6 and 8.7.7 of Chapter 8 of the ES [APP-030] state that no vulnerable receptors were identified within the study area that are at risk of fluvial flooding and that the importance of fluvial flood risk is low.	
		The ExA is not clear how these conclusions have been reached, as Figure 8.1 of the Road Drainage and the Water Environment Figures [APP-043] shows properties that are within Flood Zones 2 and 3, and therefore could be impacted by fluvial flooding. Furthermore paragraphs 8.7.8 to 8.7.10 of Chapter 8 of the ES discuss surface water flood risk and state that there are areas of high surface water flood risk within the study area. The paragraphs also state that there are no vulnerable receptors that would be impacted, and that the existing drainage system reduces the surface water risk to an acceptable level along the road network. However, Figure 8.1 shows vulnerable receptors within the study area, and Figure 2.8 within the Flood Risk Assessment [APP-090] depicts large areas of the study area within a high risk of flooding from surface water.	
		Clarify how the Applicant has reached the conclusion that no vulnerable receptor is	

		likely to be impacted by fluvial or surface water flooding.	
FDW 1.8	Assessment of Effects The Applicant	Considering the methodology set out in Table 8.2, Table 8.3 and Table 8.4 of Chapter 8 of the ES [APP-030], explain how this methodology has been followed.	
FDW 1.9	Assessment of Effects The Applicant	List the water environment attributes / receptors within the study area and explain: i) Their importance as set out in Table 8.2 of Chapter 8 of the ES [APP-030]. ii) The potential magnitude of impact to the water environment attribute / receptors, as set out in Table 8.3 of Chapter 8 of the ES. iii) The significance of effect to the water environment attribute / receptor as set out in Table 8.4 of Chapter 8 of the ES.	
FDW 1.10	Assessment of Effects The Applicant	In addition to the potential impacts set out in section 8.8 of Chapter 8 of the ES [APP-030], indicate the magnitude of impact and / or the potential for significant effects to arise.	

FDW 1.11	Assessment of Effects The Applicant	 i) Clarify whether a worst-case scenario has been adopted when assessing the impacts of the Proposed Development on flooding, or changes to surface water flow. ii) If so, justify the adopted worst-case scenario assessed. 	
FDW 1.12	Cumulative Impacts The Applicant	Provide the assessment methodology used to conduct the cumulative assessment for the road drainage and water environment assessment, and state what other developments were included in the assessment.	
FDW 1.13	Mitigation and Monitoring The Applicant	The ExA is not clear how the mitigation measures to reduce the impacts to the water environment, as described in section 8.9 of Chapter 8 of the ES [APP-030] and Table 1.1 of the REAC [APP-097] will be monitored. The Outline CEMP [APP-096] omits the Road Drainage and Water Environment chapter from Table 12.1 Environmental Monitoring Requirements. i) State whether the mitigation measures to reduce the impacts to the water environment, as described in Chapter 8 of the ES	

		and Table 1.1 of the REAC [APP-097] will be monitored. ii) If the mitigation measures are to be monitored, state how they will be monitored, who will be responsible for the monitoring, and how the monitoring measures will be secured through the draft DCO [APP-015] or other legal mechanism. iii) If the measures are not	
		monitored, justify why this is the case, considering the assessment's reliance on successful mitigation measures to conclude no LSEs to the road drainage and water environment receptors.	
FDW 1.14	Surface Water Management Plan The Applicant All Relevant Planning Authorities	Although Chapters 8 [APP-030] and 16 [APP-038] of the ES and the REAC [APP-097] identify no significant effects from the Proposed Development on flooding and water, they nonetheless rely on the outline CEMP and in particular the submission of a SWMP to mitigate any potential effects caused from the construction of the Proposed Development. LB Havering support raised by the ExA will lack of detail within concerning supporting documentation. LB Havering has raise significant concerning supporting to the proposed Development on flooding and water, they nonetheless rely on the outline concerning supporting to the proposed Development on flooding and water, they nonetheless rely on the outline concerning supporting to the ExA will lack of detail within concerning supporting to the ExA will lack of detail within concerning supporting to the ExA will lack of detail within concerning supporting to the ExA will lack of detail within concerning supporting to the ExA will lack of detail within concerning supporting to the ExA will lack of detail within concerning support and the submission of a SWMP to mitigate any potential effects caused from the construction of the Proposed Development.	th regards to the Outline CEMP ag sed this as a within its Local , in particular I only be a

The Outline CEMP [APP-096] contains little details on how measures set out in the REAC would be achieved and the SWMP has not been submitted into the Examination. Moreover, paragraph 4.4.3 of the CEMP lists the SWMP as a document which may or may not be ultimately submitted as part of the CEMP and Requirement 4 of the draft DCO [APP-015].

The ExA is concerned that water management and drainage matters are not adequately addressed at this stage having regard to the concerns raised in RRs and that pre-commencement works as set out in the draft DCO [APP-015] would be uncontrolled. The ExA considers the approach to surface water drainage should be known in this Examination.

- Comment on the approach not to submit an SWMP into the Examination.
- ii) Explain how the ExA can be satisfied that pre-commencement and uncontrolled works would have no significant effect on drainage matters and the discharge of Requirement 8 of the

will be produced post Consent being granted.

LB Havering would like to draw the ExA panel's attention to paragraphs 24.2.1, 24.2.2 and 24.2.3 of the LIR.

		draft DCO and that mitigation would be adequate. OR For the Applicant: iii) Submit an outline SWMP into the Examination and update Requirement 8 of the draft DCO accordingly securing the final SWMP to be in accordance with the outline version.	
GS	Geology and Soils		LB Havering Responses
GS 1.1	Assessment Methodology The Applicant	Section 10.5.7 of Chapter 10 of the ES [APP-032] states that "a second phase of GI [ground investigation] (the 'main' GI) has been carried out across the Scheme however, the complete factual dataset was pending at the time of writing and therefore the assessment is based on the findings of the preliminary GI only. In summary, the main GI included the following:	
		 Target areas where intrusive ground works will be undertaken. Target areas of identified potential contamination sources (i.e. the Source-Pathway-Receptor linkages (SPR) identified within the risk 	

		assessment provided in this chapter) and locations of ground instability. - Provide an assessment of geological	
		boundaries, thickness of strata and geotechnical testing to inform design.	
		 Characterise the hydrogeological regime. 	
		 Sample identified surface water receptors to derive site-specific quality standards. 	
		 Determine the extent and nature of fill material. 	
		- Determine the aggressivity of the ground towards buried concrete."	
		Confirm when the data and documents associated with the 'main', second phase GI, which has been carried out is expected to be submitted into the Examination.	
GS 1.2	Assumptions and Limitations The Applicant	Section 10.6.4 of Chapter 10 of the ES [APP-032] notes that design updates to the Proposed Development may introduce features that have not been assessed due, in part or in whole, to incomplete Landmark	
		in part or in whole, to incomplete Landmark Envirocheck report data for 1.5km of the South Eastern limb (along the M25) of the Proposed Development.	

		Confirm that data will be procured to cover the entirety of the Proposed Development and that the findings of the assessment are not affected by this omission or provide robust justification for the continued omission of this data.	
GS 1.3	Mitigation The Applicant	Mitigation measures are dependent on findings of the as yet unpublished GI. Clarify how the Applicant would ensure that these measures are secured in the draft DCO [APP-015].	
GS 1.4	Design Response The Applicant	In the absence of complete GI information, define the range of designs for ecological compensation ponds considered to be appropriate for the likely worst-case and likely affects associated with these designs.	
GS 1.5	Cumulative effects The Applicant	Provide the assessment methodology used to conduct the cumulative assessment within Chapter 10 of the ES [APP-032].	
HE	Historic Environment		LB Havering Responses
HE 1.1	Archaeological Control Plan and Written Scheme of Investigation	Although Chapter 8 [APP-030] and the Summary [APP-038] of the ES and the REAC [APP-097] identify no significant effects from the Proposed Development on	The applicants' identification of a "slight averse" impact to cultural heritage in the ES is based on what

The Applicant

All Relevant Planning Authorities

the historic environment, they nonetheless rely on the outline CEMP and in particular the submission of an ACP associated with a Written Scheme of Investigation (WSI) to mitigate any potential effects from archaeological finds.

The Outline CEMP [APP-096] contains little details on how measures set out in the REAC would be achieved and the ACP / WSI has not been submitted into the Examination. Moreover, paragraph 4.4.3 of the CEMP lists the ACP as a document which may or may not be ultimately submitted as part of the CEMP and Requirement 4 of the draft DCO [APP-015].

The ExA is concerned that archaeological matters are not adequately addressed at this stage having regard to the concerns raised in RRs and that pre-commencement works as set out in the draft DCO [APP-015] would be uncontrolled. The ExA considers the approach to mitigation on archaeological matters should be known in this Examination.

 i) Comment on the approach not to submit an ACP and an associated WSI into the Examination. the borough and the Greater London Archaeological Advisory Service (GLAAS) are advising the ExA is an unacceptably limited set of baseline data, i.e. a four year old desk-based assessment. There is something of an "absence of evidence" approach about encountering significant remains to the ES conclusions, instead of an "evidence of absence" position derived from fieldwork results.

The current information is not sufficient to provide comfort on significant remains, and LB Havering/GLAAS have asked for fieldwork to inform a design and decision. This approach is supported by NSPNN 5.127 and Local Plan policy.

The applicants seek to use a postconsent programme, as is mentioned in the CEMP, along with ancillary documents to manage all archaeological remains but have not provided thorough detail. GLAAS (on behalf of LB Havering) has been clear in their recent meetings with the ii) Explain how the ExA can be satisfied that pre-commencement and uncontrolled works would have no significant effect on historic matters and the discharge of Requirement 9 of the draft DCO and that mitigation would be adequate. OR

For the Applicant:

iii) Submit an outline ACP and WSI into the Examination and update Requirement 9 of the draft DCO accordingly securing the final ACP and WSI to be in accordance with the outline version.

Applicant that the CEMP especially would need to detail a robust protocol for managing unexpected discoveries. This should include engineering and design changes to secure preservation of unexpected remains, where this can be achieved and agreed with GLAAS. This advice does not affect the need to carry out survey work in sensitive areas beforehand to better manage the risk of unexpected discoveries in key areas (see below).

GLAAS have raised concerns about the submission for some time and the application was unfortunately not updated to reflect the key concerns.

i) The absence of detailed archaeological documentation at this stage is unusual. GLAAS advise that an Archaeological Control Plan (ACP) and Overarching Written Scheme of Investigation, including outreach and public benefits to offset harm,

		would be recommended parts of any acceptable DCO submission.
	::>	However, GLASS also advise that an ACP cannot be finalised in a policy-compliant way until it is informed by field survey work at the site. This is with an aim of identifying particularly sensitive remains including for example any Roman crossing of the Weald Brook, further remains of the Saxon occupation site that was found on the south side of the Roman road at Gardens of Peace and any multi-period evidence at the stream confluence.
	ii)	It is GLAAS' view that the ExA cannot be satisfied
		that pre-commencement and uncontrolled works will not cause significant harm
		to archaeological heritage. This is because there is

		both an absence of field survey information to identify sensitive areas and an absence of procedural detail on how any impacts would be managed.
	iii)	Submission of an ACP and WSI in draft form, in the absence of fieldwork results, would allow for the investigation and recording of remains. However, we would remind the ExA of National Policy Statement for National Networks December 2014 (NPSNN) 5.139 which explicitly states that the ability to record evidence of heritage asset harmed through development scheme should not be a factor in deciding whether a consent should be given.
	making pharm to	an informed decision process based on balance of benefit needs to be followed. nce must be reached

			drawing on sufficient assessment and evaluation of significance and harm, as well as consideration of public benefits, including public heritage benefits. The applicants are still some way from having that information to put before the ExA.
HE 1.2	SoCG Appraisal The Applicant Essex County Council Brentwood Borough Council	At Preliminary Meeting part 1 held on Friday 11 December 2020 [EV-001], both the Applicant and the London Borough of Havering stated that matters concerning the historic environment would form part of a SoCG between the two; and that such an agreement would also include that of Historic England. No such arrangement appears to exist for the Essex side, and the ExA is concerned that historic matters would not be adequately assessed and appraised. Explain how an appraisal of historic matters are to be appraised on the Essex side of the Order limits and whether it will form part of	
		a SoCG signed between the Applicant and Essex County Council and / or Brentwood Borough Council.	

HE 1.3	Construction The Applicant	Paragraph 11.8.8 of Chapter 11 of the ES [APP-033] states that 'the setting of one designated asset, the Grade II listed Stony Hills Farm (1297215) may be temporarily impacted by bridge construction on Warley Road and subsequent gantry removal and reinstallation. The farm building is significant for its age and construction, and sits within an active, modern farm complex.' The Proposed Development 'would introduce slight temporary changes to this farmstead setting, resulting in slight adverse effects, which are not considered significant'. The Works plans [APP-006] and the draft DCO [APP-015] do not make references to any gantry or bridge works or construction at Warley Road. Clarify the extent of works proposed in this area.	
HE 1.4	Impact on Heritage Assets The Applicant	Provide a response to the concerns raised by the London Borough of Havering in its RR [RR-017], which identifies designated and non-designated heritage assets within the Borough. The ExA would be assisted in the examination of these matters by the	LB Havering would like to draw the ExA attention to the draft Statement of Common Ground between Highways England and LB Havering that was submitted by the Applicant at Deadline One, specifically section 8.2.1. (REP1-004).

		inclusion of further evidence to support the approach taken towards these assets in the heritage assessment.	
LV	Landscape and Visual		LB Havering Responses
LV 1.1	Landscape and Ecology Management and Monitoring Plan The Applicant	A LEMP is required by Requirement 5 of the draft DCO [APP-015]. An outline LEMP has been submitted into the Examination [APP-072]. Yet the outline CEMP lists the LEMP as a document which may or may not form part of the final CEMP. The ExA is not clear as to why the LEMP may form part of a CEMP when it is required as a standalone document. Provide a response.	
LV 1.2	Assessment of Effects The Applicant	Paragraph 9.14.6 of Chapter 9 of the ES [APP-031] states that as part of the CEMP the appointed Environmental Clerk of Works or Site Manager would be responsible for ensuring that the angle and direction of night-time lighting is not directly focussed on adjacent residential receptors. Provide further details regarding the proposed lighting strategy during construction and the proposed method for managing the direction of lighting.	

			<u>, </u>
LV 1.3	Mitigation and Monitoring The Applicant	Chapter 9 of the ES [APP-031] concludes that adverse effects of the Proposed Development on visual receptors during the operational phase in opening year would likely be significant to nine visual receptors.	
		The ES states that with the mitigation and compensation measures proposed as part of the development these adverse effects would reduce to three visual receptors experiencing significant impacts in the fifteenth year after opening.	
		Clarify whether the three visual receptors would experience significant effects rather than impacts in the fifteenth year after the opening of the Proposed Development.	
LV 1.4	Reasoned Conclusions	The London Borough of Havering has stated	Following submission of Winter
	The Applicant	in its RR [RR-017] that the panoramic photographs within the Landscape and	Photomontages and Photomontage Methodology at Procedural Deadline
	London Borough of Havering	Visual figures have not been presented in accordance with the Visual Representation of Development Proposals Technical Guidance Note (TGN) 06/19 (Landscape Institute, September 2019).	B, LB Havering's previous concerns as set out in RR (RR-017) have been addressed. LB Havering will be submitting comments at Deadline 2 on the Winter Photomontages and Methodology.
		For the Applicant:	3,
		 i) Respond to London Borough of Havering's concerns over the accuracy of panoramic 	LB Havering has reviewed the Winter Photomontages and Photomontage Methodology and can confirm that

		asse	tographs used to assist the essment of visual impacts and y significance of effects.	these have been completed in line with the Landscape Institute TGN 06/19 Visual representation of
		For the Lond	on Borough of Havering:	development proposals (published 17 September 2019).
		impo repr the t requ	ify why they believe that it is ortant for visual esentations to be depicted in format that they have lested rather than that vided by the Applicant.	25,000261
LV 1.5	Reasoned Conclusions The Applicant	unde the l for p	ify what consultation was ertaken with stakeholders on locations of viewpoints used photomontages and whether eement was reached.	
		prov	greement was not reached, vide details of the differences veen parties.	
LV 1.6	Good Design		28 to 4.35 of the National	
	The Applicant	NPS) establish The ExA notes contained with of the ES [APF	onal Policy Statement (NN the criteria for good design. the design comments in sections 4.10 of Chapter 4 P-026] and 9.9 of Chapter 9 of 131] but these are primarily	
		_	mitigation of the Proposed	

		Development as opposed to an explanation of the overall design strategy. Demonstrate how good design has been incorporated into the proposals with particular reference to the design approach employed in order to achieve a high quality built environment when considering the design of structures including proposed new bridges, culverts and ponds.	
LV 1.7	Good Design The Applicant	Paragraph 4.33 of the NN NPS provides criteria for 'good design' for national network infrastructure. i) Set out the approach taken for scheme design in response to these criteria as they relate to landscape architecture, visual appearance and integration with the public realm. ii) Explain whether an independent design review of the Proposed Development has been undertaken and if not, why not.	
LV 1.8	Good Design The Applicant	Concerns have been raised by IPs about the visual effect of proposed new road infrastructure on their property and amenity.	

		Provide an explanation of the design approach to elements of the Proposed Development which potentially would have significant visual impacts.	
LV 1.9	Good Design The Applicant	The Engineering Drawings [APP-011] illustrate sections of the main bridges to be used, those being:	
		 Alder Wood Bridge (sheet 1 of 10) where the proposed M25/A12 off slip overpasses the M25 northbound on slip. 	
		 Duck Wood Bridge (sheet 2 of 10) where the proposed M25/A12 off slip overpasses Weald Brook. 	
		 Grove Bridge (sheet 3 of 10) where the proposed M25/A12 off slip overpasses both the Weald Brook and Ingrebourne River. 	
		 Maylands Bridge (sheet 5 of 10) where the proposed A12 eastbound off slip overpasses the M25/A12 off slip. 	
		 i) Set out the design approach to these bridges and explain how they constitute good design. 	
		ii) Justify the requirement and size for the deck planned for Alder	

		Wood Bridge and how this constitutes good design.	
LV 1.10	Arboricultural Method Statement (AMS) The Applicant	The ExA is concerned by the Applicant's apparent approach to tree management and mitigation. Chapter 7 of the ES [APP-029] introduces arboricultural matters. The REAC [APP-097] and outline CEMP [APP-096] particularly Table 9.1 identify that the Proposed Development has the potential to directly and indirectly affect 19 ancient woodlands including two adjacent to the Order limits and 15 veteran trees. The REAC identifies a number of measures designed to mitigate and protect trees to be retained and signposts the outline CEMP as the principle document where such matters would be controlled. However, the outline CEMP makes no further mention of trees in detail and neither the outline CEMP or REAC give any meaningful indication of management of Tree Preservation Order (TPO) trees. The REAC references to the Scheme Layout Plans [APP-010] and Preliminary Environmental Design Plans (which do not appear to be before this Examination) are not sufficient as tree protection documents.	 We expect the timing for the Ecological Clerk of Works will be detailed in the final CEMP and include the roles & responsibilities as follows: Advise on protecting valued biodiversity features on within the construction site, particularly providing input to the final CEMP. Provide practical, site-specific and proportionate assistance on how the Applicant can achieve compliance with environmental legislation including co-ordination of European Protected Species mitigation and badger development licences.

The Arboricultural Impact Assessment (AIA) [APP-063] identifies and plots the positions of veteran trees and TPO groupings. The AIA alongside the REAC and outline CEMP rely on an AMS which is not before the ExA and no provision is made for it within the draft DCO [APP-015].

The ExA is concerned that the Applicant's approach does not satisfactorily address tree protection measures and places a heavy reliance on an as yet unseen AMS. Unanswered questions remain, including:

- The identification of the Root Protection Areas (RPAs) for the veteran trees within or close to the Order limits that are identified to be retained and the most appropriate approaches for their protection.
- The absence of identification of and survey work of the ancient woodlands and the potential indirect impacts on them, which contrary to the REAC are not set out in the CEMP in any detail.
- A precise indication of the trees to be removed.
- The appointment of, the roles and responsibilities and the timing of the

Ecological Clerk of Works and the Arboricultural Officer.

The ExA considers the Applicant's approach to tree protection and management to be scattered over several documents and is as such imprecise and unclear. It places too heavy a reliance on an AMS, which needs to be examined in this application. Given the quantum and importance of trees and the vagueness of the CEMP and REAC, the ExA does not consider that Requirement 4 of the draft DCO adequately secures the mitigation practices set out by the Applicant.

The ExA requires the submission of an outline AMS, which should incorporate the AIA and build on in greater detail the headline measures set out in the CEMP and REAC, thus providing the Examination with a clear identification and mitigation approach to trees.

- i) Provide an outline AMS to contain the evidence set out above.
- ii) Insert a new Requirement into the draft DCO securing the mitigation and management of trees which requires, prior to the commencement of the

		development, the submission for approval of an AMS in accordance with the outline AMS.
		iii) Explain whether the AMS should be added to the list of Certified Documents in Schedule 10.
LV 1.11	TPO The Applicant	Schedule 5 of the draft DCO [APP-015] lists TPO trees at risk from felling to facilitate the Proposed Development. Confirm whether this includes veteran
		trees.

NV	Noise and Vibration	ExA Question	LB Havering Responses
NV 1.1	Dust, Noise and Nuisance Management Plan The Applicant All Relevant Planning Authorities	Although the Chapter 6 [APP-028] and the Summary [APP-38] of the ES and the REAC [APP-097] identify no significant effects from the Proposed Development from noise and vibration, they nonetheless rely on the CEMP and in particular the submission of a Dust, Noise and Nuisance Management Plan (DNNMP) to mitigate any harmful effects caused by the construction and operation of the Proposed Development. The outline	LB Havering has raised concerns within it Local Impact Report that a number of documents may only be produced as part of the CEMP and only after Consent has been granted. This does not give the Council sufficient reassurance that these documents will be produced and therefore that appropriate mitigation

CEMP [APP-096] contains little details on how measures set out in the REAC would be achieved and the DNNMP has not been submitted into the Examination. Moreover, paragraph 4.4.3 of the CEMP lists the DNNMP as a document which may or may not be ultimately submitted as part of the CEMP and Requirement 4 of the draft DCO [APP-015].

The ExA is concerned that noise and vibration matters are not adequately addressed at this stage having regard to the concerns raised in RRs and that precommencement Works as set out in the draft DCO [APP-015] would be uncontrolled. The ExA considers the approach to mitigation on noise matters should be known in this Examination.

- Comment on the approach not to submit an DNNMP into the Examination.
- ii) Explain how the ExA can be satisfied that pre-commencement and uncontrolled works would have no significant effect on noise matters and the discharge of Requirement 4 of the draft DCO

will be in place to address the impacts of noise from the scheme.

Furthermore requirement 4 currently states that the CEMP only needs to be produced "substantially in accordance" with the outline CEMP. This does not give the Council sufficient reassurance that the commitments set out within the Outline CEMP will be adhered to by the appointed contractor.

		and that mitigation would be adequate. For the Applicant: iii) Submit an outline DNNMP into the Examination either update Requirement 4 or insert a new Requirement into the draft DCO securing the final DNNMP to be in accordance with the outline version.	
NV 1.2	Vibration The Applicant	The condition of the road surface is a significant factor in determining the likelihood of ground-borne vibration impacts. Ground-borne vibration is scoped out of the assessment as it is assumed that the new road surface will be adequately maintained to be free of irregularities over the long-term assessment period. Is the maintenance regime secured in order ensure that ground-borne noise will not become a problem over the lifetime of the Proposed Development?	
NV 1.3	Noise Climate The Applicant Grove Farm	Paragraph 6.7.1 of Chapter 6 of the ES [APP-028] omits Grove Farm from the list of closest businesses that are sensitive	

		receptors to noise but includes it as a residential receptor.	
		For the Applicant:	
		i) Confirm that these lists of receptors are accurate.	
		For the occupiers of Grove Farm	
		ii) Comment on the noise assessment contained within Chapter 6 of the ES	
NV 1.4	Noise Climate	Despite Grove Farm's immediate proximity	
	The Applicant	to the M25 / A12 junction it is not designated as an Important Area for Noise	
	Grove Farm	(NIA) within Table 6.7 of Chapter 6 of the ES [APP-028].	
		Provide justification for this omission, particularly in the light of the inclusion of 'The Poplars' and explain whether the findings presented in the assessment would be altered by Grove Farm's inclusion as an NIA.	
MW	Minerals and Waste		LB Havering Responses

MW 1.1	Waste Deposits The Applicant	In paragraphs 2.1, 2.2 and 2.3 of its RR [RR-009], the EA raises concerns about waste deposits and permit frameworks. Provide a response to the issues raised and provide a timeframe for the resolution of the issues identified.	
PC	People and Communities		LB Havering Responses
PC 1.1	Locations of residential and commercial property receptors The Applicant	Tables 13.18 and 13.19 of Chapter 13 of the ES [APP-035] lists the residential and commercial property receptors in the vicinity of the Proposed Development site. It would be helpful if this information could be provided in a colour-coded map form. The ExA requests from the Applicant that such a map is submitted into the Examination. Provide a response.	
PC 1.2	Assessment of effects on private dwellings The Applicant	Section 13.10 and Table 13.24 of Chapter 13 of the ES [APP-035] set out those dwellings assessed together with a summary of effects from the Proposed Development on their living conditions. No assessment has been made for the properties in Woodstock Avenue.	

		 i) Explain the absence of assessment for properties in Woodstock Avenue. ii) Given the number of RRs received from occupiers in those properties, explain whether an assessment of those properties should form an addendum to Chapter 13 of the ES.
PC 1.3	Grove Farm The Applicant	Section 13.10 and Tables 13.24, 13.25 and 13.26 of Chapter 13 of the ES [APP-035] identifies that the Proposed Development would have a significant adverse effect on the private dwellings at Grove Farm from both construction and operation. However, to understand the actual effects, the occupiers of these properties and the ExA need to look at a range of ES Chapters as well as the REAC [APP-097]. The ExA considers it would be beneficial if an individual and cumulative assessment on the effects on the living conditions of the occupiers of Grove Farm could be provided in a concise statement or document to be submitted into the Examination, and the ExA requests such an assessment. i) Provide a response.

		ii) Explain how mitigation can be considered to be adequate when statements, for the DNNMP has not been submitted into the Examination.	
PC 1.4	Maylands Golf Course - Hole 2 The Applicant Luddington Golf Limited	Paragraph 13.8.21 of Chapter 13 of the ES [APP-035] states that the tee off area for Hole 2 is required for Work No.29 (diversion of high-pressure gas pipeline). The area of land indicated for this is plot 1/12 as shown on the Land plans [APP-005]. The Applicant proposed that plot 1/12 be CA for the freehold owing to the need to provide a permanent easement over the diverted gas pipeline and to minimise future disruption that the presence of the gas pipeline might cause to the availability of Hole 2 to users of the golf course.	
		However, in its RR [RR-019] Luddington Golf Limited states that Hole 2 only needs to be temporarily relocated (although the Applicant and Luddington Gold Limited are not currently in agreement on those works). The SoR [APP-019] only refers to discussions having taken place between the Applicant and Maylands Golf Club. i) Clarify whether there is a dispute between the parties as to whether	

		_
		Hole 2 needs permanent or temporary relocation and whether there is subsequently a dispute on the CA powers sought.
		ii) Clarify that it is only Hole 2 of the Maylands Golf Course that would be directly affected by the Proposed Development (setting aside Plot 3/2).
		iii) Provide details of the Applicant's and Luddington Golf Limited's solutions to remodel and / or mitigate the construction effects and set out the disputes between the parties.
PC 1.5	Maylands Golf Course The Applicant Luddington Gold Limited	Section 13.10 and Table 13.23 identifies that there would be a not inconsiderable land take from Maylands Golf Course both for a temporary and permanent nature. Table 13.27 and paragraphs 13.10.19 to 13.10.28 set out the construction effects on the Maylands Golf Course which is described as having a LSE.
		i) Clarify the construction effects that would occur to the wider Maylands Golf Course and how

		ii)	they are mitigated and secured in the draft DCO [APP-015]. Explain the status of the 'informal' practice driving range at plot 1/11 as shown on the Land plans [APP-005].	
Lond	elopment Land don Borough of rering	of Chapte the Orde London E developn developn conclude low signi available	ths 13.8.45, 13.8.46 and 13.10.47 er 13 of the ES [APP-035] identifies in land as including sites within the Borough of Havering's emerging ment plan as being for wind related ment. Paragraph 13.10.47 is that "this is considered to be of ficance given the alternative sites, and the result effect is therefore end to be negligible". Provide a response as whether this is agreed with. Indicate which plots within the Land plans this relates to.	As part of Havering's Duty to Cooperate obligations during preparation of the Local Plan, LB Havering agreed a Memorandum of Understand (MOU) with Highways England in September 2019 which resolved this matter and concluded in an additional criteria being added to Local Plan policy 36 as set out in para 8.6.5 of the Local Impact Report. Therefore LB Havering agrees with i) in the ExA's question. With regards to question ii), the plots within the Land Plans that the wind related development sites identified in Havering's emerging development plan were:

			Area 1: Plots 1/10, 1/11 and 1/14 Area 3: Plots 3/20, 3/21 and 3/22
PC 1.7	Development Land Glebelands Estates Limited	In Glebelands Estates Limited's RR [RR-020], it is stated that the Proposed Development would prevent other land holdings being brought forward for development. If this does not relate to the wind development discussed above in WQ PC 1.6, explain which plots Glebelands Estates Limited are referring to, and what stage in the planning process these developments have progressed.	
PC 1.8	Cycleways The Applicant	Table 13.33 of Chapter 13 of the ES [APP-035] states that there is the potential for the cycle infrastructure to be upgraded and functional during the operational phase of the Proposed Development which would have a significant beneficial impact. Explain how this is secured in the draft DCO [APP-015]	
PC 1.9	Plot 1/8 Gardens of Peace Muslim Cemetery	The SoR [APP-019] confirms that plot 1/8 as shown on the Land plans [APP-005] is required for Work No.29 (diversion of a	

		high-pressure gas pipeline) in order to allow for the construction of the Proposed Development. In Gardens of Peace's RR [RR-024] it is stated that the works would interfere with the operation of the cemetery and would result in a redesign of the layout. i) Explain the anticipated length of time it would take to divert the existing high-pressure gas pipeline on Plot 1/8. ii) Explain why the cemetery would need to be resigned. iii) Explain whether the diversion could be timed to minimise harm	
PC 1.10	Limits of Deviation The Applicant Part 2, Article 7(1)(b), (c) and (d) of the draft DCO [APP-015] would permit the authorised development to be increased up to 2m upwards in certain places.		
		 i) Confirm whether the scope and assessment in the ES has allowed for these limits of deviation. 	
		ii) If no assessment has been given, provide it and explain whether it has any bearing on the scope and assessment in the ES, particularly	

		on the identified effects to the private dwellings at Grove Farm.	
PC 1.11	Community Engagement All Interested Parties	The ExA is concerned that the REAC [APP-097] and CEMP [APP-096] do not provide adequate and clear instructions on how the Applicant intends to liaise with the local community during construction.	The Construction Environment Management Plan sets out a communications framework for how members of the public will be engaged pre and during construction.
	For	i) Comment on the Applicant's approach to community engagement during construction of the Proposed Development, should the SoS decide to make the Order, and whether this is adequately secured in the draft DCO [APP-015].	However the framework does not provide sufficient detail as to the methodology for carrying out engagement with the public. For example, what geographical area would letter drops take place over, how many days in advance of works taking place will communications be sent out?
		For the Applicant:	What does the "public" cover? Does
		i) Consider an additional requirement which requires, prior to the commencement of the development, the submission for	it include for example community groups in the local area who would be critical for helping get the message out?
		approval of a Community Engagement Plan which must be in accordance with the outline document.	The Communications Framework needs to provide further detail on the methodology for getting communications out to members of the public, for example, how will social media platforms be used?

	The Framework also lacks information on how other groups will be engaged with, for example there is no information on how local businesses will be made aware of works which will be critical for business that rely on the road network for logistical purposes.
	Such matters could be picked up in a Community Engagement Strategy for the scheme.
	Furthermore LB Havering is concerned that the communications plan will not be finalised until the final CEMP is produced by the appointed contracted and such matters may get overlooked.

TA Traffic and Access		LB Havering Responses
The Applicant Essex County Council London Borough of Havering Transport for London	Although the REAC [APP-097] identifies no significant effects by the construction and operation of the Proposed Development in respect to noise and vibration and people and communities from traffic issues, it does nonetheless rely on the submission of a Traffic Management Plan (TMP) to mitigate any harmful effects. However, this document is not before the Examination and the ExA is concerned that traffic management matters are not adequately addressed at this stage having regard to the concerns raised in RRs. The ExA considers the approach to mitigation on traffic management matters should be known in this Examination. Additionally, concerns have been raised in RRs that construction traffic and construction site access requirements could lead to significant disruption to traffic on local roads and to access westwards along the A12 for residents of Woodstock Avenue. i) Comment on the approach not to submit an TMP into the	LB Havering is disappointed that a Traffic Management Plan (TMP) has not yet been produced by the Applicant. This is despite LB Havering raising concerns in its Relevant Representation that critical documentation would not be made available until after Consent has been granted. In Havering's Local Impact Report the Council has identified in para 19.3 roads that are unsuitable for construction traffic and yet in the applicant's Transport Assessment Supplementary Information Report (TASIR) construction traffic is seen to be distributed on some of those roads and other traffic is also seen to reassign on to these unsuitable roads as a result of construction activity. Therefore it is essential that a TMP is agreed with Havering and other local authorities ahead of Consent.

		ii)	Submit an outline TMP into the Examination update Requirement 10 of the draft DCO securing the final TMP to be in accordance with the outline version.	
TA 1.2	Extent of traffic modelling The Applicant	i)	Provide a response to the traffic and access concerns raised by the London Borough of Havering in its RR [RR-017].	
		ii)	Explain whether traffic modelling has been carried out to establish the impact of the Proposed Development on roads beyond Gallows Corner and the impact on roads approaching the A12 between Gallows Corner and J28.	
TA 1.3	Extent of Traffic Modelling The London Borough of Havering Essex County Council	For the	Set out the specific concerns regarding the Gallows Corner area and provide comment, where appropriate, in response to the additional information, specific to this area, provided within Chapter 9.5 Transport Assessment Supplementary Information Report, submitted at Procedural	Gallows Corner area consists of a Strategic 5-arm road network junction comprising at-grade roundabout & grade separated flyover. It connects the A12 Eastern Avenue (TLRN) /A12 Colchester Road (TLRN) A127 Southern Arterial Road (TLRN) /A118 Main Road (SRN) /Straight Road /Flyover links A12 west (Eastern Avenue) to A127 (Southend Arterial Road).

Deadline B on 21 December 2020 [PDB-003].

For Essex County Council:

ii) In its RR [RR-011], Essex County Council raises general concerns around the impact of traffic congestion on Brentwood's emerging local plan. Set out the specific areas of concern and what mitigation measures might be appropriate to address these concerns.

In 1970 the existing flyover was installed using Braithwaite and Co. design. The Fliway' construction type was intended as a temporary structure only, with a 15 year design life envisaged. Several maintenance programmes have been carried out on the structures since 2008 to present day.

In October 2019 all day traffic surveys were carried out at Gallows Corner (A12 Roundabout and Flyover). Key feeders for this junction include the A12 and the A127 corridors towards Essex/M25/M11 along with local centres around the junction. The 2019 traffic survey turning counts revealed 86% of classed vehicles were car/LGV. In the AM peak the roundabout had a total of 12094 movements with the A12 Colchester Road & A118 feeding the greatest flows into roundabout. The A12 Colchester Road & A12 Eastern Avenue handle greatest outflows and the Flyover carried 3612 vehicles in AM. The flows trends are broadly tidal.

Gallows Corner forms a strategic function for abnormal freight loads as well as other freight on the road network, with the A127 providing onward connections towards to the Ports of Thurrock and Tilbury and the A12 eastbound arm providing onward connections towards Harwich and Felixstowe. It is important that this function is not adversely impacted as a result of this scheme both during construction and operation, with many businesses using Gallows Corner for time sensitive logistical purposes.
LB Havering's Local Impact Report (LIR) sets out the concerns that the Council has with regards to the air quality and noise issues around the junction (paragraphs 10.11.4, paras 15.1.11). The conditions for cyclists and pedestrians are also poor around the junction. In addition there are a number of schools located in proximity to Gallows Corner off the A12 Colchester Road and Straight

Road arms, further details can be found in paragraph 5.3.7 of the Local Impact Report. In addition further information on collision data in the

	areas can be found in Figures 10 and 11 of the Local Impact Report.
	Havering notes the assessment that has been undertaken for Gallows Corner and the A12 by Highways England (HE). Given that the assessment has not taken into account the sub regional growth, Havering cannot agree with the reported impacts for Gallows Corner and the A12. Havering refers to its Local Impact Report with regards to the effects of the proposed scheme on Gallows Corner and the A12. It should be noted that section 19 of LB Havering's LIR illustrates the effect of sub regional 2041 traffic growth would have on this junction with the proposed M25 J28 scheme in place.
	LB Havering has reviewed the TASIR that was submitted at Procedure Deadline B. LB Havering submitted a response at Deadline One. Part of this response expressed concern that the growth scenarios set out within the TASIR do not appear to have taken into account sub regional growth. The impact of the scheme on

			Gallows Corner cannot be fully understood at this stage.
TA 1.4	Brook Street The Applicant	Section 5.8.6 of the Transport Assessment Report [APP-098] states "the Brook Street westbound mitigation is proposed to be delivered as part of the Scheme and it will be developed further in the subsequent detailed design phase. With this mitigation, the delays with the Scheme in place are expected to be less than those predicted for the Do minimum in both the AM and PM peaks".	LB Havering seeks reassurance from the Applicant that the optimisation of signals at the Brook Street Interchange will be secured through the DCO.
		Confirm whether the information contained within Procedural Deadline B submission - 9.5 Transport Assessment Supplementary Information Report [PDB-003] describes "the Brook Street westbound mitigation"	
		Explain whether further development of this mitigation work is guaranteed in the draft DCO [APP-015].	
TA 1.5	Collision Data for M25 junction 28	Figure 6-1 of the Transport Assessment Report [APP-098] shows a fatal accident in	
	The Applicant	the region close to the A12 junctions with Maylands Golf Course and Woodstock Avenue. These are areas that a number of IPs have raised concerns about in relation	

		to safety and accessibility of this area within RRs. Explain what measures exist within the Proposed Development to address the concerns raised.	
TA 1.6	Road Safety Audit The Applicant	Figure 6-8 of the Transport Assessment Report [APP-098] indicates that the road safety audit Problem 1 was responded with "disagree".	
		 i) Explain the evidence to support this disagreement. 	
		ii) Explain whether local businesses and residents have been consulted on the possibility, or practicality, of using existing access for maintenance vehicles.	
		iii) Set out whether specific objections have been raised and whether the risk of traffic disruption caused by an accident under Problem 1 would be a greater, or significant inconvenience and a higher safety risk than periodic access via a shared connection.	

	-		
TA 1.7	Road Safety Audit The Applicant	Figure 6-8 of the Transport Assessment Report [APP-098] indicates that the road safety audit Problems 3 and 6 were responded with "agree, it is proposed that this recommendation is implemented in the detailed design stage".	
		Explain whether the provision of the agreed additional safety measures is guaranteed in the draft DCO [APP-015].	
TA 1.8	Road Safety Audit The Applicant	Figure 6-8 of the Transport Assessment Report [APP-098] indicates that the road safety audit Problem 7 was responded with "disagree".	
		While noting that the design has been carried out in line with guidance set out in DMRB, it is apparent that an out of date version is referenced.	
		Confirm that the design of the Proposed Development in its entirety complies with the guidance set out in the most current DMRB.	
TA 1.9	Road Safety Audit The Applicant	Figure 6-8 of the Transport Assessment Report [APP-098] indicates that the road safety audit Problem 7 was responded with "disagree".	

		It is confirmed that a GG104 safety risk assessment has been undertaken. Confirm whether the findings of the risk assessment have been published.
TA 1.10	Road Safety Audit The Applicant	Figure 6-8 of the Transport Assessment Report [APP-098] indicates that the road safety audit Problem 12 was responded with "disagree". The Applicant's response does not appear to
		fully address the problem raised. i) Confirm whether evidence has been provided to explain that there is no greater risk of lighting columns positioned as proposed being struck in a collision and that there is no increased severity of collision as a result of this positioning.
		ii) Demonstrate that lighting columns on the offside position of the carriageway are not more difficult to maintain and that routine maintenance will not require lane closures, resulting in longer periods where lighting is inoperable in this case.

TA 1.11	Sustainable Transport The Applicant	Section 3.17 of NN NPS states that new development should "identify opportunities to invest in infrastructure in locations where the national road network severs communities and acts as a barrier to cycling and walking, by correcting historic problems, retrofitting the latest solutions and ensuring that it is easy and safe for cyclists to use junctions." Demonstrate the extent to which the Proposed Development has sought to	
TA 1.12	Accessibility The Applicant	address the NN NPS objectives. Section 3.22 of NN NPS states that new developments should "seek to deliver improvements that reduce community severance and improve accessibility". A number of local residents in RRs - particularly those who reside in Woodstock Avenue - have raised this as a concern. Demonstrate the extent to which the Proposed Development has sought to address the NN NPS objectives.	LB Havering agrees with the concerns residents in Woodstock Avenue have raised in regards to severance and accessibility. LB Havering has raised this point in its Responses to Relevant Representations submission at Deadline One (REP1-034).
TA 1.13	Accessibility London Borough of Havering	Particular concern has been raised by residents of Woodstock Avenue in relation to a lack of access westbound along the A12 from their road as it is currently not possible to execute a right turn from the	LB Havering recognises the concerns raised by residents of Woodstock Avenue concerning access westbound along the A12. LB Havering is sympathetic to these concerns and

Transport for London	junction of Woodstock Avenue on to the A12.	set out in its response to Relevant Representations at Deadline One.
	i) Comment on the level of support within each organisation for the provision of a right turn from Woodstock Avenue onto the A12.	(REP1-034) Furthermore LB Havering has noted the request by a local resident for a
	ii) Comment on the practicalities of such a provision on the current network.	feasibility study to be undertaken by the applicant and has requested the ExA to consider this, as part of its
	iii) Provide an opinion as to whether the Proposed Development would alleviate the current issues faced by residents of the properties.	LB Havering does not consider it possible at this stage to provide an opinion as to whether the proposed development would alleviate the current issues faced by residents because of the lack of sub regional growth scenario testing in the traffic assessment.



ANNEX A

Abbreviations Used

ACP	Archaeological Control Plan	HEMP	Handover Environmental Management Plan	SPA	Special Protection Area
AIA	Arboricultural Impact Assessment	HRA	Habitats Regulations Assessment	SPR	Source Pathway Receptor
AMS	Arboricultural Method Statement	IAN	Interim Advice Note	SWMP	Surface Water Management Plan
AP	Affected Person	IP	Interested Party	TfL	Transport for London
AQMA	Air Quality Management Area	km	Kilometre	TGN	Technical Guidance Note
ARN	Affected Road Network	LEMP	Landscape and Ecology Management and Monitoring Plan	TLRN	Transport for London Road Network
BoR	Book of Reference	LSE	Likely Significant Effect(s)	TMP	Traffic Management Plan
CA	Compulsory Acquisition	LTC	Lower Thames Crossing	TP	Temporary Possession
CEMP	Construction Environmental Management Plan	m	metre	TPO	Tree Preservation Order
CoCP	Code of Construction Practice	NE	Natural England	tCO₂e	Tonnes of Carbon Dioxide emissions
CO ₂ e	Carbon Dioxide Emissions	NIA	Important Area for Noise	WQ1	Written Questions
DCO	Development Consent Order	NN NPS	National Networks National Policy Statement	WQ2	Further Written Questions
DEFRA	The Department of the Environment, Food and Rural Affairs	NO ₂	Nitrogen Dioxide	WSI	Written Scheme of Investigation
DMRB	Design Manual for Roads and Bridges	NSER	No Significant Effects Report		

DNNMP	Dust Noise and Nuisance Management Plan	PDA	Procedural Deadline A	
EA	Environment Agency	R	Receptor	
ECP	Environmental Control Plan(s)	REAC	Register of Environmental Assessment Commitments	
EM	Explanatory Memorandum	RIS	Ramsar Information Sheet	
ES	Environmental Statement	RPA	Root Protection Area	
ExA	Examining Authority	RR	Relevant Representation	
GCN	Great Crested Newt	SoCG	Statement of Common Ground	
GI	Ground Investigation	SoR	Statement of Reasons	
Gardens of Peace	Gardens of Peace Muslim Cemetery	SoS	Secretary of State	



ANNEX B

M25 Junction 28: TR010029

List of all objections to the grant of CA or TP powers (WQ1: Question CA 1.3)

Obj No. ⁱ	Name/ Organisation	IP/AP Ref No ⁱⁱ	RR Ref No ⁱⁱⁱ	WR Ref No ^{iv}	Other Doc Ref No ^v	Interest	Permanent / Temporary	Plot(s)	CA ^{viii}	Status of objection
1	Network Rail		RR-002			Cat 1	Permanent	4/2	Yes	Protective Provisions Not Agreed
2	Cadent Gas		RR-006			Cat 1 and 2	Permanent	1/1, 1/3, 1/5, 1/6, 1/7, 1/8, 1/10, 1/11, 1/12, 1/13, 1/14, 1/35, 1/36, 1/38, 3/2, 3/6, 3/8, 3/20, 3/21, 3/22, 4/4	Yes	Protective Provisions Not Agreed
3	Eastern Power Networks		RR-008			Cat 3		None	Yes	Protective Provisions Not Agreed
4	Glebelands Estate		RR-020			Cat 1 and 2	Permanent and Temporary	1/1, 1/10, 1/11, 1/12, 1/13, 1/14, 3/2, 3/3, 3/4, 3/6, 3/8, 3/16, 3/20, 3/21, 3/22	Yes	Objection to quantum of land and powers sought
5	NGET / NGG		RR-022			Cat 1	Permanent	1/1, 1/4, 1/5, 1/6, 1/17, 1/18, 1/22, 1/25, 1/29, 3/5, 3/11, 3/12, 3/13, 3/14, 3/16, 3/17,	Yes	Protective Provisions Not Agreed

Obj No. ⁱ	Name/ Organisation	IP/AP Ref No ⁱⁱ	RR Ref No ⁱⁱⁱ	WR Ref No ^{iv}	Other Doc Ref No ^v	Interest	Permanent / Temporary	Plot(s)	CAviii	Status of objection
6	Gardens of Peace		RR-024			Cat 1	Permanent	1/1, 1/8, 1/9	Yes	Need and use of Plot 1/8
7	Grove Farm (Jones Family)		RR-026			Cat 1 and 2	Permanent and Temporary	1/15, 1/16, 1/17, 1/18, 1/20, 1/21, 1/22, 1/23, 1/24, 1/25, 1/26, 1/27, 1/27a, 1/28, 1/29, 3/5, 3/11, 3/13, 3/14, 3/15, 3/16, 3/17, 3/18, 3/19		No specific objection but AP with considerable land holding, has significant concerns over location of Works and its effects.
8	TfL		RR-028			Cat 1	Permanent	1/1, 1/2, 1/3, 1/4, 1/7	Yes	Objection to the grant of land after development is complete to maintain Proposed Development Powers in draft DCO [APP-015]

- i Obj No = objection number. All objections listed in this table should be given a unique number in sequence.
- ii Reference number assigned to each Interested Party (IP) and Affected Person (AP)
- iii Reference number assigned to each Relevant Representation (RR) in the Examination library
- iv Reference number assigned to each Written Representation (WR) in the Examination library
- v Reference number assigned to any other document in the Examination library
- vi This refers to parts 1 to 3 of the Book of Reference:
 - Part 1, containing the names and addresses of the owners, lessees, tenants, and occupiers of, and others with an interest in, or power to sell and convey, or release, each parcel of Order land.
 - Part 2, containing the names and addresses of any persons whose land is not directly affected under the Order, but who "would or might" be entitled to make a claim under section 10 of the Compulsory Purchase Act 1965, as a result of the Order being implemented, or Part 1 of the Land Compensation Act 1973, as a result of the use of the land once the Order has been implemented.
 - Part 3, containing the names and addresses of any persons who are entitled to easements or other private rights over the Order land that may be extinguished, suspended or interfered with under the Order.
- vii This column indicates whether the applicant is seeking compulsory acquisition or temporary possession of land/ rights
- viii CA = compulsory acquisition. The answer is 'yes' if the land is in parts 1 or 3 of the Book of Reference and the The Applicant are seeking compulsory acquisition of land/ rights.