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Lower Thames Crossing

9.138 Applicant's Response to Comments Made by Thurrock Council at D4 and D5

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Lower Thames Crossing

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1 Introduction

1.1 Applicant's response to comments made by Thurrock Council at D4 and D5

1.1.1 At Deadline 5 Thurrock Council submitted Comments on the Applicant's Submissions at Deadline 4 [**REP5-112**].

1.1.2 Aside from comments on the dDCO which are dealt with separately in 9.127 Applicant's Responses to IP's Comments on the draft DCO at Deadline 5, the Applicant has responded to some comments made in [**REP5-112**] in Table 2.1.

1.1.3 Table 2.1 sets out responses to new comments, or where a response goes beyond what has previously been addressed by the Applicant, to address factual inaccuracies or to refute the generalised and unsubstantiated positions presented by Thurrock Council on several matters.

1.1.4 At Deadline 5 the Applicant provided comments on IP responses to ExQ1 at Deadline 4 – 9.105 Applicant's Comments on IP Responses to ExQ1 at Deadline 4 [**REP5-077**]. In Table 3.1 the Applicant has provided further comments on responses provided by Thurrock Council with regards to the following questions:

a. ExQ1 2.2.1 - Localised Climate and Carbon Assessments

b. ExQ1 8.1.2 - Waste and Materials, Excavated Materials

c. ExQ1 8.1.4 - Waste and Materials, Waste Management

d. ExQ1 8.1.6 - Waste and Materials, Waste Management

e. ExQ1 8.1.9– Waste and Materials, Monitoring Consultation/ Approval/ Timescales

2 Applicant's Response to Thurrock Council's Comments on Applicant's submissions at Deadline 4

Table 2.1 Applicant's response to Thurrock Council's Comments on Applicant's submissions at Deadline 4

Section no.	Thurrock Council's Comments	Applicant's response
Section 1 – Introduction		
1.4.1 11.4.2	The Council notes that in many instances within the applicant's documents covered by this submission, there is no further analysis, evidence, documentation or response that addresses the Council's points made in its previous submissions in its Local Impact Report [**REP1-281**] and its Appendices or its D3 and D4 Submissions [**REP3-211**] and [**REP4-352**, **REP4-353** and **REP4-354**] and their included Appendices. The applicant has in most cases has referred to previous documentation, reiterated its previous position and/or stressed that it has been both 'reasonable and proportionate', without actually being so. The Council contends that this is not reasonable, particularly if a major stakeholder is making substantive technical points, then it is incumbent on the applicant to respond with further analysis, evidence, documentation or argument that addresses the Council's points	The Applicant strongly refutes the generalised and unsubstantiated position that it has not engaged constructively, or provided appropriate and proportionate information to the Examination. The Applicant has, in order to ensure the Examining Authority and the Secretary of State are able to make a recommendation and decision, carefully reviewed all submissions and provided detailed responses, including to the extensive Local Impact Report and the other submissions from Thurrock Council [**REP2-062**, **REP2-063**, **REP2-064**, **REP2-065**, **REP2-066**].The Statement of Common Ground with Thurrock Council, which now runs to 300 pages, and covers over 300 technical issues, also provides a detailed response to each of the issues raised by the Council [**REP3-092**]. It is acknowledged that there are areas of disagreement and that the Council has an in-principle objection to the Project, but this should not be conflated with the assertion that the Applicant has not provided responses (a position the Applicant maintains is unevidenced, unparticularised and for the reasons explained above and below, inaccurate). The Applicant would note that, in a large number of cases, where Thurrock Council disagrees with the Applicant's response on a particular matter, the Council has simply reiterated its previous submissions with no new information, or arguments. In those circumstances, the Applicant has signposted to its previous responses, rather than repeat them,

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		in order to minimise the amount of duplicated material submitted into the Examination process. In the Applicant's experience across its portfolio of DCO promotions, the Project has been through a robust and exceptional level of scrutiny, both through an extensive pre-application period and through examination of what is the most detailed DCO application it has ever submitted. The Applicant remains willing and able to assist the Examining Authority with any questions or queries which it considers remain unresolved during the course of the Examination.
Section 2 - Responses to Applicants D4 submissions		
2.4 Statement of Reasons (v5) Changes		
2.4.3	The Council notes in Annex B that the applicant has failed to address any of the points raised in Section 18.13 of the Council's submission at D3 – 'Thurrock Council Comments on applicant's Submissions at Deadline 1 and 2 (D1 and D2)' [**REP3-211**]. There are, as highlighted previously, several points which required correcting, and which still need to be corrected.	As the Council will be aware, this is a matter which is the subject of ongoing engagement. Following CAH2 the Applicant has held a further meeting to discuss the Compulsory Acquisition of land and potential for a SAC-R commitment to working together with regard to Temporary use of land. The Applicant is awaiting a response from the Council but remains prepared to work with them to close out matters as far as possible before the end of Examination.
2.5 S106 HoT		
2.5.3	Skills, Education and Employment: Council Resourcing – the outstanding issues relating to this vital matters were set out in detail in the Council's LIR [**REP1-281**] in Section 13.4 and then updated in its D3 submission [**REP3-211**] in Section 18.12. The Council has received no satisfactory responses from the applicant, and it has refused to accommodate the Council's 'reasonable and proportionate' requests for any officer support.	The Applicant responded to matters raised in [**REP1-281**] and [**REP3-211**] within the Applicant's Comments on IP submissions at DL1 – DL3 [**REP5-088**] and additionally during meetings held on 8 August 2023 and 28 September 2023, involving dedicated discussions on s106 matters. With respect to Officer Support for the Skills, Education and Employment (SEE) scope, the Applicant has responded in detail in Part 4 of 5 of the Applicant's response to Thurrock Council's LIR [**REP2-065**], specifically Sections 13.4.8 - 13.4.14 and in a number of meetings held on 26 June 2023 and

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		8 August 2023 clarifying that the Applicant has established a SEE team responsible for pre- and post-Contractor onboarding. For the pre-Contractor onboarding period, the SEE team would be responsible for building relationships across the south-east and hosting authorities to underpin the skills provisions for the programme. Post-Contractor onboarding, the team would continue to engage with local authorities to discuss SEE opportunities and challenges, as well as provide updates once the Contractors are onboarded.
	Community Funds – the applicant has refused to change its definition of 'local'; will not increase the value of the proposed Community Fund; will not change the LAs proposed distributions of the Fund; and will not consider the Community Capacity funding. This is in spite of detailed evidence and previous best practice benchmarking from the Council and a joint request from four directed impacted local authorities.	The Applicant's position on the Community Fund is documented in the Thurrock Council SoCG in matters 2.1.177 to 2.1.181 [**REP3-092**]. Matters 2.1.77, 2.1.78 and 2.1.81 were added following receipt of the LIR. The Applicant has considered Thurrock Council's points on Community Capacity Funding but does not agree with them. The Applicant considers its position is proportionate and appropriate as outlined in SoCG matter 2.1.181.
	Officer Support Contributions – a further meeting with the applicant on 28 September 2023 has required further input from the Council to supply further information, which will be sent to the applicant immediately after D5 for their further consideration. Outstanding issues remaining relate to the payment of 15% on-costs for officers, the details of the responsibilities of each officer role, national insurance contributions and the inclusion of administrative and apprenticeship roles. These matters remain outstanding despite some two years of the Council requesting these matters.	On 8 August 2023, the Applicant met with Thurrock Council and provided its assessment of the resource burden impact, requesting clarification by the Council of responsibilities relating to the administrative and apprenticeship role. On 9 August 2023, the Applicant made an appropriate financial offer based on its assessment of the resource burden and requested clarification from Thurrock Council of its assessment of the total burden in order to facilitate further discussion. The Applicant has not received Thurrock Council's assessment of the total resource burden or clarity on the responsibilities for the administrative or apprenticeship roles.
	Pedestrian Crossing Improvements: Severance (Brennan Road, Tilbury) – at a further meeting with the applicant on 28 September 2023, the Council set out a description of its largely completed cycleway/pedestrian scheme on Brennan	The Applicant presented Thurrock Council with its rationale and proposal for pedestrian crossing improvements on Brennan Road on 8 August 2023 and requested the Council's comments on the proposal.

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	Road. As a result, it was clear that the applicant will need to amend their proposed offer on this issue. The Council set out its requirements to the applicant in an email dated 28 September 2023 and awaits the applicant's response.	The Applicant received a response on the proposals on 28 September 2023 which includes a change in the location of the Applicant's proposed improvements. The Applicant agrees with Thurrock Council's proposal and has made an appropriate offer for a financial contribution.
	Traffic Impacts at Orsett Village and Horndon – at a further meeting with the applicant on 28 September 2023, this issue was discussed further, and the applicant confirmed it would no longer be offering any mitigation or funding towards impacts of construction or operational traffic 'rat-running' through these villages. This is completely unacceptable to the Council, and it will provide further evidence of the need for such mitigation/funding within its D6 submission.	The Applicant is confident that the outline Traffic Management Plan for Construction (oTMPfC) [**REP5-056**] provides adequate measures to manage traffic impacts on Orsett village. At Thurrock Council's request, the Applicant has waited over 12 months for a Council report clarifying their views on the potential traffic control/ calming with a view to making an appropriate offer for financial contribution which would mitigate the Applicant's construction impacts. The Council confirmed that the said report will not be ready by the end of the Examination. The Applicant has therefore reverted to the oTMPfC as a means to manage impacts during the construction phase in these locations.
2.5.6	Summary: notwithstanding the above, the process to achieve no agreement on the S106 has taken almost two years, despite five meetings and much evidence produced by the Council to the applicant. The applicant has sought to disguise its lack of progress in a recent submission by only providing a high level update. There are several significant areas of concern to the Council that remain outstanding and await positive responses from the applicant, as set out above. However, the applicant's proposed programme for achieving an acceptable draft S106 Agreement has now been largely agreed with the Council, following Council representations on deadlines.	The Applicant has already responded to all matters raised by Thurrock Council above, and refers to SoCG items 2.1.176, 2.1.177 and 2.1.181 for the status of these matters. The Applicant does not agree that there has been a lack of progress based on the following: • All heads of terms are scoped, well defined and financial contribution offers have been made where appropriate; • The timing for the finalisation of the s106 agreements is targeted towards the end of the Examination to ensure that all residual impacts have been mitigated; • A s106 legal draft document has been issued to Council and a legal representatives meeting has been scheduled for 27 October 2023.

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Section 3 - Localised Traffic Modelling – Key Issues		
3.1 Orsett Cock Roundabout: Council Introduction, Context and Programme		
3.1.4	It is accepted by the applicant that the VISSIM model provides the ability to gain a much better understanding of traffic behaviour through a local area in comparison to LTAM, thus addressing a limitation of the strategic model; and has accepted that it is modelling practice to use microsimulation modelling to validate and iterate the LTAM model. However, it is important that similar judgements on impacts can be made on both types of models, which is currently not possible. LTAM has been used to determine journey time benefits and disbenefits across the local highway network in Thurrock. If LTAM is underestimating impacts at critical junctions (as reported by VISSIM) then it will overestimate benefits and underestimate disbenefits. This is why model iteration is required between VISSIM and LTAM, so that the models and therefore judgements on impacts, are reasonably well aligned.	By 'iterate' the Applicant is referring to the modelling practice to take the traffic flows from the LTAM into VISSIM, and then if the design of the junction is changed, to reflect these design changes back into the LTAM. This approach was undertaken during the development of the Project. If by 'iterate' the Council means utilising VISSIM traffic outputs into a SATURN model directly, the Applicant has explained in detail why this is not standard modelling practice (and the Council has tellingly failed to identify a single SRN DCO project which does this, and refers to unusual examples (e.g. an invitation to tender from Leicestershire City Council) which do not, in any event, detract from the Applicant's position for the reasons explained in Annex A.3 of Post-event submissions, including written submission of oral comments, for ISH4 [**REP4-180**]. The Applicant notes that Transport for London has confirmed the Applicant's approach is broadly consistent with its guidance in Comments on Applicant's submissions at Deadline 4 [**REP5-114**]. The Applicant does not agree that if the LTAM underestimates impacts at critical junctions that it would overestimate benefits and underestimate disbenefits. There are junctions where traffic levels would reduce as a result of the Project and it is just as possible that the scale of the relief provided at these junctions differs between models built using different modelling methodologies, as would be the case with the scale of disbenefits at junctions where there would be an increase in traffic.
3.1.7	In response to Council concerns about the performance of Orsett Cock, the applicant decided it was necessary to build a new VISSIM model. The fact that this was considered necessary demonstrates the inadequacy of previous	The Applicant considers that this seriously misrepresents the situation. As part of the Applicant's extensive pre-application dialogue, the Applicant agreed to develop a new VISSIM model based on observed count data (as opposed to outputs from the

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	microsimulation modelling. Despite having significant opportunity to do so prior to submission, the applicant chose not to expedite the VISSIM model development for Orsett Cock, nor to use the Orsett Cock VISSIM model to address known issues of model divergence with LTAM.	LTAM) and that would be built collaboratively with Thurrock Council. The Local Model Validation Report (LMVR) and forecasting report of the previous microsimulation to which the Council refers was submitted to the Examination as Localised Traffic Modelling Appendix G - Traffic Operational Appraisal - VISSIM Local Model Validation Report [**REP1-193**] and Localised Traffic Modelling Appendix H - Traffic Operational Appraisal - VISSIM Forecasting Report [**REP1-194**], and the Applicant does not consider that this is inadequate.
3.1.8	Put simply, the VISSIM model shows that the current Orsett Cock junction configuration, including its recently constructed signal controls and additional lanes, does not work; whereas the analysis of the LTAM modelling is used by the applicant to claim that the junction does work. The LTAM model uses an old version of the junction, which has fewer lanes and does not have signal controls, this should mean that there is reduced ability for LTAM to cope with forecast traffic; whereas counter-intuitively the applicant claims that the old version of the Orsett Cock junction works within LTAM. This discrepancy between the models is of serious concern and cannot be left unresolved. This is a matter that specialist consultants representing the LHA, Essex County Council and the two National Ports (Port of Tilbury and DP World London Gateway) are all in broad agreement.	It is not the case that the LTAM has fewer lanes and does not have signal control. The Council has had a cordon model (which includes the Orsett Cock junction) for many years, and so is able to examine the coding at this and other locations on the network.
3.1.11	The Council's specific concerns regarding traffic congestion have now been the topic of discussions with the applicant for over two years and the issues are well known to the applicant. The applicant has had ample opportunity to advance the microsimulation modelling and design to resolve these known traffic issues but has chosen not to. In deciding not to engage effectively and appropriately with the LHA, it has knowingly put its application at risk.	This is not the Applicant's understanding of the situation. The Applicant has met frequently with the Council, and has sought to work constructively with them. The Applicant's progress in resolving issues has been complicated by delays in receiving responses from the Council. For example, the Applicant provided the Orsett Cock forecast model to the Council in September 2022 but did not receive comments until August 2023. In relation to the Manorway junction forecast model this

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		was issued to Thurrock in October 2022, but comments were not received until August 2023.
3.1.12	The design configuration for the interchange of A13/A1089/LTC was established prior to its LTC Statutory Consultation in late-2018. The applicant clearly states in Table 3.1 in Appendix H of the Localised Traffic Modelling Appraisal reports (National Highways, Lower Thames Thurrock Council's Comments on Selected Applicant's Submissions at Deadline 4 (D4) and Localised Traffic Modelling Key Issues Lower Thames Crossing 16 Crossing – 9.15 Localised Traffic Modelling Appendix H - Traffic Operational Appraisal - VISSIM Forecasting report, Table 3.1) [**REP1-194**] that the Orsett Cock junction was only assessed using a combination of basic Arcady and Excel spreadsheet assessment and through the use of Saturn. The primary modelling on Orsett Cock that informed the scheme design was undertaken sometime in the period 2017-2018. This was a long time, some three to four years, before the applicant had started its essential VISSIM modelling to examine the operation of the Orsett Cock junction and the connection of LTC to the circulation at Orsett Cock	This is inaccurate. Table 3.1 of Localised Traffic Modelling Appendix H - Traffic Operational Appraisal - VISSIM Forecasting report [**REP1-194**] does not state that only ARCADY and spreadsheet assessments, in addition to the LTAM were undertaken for the Orsett Cock junction. Table 3.1 clearly sets out that VISSIM modelling was also used.
3.1.13	This means that before commencing with the as yet incomplete Orsett Cock VISSM modelling (i.e. since the applicant's Statutory Consultation in late-2018), the applicant had already invested considerable sums to undertake the work required for its application based on this previously prepared configuration, which showed no designed interface to the Orsett Cock junction, merely an assumption that the scheme would abut the local road network at this locale. Put simply, before the late-2018 Statutory Consultation the applicant undertook some rudimentary junction assessment of Orsett Cock junction,	The Orsett Cock junction design was not 'locked in' as suggested. The Applicant's design has been developed since the Preferred Route Announcement, informed by the traffic modelling, to tie into the preliminary Thurrock Council design for the Orsett Cock junction. To date the Applicant has not received an 'As Built' version of the roundabout design to be able to confirm the link approach tie-ins.

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	as set out above. This assessment informed the design of the A13/A1089/LTC configuration and link to Orsett Cock. At this stage the design was locked in and the LTC design work progressed at pace. This early lock in on design has severely limited the ability of any subsequent more detailed modelling analysis to influence design beyond relatively minor modifications. The initial scheme configuration was based on inadequate assessment and this effectively locked-in design flaws in the initial scheme configurations which now appear impossible to remedy without considerable reworking of the scheme design.	
3.1.17	If the applicant does address the identified model divergence at the Orsett Cock junction (and potentially other junctions being assessed with VISSIM) by accurately replicating queuing and delays, then the LTAM modelling will change across the network. The applicant will be keen to avoid this because of the knock-on effects of updating LTAM. The overall scheme (dis)benefits and the economic appraisal will change and there will be a need to introduce design changes at the Orsett Cock junction at a late stage of the Examination.	As stated in Table 4 of Joint Position Statement: Orsett Cock junction [**REP5-084**], the Applicant maintains that the LTAM run used to inform the application and set out in the Combined Modelling and Appraisal Report [**APP-518**] is an appropriate model to determine the impacts of the Project and to inform the planning decision. The Applicant does not consider there to be a need to "*reconcile identified differences between the LTAM and VISSIM modelling*". As the Applicant has set out in Annex A.5 of the Post-event submission for ISH4 [**REP4-180**], the two different models are developed for different purposes, and the degree of alignment between the models is normal.
3.1.23	The Council requires that the applicant should accept the VISSIM modelling has identified issues that must be addressed. Until the modelling issues are resolved it remains impossible to determine what mitigation might be appropriate at Orsett Cock. Furthermore, the applicant should formally recognise the traffic impacts that it would create at Orsett Cock junction as a result of the LTC and must accept that it is required to address these known impacts through mitigation designed and agreed and as part of the Examination and secured through the DCO,	The Applicant considers that the VISSIM modelling demonstrates that the Orsett Cock junction performs acceptably in 2030 and acceptably, albeit with longer queue in 2045. While the Applicant acknowledges changes to the VISSIM model can be made as set out in Joint Position Statement: Orsett Cock junction [**REP5-084**] the modelling as presented to the Examination provides a reasonable representation of the forecast performance of the junction. In recognition that additional modifications may be identified during the detailed design stage to improve the performance of the junction, the Applicant proposed a new requirement relating to the operation

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	before its scheme can be considered acceptable in terms of traffic impact.	of the Orsett Cock junction at Deadline 5, and this has been included in the draft Development Consent Order [**REP5-024**] submitted at Deadline 6.
3.1.27	Crucially, reallocating traffic flows away from Orsett Cock would put additional pressure on many other critical junctions on both the Strategic and Local Road Networks, which LTAM has already predicted to be at or very close to capacity in a number of locations. Consequently, other junctions would fail to operate to an acceptable level. Additional VISSIM modelling would then be crucial to appropriately understand mitigation necessary and achievable at these other junctions. LHAs have been restricted to LTAM cordon models for their respective administrative boundaries (or only four districts in the case of Essex CC) and would not be able to appropriately understand the impacts of traffic reassignment from the LTAM VDM, without being given access to the full LTAM model. This transparency is crucial, however, to date the applicant has resolutely refused to allow any party access to its full LTAM model.	It is National Highways policy to not release a full model developed to support an individual scheme while the scheme is in development. As noted by Thurrock, the Applicant has provided a cordon model of the Thurrock local authority area to the Council. The Applicant has also undertaken many model runs for the Council, for development of their emergent local plan and to test alternative scheme designs suggested by the Council. The Applicant notes that the regional transport model, from which the LTAM was developed, is available to any local authority. The Council requested and received a copy of the full South East England Regional Transport Model – which is a variable demand SATURN model.
3.1.28	The Council is concerned that this reallocation of traffic within LTAM would have serious ramifications for the LTC Outline Business Case (OBC), which would need to be revised. Given the already fragile position of the value for money assessment, which shows a low BCR for the scheme, the applicant Is likely to continue to remain highly resistant to agree any amendment to its ComMA report [**APP-518**] and Appendices thereof.	The Applicant considers that the change in journey times with and without the Project at the Orsett Cock junction, from using journey times through the junction from the VISSIM model rather than the LTAM are so infinitesimally small in comparison to the total journey time savings in the region as a result of the Project that it would make no material difference to the benefit cost ratio of the Project.
3.1.29	Given the time constraints to undertaking all of the above process, an alternative approach would be for VISSIM to be updated to align with the level of capacity shown in LTAM. This would still require a significant programme of work to	Within Joint Position Statement: Orsett Cock junction [**REP5-084**], the Applicant has set out its proposed course of action for the Orsett Cock junction. The Applicant does not propose to update the VISSIM model to "*align with the level of*

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	be completed by the applicant in agreement with the LHA, the two National Ports and other stakeholders, within a very challenging time constraint, if it to be completed before the end of the Examination. In the Council's view, it is highly unlikely that the necessary design modifications to the Orsett Cock junction could be achievable within the Rochdale envelope. In 2021-2022, the applicant undertook some modelled theoretical modification testing within the Order Limits, seeking to address the delays and problems within the wider interchange and found this to be insufficient.	*capacity shown in LTAM"*, although the Applicant is unclear what the Council is seeking in practice, as capacity is not an input into VISSIM.
3.1.30	In conclusion, the modelling has demonstrated that mitigation is required at Orsett Cock. However, the applicant has not put forward any design options to mitigate the known impacts at this critical junction. Indeed, within the Joint Paper on Orsett Cock, the applicant has stated that there is no need for any further work beyond the modelling steps agreed within the Joint Paper. The modelling is not an end in itself and is required to be used to understand impacts and design mitigation. The Council contend that the Examination will be defective, and open to legal challenge, if the applicant fails to undertake the agreed modelling steps within a reasonable timeframe, or does so in a way which gives rise to procedural prejudice to the Council and other stakeholders, or if the modelling is not used to inform the design and provision of mitigation measures, which can be shown to address the modelled deficiencies.	The Applicant does not agree that the modelling has "*demonstrated that mitigation is required at Orsett Cock*". As set out in response to paragraph 3.1.23 of Thurrock Council's D5 submission, the Applicant considers that the modelling demonstrates that the Orsett Cock junction operates acceptably in both 2030 and 2045, albeit with longer queues in the latter year. Equally the Applicant does not concur with the Council's assertions in relation to the effectiveness of the Examination itself. The Applicant has proposed a new requirement relating to the operation of the Orsett Cock junction at Deadline 5, and this has been included in the draft Development Consent Order [**REP5-024**] submitted at Deadline 6.
3.2 Asda Roundabout: Council Introduction and Context		
3.2.2	The LHA and the Port of Tilbury London Limited (PoTLL) have repeatedly expressed serious concerns about the inadequacy of analysis by the applicant to assess the impact of construction traffic on the Asda Roundabout.	The Applicant has considered the detailed comments made by Thurrock Council on the Asda roundabout base VISSIM model, as set out in Appendix A of Thurrock Council Comments on Applicant's Submissions at Deadline 3 (D3) [**REP4-354**]. A

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	Initial modelling was provided during the Examination at Deadline 3 and the Council has provided its response on the inadequacies of that modelling at it Deadline 4 Response Appendix A [**REP4-354**], which concluded that the base micro-simulation modelling was not approved and as such the construction forecast modelling was not accurate for review.	response log has been created which sets out that many of the comments made by the Council relate to differences in coding styles and would have no material impact on the model results (and as such the Applicant will not incorporate). However, the Applicant has identified that there are a small number of comments which the Council have made, which the Applicant agrees with and considers that they would affect the model results. The Applicant's proposed way forward in relation to the Asda roundabout is set out in 9.158 Applicant's submissions on construction impacts and management at Asda roundabout, submitted at this deadline (Deadline 6).
3.2.4	The applicant had asserted that its workers would be required to adhere to agreed routes so as to minimise the impacts on the Local Road Network and local communities. For access to the North Tunnel Portal compound and the Station Road compound that access route was focused on A1089 and St Andrews Road. Inspection of the assignment within LTAM during the construction phase scenarios has shown that that worker traffic has assigned itself to the LRN through communities to the east of A1089, including Chadwell St Mary, East and West Tilbury. This is contrary to the commitment made by the applicant, generates harm to the local communities and under-estimates the impacts on Asda Roundabout during construction.	The Applicant has not asserted that the construction workforce for the Project would be required to adhere to agreed routes, and this does not feature within either the Framework Construction Travel Plan [**REP5-054**], outline Traffic Management Plan for Construction [**REP5-056**] or the Transport Assessment [**REP4-148**, **REP4-150**, **REP4-152**]. The Applicant considers that it would not be reasonable, proportionate or practicable to restrict the routes that the workforce would be able to use to travel to work. This approach is reflected in the LTAM, as noted by the Council in relation to the workforce traffic heading to/from the northern tunnel entrance compound.
3.3 Manorway Roundabout Model		
3.3.2	The Council has prepared a base year model using observed traffic flows from 2022 to allow an updated forecast model to be developed by the applicant and agreed by the Council. The AM peak base model has been shared with the applicant just prior to the D5 submission. The PM peak base model and the Local Model Validation Report	The Applicant confirms that it has received a base model for the AM and PM peaks and a LMVR from Thurrock Council, the final parts of which were received on 12 October 2023. The Applicant has reviewed these considers that the base model has poor journey time validation when using the criteria set out by DfT in TAG and as such is not currently suitable for use in

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	(LMVR) will be shared with the applicant ahead of D6 for them to review and adopt the base year models in forecasting prior to D6 submission.	forecasting. The Applicant has prepared a comments log that has been shared with Thurrock Council, setting out detailed comments related to, among other things, base model coding parameters, the model calibration and model validation results, and conclusions in conjunction with details in the LMVR. The Applicant would again note that the VISSIM model it has developed for the Manorway junction was undertaken through a collaborative process with the Council. As part of this, it was agreed, that as observed count data was not available that only a forecast year model would be developed. Given that the Applicant's VISSIM model does not forecast any issues beyond those already identified by the LTAM (the Project's strategic transport model) at the junction the Applicant does not consider that there is merit in further development of the Manorway VISSIM model.
Section 4 – Dartford Crossing		
4.1.2	However, the Council considers that the response to ExQ(1) Q4.1.1 'Modelled Effects: Dartford Crossing' raises such fundamental issues concerning the need and rationale for LTC that a response is provided below.	The Applicant notes the response from the Council to the Applicant's response to ExQ1 Q4.1.1 which largely repeats or reiterates its previous submissions. The Applicant considers that it has already provided written submissions on many of the areas raised by the Council and has signposted these where appropriate. The Applicant has provided further commentary where it considers it appropriate to do so.
4.3.7	The applicant could argue that Thurrock residents could use the LTC to cross the River Thames. However, for most residents the Dartford Crossing will continue to be the most accessible cross-river connection because there is only a single access to the LTC in Thurrock at the A13/A1089/Orsett Cock junction. This poor connectivity to LTC by Thurrock residents is compounded by the forecast congestion at A13/A1089/Orsett Cock and the removal of Tilbury Link Road from the scheme.	The Applicant does not agree with the Council's assertion that there is only a single access to the Project from within Thurrock. As well as access from the A13 westbound carriageway, access to the northbound Project road would also be possible from the A1089. Access from the Project to destinations in Thurrock would be possible from the A13, the Orsett Cock junction and the A1089.

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		The Applicant set out its consideration of a Tilbury Link Road in Annex E.6 of Post-event submissions, including written submission of oral comments, for ISH1 [**REP1-183**].
4.4.2	This means that the scheme objective as previously stated - 'to relieve the congested Dartford Crossing and approach roads and improve their performance by providing free-flowing north south capacity' has now been restated as 'maintaining high levels of congestion on the Dartford Crossing and its approach roads, while providing free-flowing north-south capacity only on the A122'.	The Applicant would like to note that it has not restated this Scheme Objective, it has simply provided additional context and framing to help explain to Interested Parties and the ExA as to how the Applicant considers that the Project meets this Scheme Objective.
4.5.4	For LTC, the applicant is already stating now, at the application stage, that at the Dartford Crossing the congestion relief associated with LTC will have disappeared within only seven years of opening. If this very limited period of impact is already acknowledged, it might be assumed that the actual period of relief may be significantly less than seven years from opening.	This is not the case. While the Applicant has been clear that traffic flows at the Dartford Crossing are forecast to increase, it has also set out that forecast journey time improvements remain in 2045. This was set out by the Applicant in Annex A.2 of Post-event submissions, including written submission of oral comments, for ISH1 [**REP1-183**].
4.6.2	Local residents are likely to consider the following: • Traffic flows do not reduce: analysis provided by the Council at D4 (Table 2.1 and Table 2.2 of [**REP3-211**] shows that traffic flows do not reduce at Dartford Crossing in many time periods and in fact they increase. • Journey times do not improve: analysis provided by the Council at D4 [**REP3-208**] has shown that journey times across Dartford Crossing are forecast to improve by a maximum of one minute in each direction compared to the base year and this is a very small change.	The Applicant responds to these points as follows: • The Council has compared flows for 2030 and 2045 against those from 2016, which the Applicant considers is not a reasonable comparison as it takes no account of background traffic growth. The Applicant has presented the forecast change in traffic flows as a result of the Project in Table 5.1 of Traffic Forecasts Non-Technical Summary [**APP-528**]. As shown by Plates 5.1-5.6 of the same document, many roads in Thurrock are forecast to see a reduction in flow as a result of the Project.

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	• Crossings serve different travel markets: the journey patterns of local, regional and national users of the Dartford Crossing and LTC show that the two crossings would service very different travel markets, i.e. LTC is not a direct alternative route for current Thurrock-based users of the Dartford Crossing. This was shown in Figure 7.4 of Thurrock's LIR [REP1-281] which is repeated below for convenience.	• Again the Council has compared the base year to those in 2030 and 2045. The Applicant again does not consider that this is a reasonable comparison, and has set further consideration of journey times in Annex A.2 of Post-event submissions, including written submission of oral comments, for ISH1 [REP1-183]. • The Applicant has never claimed that the Project and the Dartford Crossing would serve the same travel markets. Thurrock residents would have the choice of either crossing, and would use the one that offered the shortest journey time for the journey they were intending to make.
4.7.1 – 4.7.4	4.7.1 The history of Dartford Crossing shows that all previous increases in traffic capacity have led to associated increases in traffic demand. The applicant's response to ExQ(1) Q4.1.1 shows that the applicant now expects exactly the same thing to happen following the construction of LTC and that Dartford Crossing will still be congested by 2037 (and possibly earlier). 4.7.2 There is a need to improve cross-river connections to support economic growth as highlighted by the applicant in the 'Need for the Project' [APP-494]. The Council agrees with this analysis. There are different ways to provide a significant proportion of this improved connectivity at a significantly reduced cost and with significantly reduced negative impacts. These have been described in previous submissions (e.g. Local Impact Report Appendix B Transport Alternatives [REP1-283] and are summarised below: • Improve public transport connections across the River Thames by providing improved bus priority measures and levels of bus service provision;	The Applicant has covered alternatives in a number of places within the Application and submissions made during Examination and does not intend to repeat these here, but these can be found at the following locations: • Chapter 5 of the Planning Statement [APP-495] • Paragraph 4.2.3 and Annexes B.2 and B.4 of Post-event submissions, including written submission of oral comments, for ISH1 [REP1-183] In relation to the Council's assertion that the Applicant has not considered a potential future reduction in this vehicle type at the Dartford Crossing, the Applicant considers that if this was to occur, it would improve the operation of the Dartford Crossing and extend the benefits that the Project would bring to its operation.

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	• Implement new cross-river high-quality public transport service in the form or a tram or bus rapid transit service; • Review and update arrangements for northbound Dangerous Goods Vehicles which currently reduce capacity by 8-12% (paragraph 4.2.14 Need for the Project [**APP-494**]) and which have, however, not taken any account of the substantial reduction in the need for petrol-carrying lorries (a main class of dangerous goods vehicles) as the proportion of electric vehicles increases over the appraisal period; and, • Use tolls to manage demand. 4.7.3 In considering these alternative options, the scale and cost of LTC needs to be considered. LTC's cost of £8-£9bn means that even 10% of this (£800-900m) would be a nationally significant investment in public transport. In practice, schemes cost much less and Fastrack, which operates in North Kent has been delivered for 1-1.5% of the current LTC cost. 4.7.4 The applicant consistently argues that no other alternative scheme could provide the level of relief which LTC delivers at Dartford Crossing (see our comments on this in paragraph 8.6.11 of Thurrock's Local Impact Report [**REP1-281**]). This argument depends on accepting traffic forecasts which are themselves predicated on the absence of such alternatives.	
Appendices		
Appendix B - Joint Position Statement – Asda Roundabout (Thurrock Council and PoTLL)		
B.2.2	The Council has undertaken a review of the base model, which was presented at Deadline 4 in Appendix A, Annex 2 of Thurrock Council Comments on Applicant's submissions at Deadline 3 [**REP4-354**]. The review of the base VISSIM	The Applicant has provided a response to this matter above in response to paragraph 3.2.2 of Thurrock Council's Deadline 5 submission.

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	model has identified critical issues, which need to be addressed before comments can be provided on the forecast models and the results. The findings of Thurrock Council's Asda roundabout base VISSIM model review are supported by PoTLL. It is estimated that it would take the applicant no longer than 1-2 days to address all of the issues identified within the model review.	
B.2.4	Since the D4 submission, PoTLL has undertaken a review of the wealth of traffic data collected by PoTLL during 2017 and 2018 (rather than the single day comparison presented at D4) and compared it against the traffic data collected on 17 May 2018 and used by the applicant for the development of the base VISSIM model. This comprehensive analysis is included as Appendix A and its Annex A of this Joint Paper and shows that: • 17 May 2018 traffic count data used by the applicant does not represent a 'typical day' for traffic flow movements through the ASDA roundabout; • The survey data collected by the applicant on the 17 May 2018 is shown to be the lowest total count data of all survey data collected by PoTLL during 2017 and 2018, during all three peak hours reviewed. • Further it is understood that the ASDA roundabout base VISSIM model has used Automatic Number Plate Recognition (ANPR) traffic data collected in May 2018 as opposed to 17 May 2018 MCC traffic data. The ANPR traffic data being a further 10% lower than the 17 May 2018 data. • For Tilbury2 DCO, National Highways required PoTLL to use the average of October 2017, November 2017 and March 2018 survey data, which is considerably higher	The Applicant has reviewed the information submitted by PoTLL. The Applicant does not agree that the observed traffic count data that it has collected is unrepresentative of a "typical day" at the Asda roundabout. Analysis of TRIS data has shown that there is, as would be expected, some daily variation in traffic flow movements and that consideration of traffic flows over working days in 2017 and 2018 shows that the flows recorded by the Applicant represent between 97% and 107% of the average depending on count location and time period. However, the Applicant agrees the base year count data used by the Applicant in the Asda VISSIM model was from ANPR data as opposed to MCC data and that this therefore represents a lower set of flows, on average by 6%. The Applicant has set the proposed way forward in relation to the Asda roundabout in 9.158 Applicant's submissions on construction impacts and management at Asda roundabout, submitted at this deadline (Deadline 6).

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	than the flows used by National Highways for the Lower Thames Crossing assessment. • The ASDA roundabout base VISSIM needs to be revalidated using more representative base year traffic data.	
B.3.1	Based on the review of the modelling provided to date, Thurrock Council and PoTLL have set out the following steps that are required to agree the modelling to enable impacts and need for mitigation to be determined and to then advance the concepts for the required mitigation prior to the close of the Examination.	The Applicant does not agree that the proposed approach as set out by Thurrock Council and PoTLL is reasonable or proportionate. The Applicant has set the proposed way forward in relation to the Asda roundabout in 9.158 Applicant's submissions on construction impacts and management at Asda roundabout, submitted at this deadline (Deadline 6).
Appendix C - Transcript of Workshop between Applicant, Thurrock Council, Essex County Council, Port of Tilbury London Limited and DP World London Gateway		
3:00.56		The Applicant notes that the transcript ends at 3 hours and 56 seconds after a question was posed by the Applicant. The Applicant was offering, for a second time, an opportunity to discuss monitoring and mitigation. This offer was again declined by Thurrock Council but that response has been omitted from the transcript. The Applicant wishes to highlight for the ExA and the Secretary of State the importance of its repeated offers, as well as this exclusion from the transcript.

3 Applicant's additional Comments on IP Responses to ExQ1 at Deadline 4

Table 3.1 Applicant's additional Comments to Thurrock Council's Responses to ExQ1 at Deadline 4

ExQ1 2.2.1		
Localised Climate and Carbon Assessments ExQ1 Question to Thurrock Council: In its Deadline 1 submission at Appendix K [**REP1-292**], Thurrock Council appears to be calling for a localised assessment of climate and carbon. 1. Can the Council explain the national policy and scientific basis for such an assessment? 2. Please refer to any other made DCO's where such an approach has been taken		
Page no.	**Thurrock Council's Response**	**Applicant's response**
Page 7	Full and transparent access to the Applicant's carbon quantification model is required to ensure that the Applicant has put forward a reasonable assessment of carbon. To date the Applicant has refused to provide this data to enable full scrutiny and has instead provided output tables in a pdf format. Thurrock Council is unable to apply adequate scrutiny to this. This has prevented local authorities and other interested parties from its ability to interrogate the carbon modelling as to do so would require the development of a duplicate model at substantial cost.	A further discussion on this matter was held on 26 September 2023 and the Applicant has agreed to send a copy of the independent UKCRIC review of the carbon model, under separate cover. The carbon quantification model was reviewed by an independent expert, UKCRIC Limited, a network of leading UK universities. The report confirmed that the approach to calculating carbon represents good practice and that the construction phase emissions level (1.76 MtCO2e) is in line with industry best practice. The findings of the UKCRIC report have been adopted where they are relevant to this phase of the Project, or alternatively will be the responsibility of the Contractors, who are incentivised to adopt them during detailed design and the creation of the second iteration of the Carbon & Energy Management Plan. The required PAS2080 certification of the Project, including annual reporting by the Applicant and auditing by an independent body, will further ensure transparency of the carbon quantification and actual emissions during the construction phase.

Page 10 and 11	The Net Zero Strategy (page 261) states: *'1. Devolved and local government play an essential role in meeting national net zero ambitions. Across the UK many places have already made great strides towards our net zero future, having set their own targets and strategies for meeting local net zero goals. Taking a place-based approach to net zero is also vital to ensuring that the opportunities from the transition support the government's levelling up agenda.'* The national policy is clear that a **place-based approach** is vital. This sets the national policy requirement for the need for localised assessment of climate change and carbon. Without detailed assessment of local impacts, local authorities are unable to plan effectively to fulfil their obligations.	The Applicant disagrees with Thurrock Council that from the concept of a place-based approach follows a requirement for localised assessment in Environmental Statements of NSIPs. For further context on the role of local authorities, please refer to the responses below.
Page 11	The Net Zero Strategy also states: *'2. The combination of devolved, local, and regional authorities' legal powers, assets, access to targeted funding, local knowledge, and relationships with stakeholders enables them to drive local progress towards net zero. Not only does local government drive action directly, but it also plays a key role in communicating with, and inspiring action by, local businesses, communities, and civil society. Of all UK emissions, 82% are within the scope of influence of local authorities.'* The national policy is clear that local authorities are vital in delivering the national net zero goals, through their legal powers, assets, access to targeted funding, local knowledge and relationship with stakeholders. This sets the national policy requirement for meaningful engagement and response to local needs. Under national policy it is the local authority who is responsible for the carbon emissions within its geographic boundaries, and not the applicant as operator of the SRN.	The Applicant disagrees with Thurrock Council's conclusion that from this Net Zero Strategy (NZS) statement follows that *'Under national policy it is the local authority who is responsible for the carbon emissions within its geographic boundaries'*. According to the Climate Change Act, it is the duty of the Secretary of State *'to ensure that the net UK carbon account for the year 2050 is at least 100% lower than the 1990 baseline' (s.1(1)) and 'to ensure that the net UK carbon account for a budgetary period does not exceed the carbon budget'* ((s.4(1)(b)). The revised National Planning Policy Framework (NPPF) (Department for Levelling Up, Housing & Communities, 2023) sets out the role of local planning authorities and local plans in climate change in Section 14 (Meeting the challenge of climate change, flooding and coastal change). Paragraph 152 states: *'The planning system should support the transition to a low carbon future in a changing climate, taking full account of flood risk and coastal change. It should help to: shape places in ways that contribute to radical reductions in greenhouse gas*

		emissions, minimise vulnerability and improve resilience; encourage the reuse of existing resources, including the conversion of existing buildings; and support renewable and low carbon energy and associated infrastructure'. This paragraph clarifies the role of the local planning system in terms of 'support' and 'help to'. The revised NPPF does not make local authorities responsible for the carbon emissions within their geographical boundaries. Reference is also made to the Carbon Budget Delivery Plan (CBDP), which states on page 162 the following on the matter: *'Local authorities play an essential role in driving and accelerating action to tackle climate change with significant influence in energy, housing, and transport. Local authorities are directly responsible for only 2-5% of local emissions through their own estates and operations, but they have potential to influence up to around 80% of all UK emissions.'* This statement also distinguishes clearly 'responsibility' and 'play an essential role'. Paragraph 15.5.5 of ES Chapter 15 confirms that the Applicant can influence but not control the emissions from user carbon (i.e., user traffic). These emissions are covered by central Government policy, principally the Department for Transport.
Page 11	A policy commitment made within UK Net Zero Strategy Chapter 4 is for Government to: *Set clearer expectations on how central and local government interact in the delivery of net zero.* This sets the policy requirement for Government investments to ensure there is localised assessment and interaction between projects and local authorities.	The Applicant does not agree that this sets a policy requirement for Government investments to ensure there is a localised assessment in the Environmental Statement. The policy commitment concerns clarifying the mode of interaction between central and local government only. The Applicant further notes that ample interaction between the Applicant and local authorities has taken place, as described in the Consultation Reports [**APP-064** to **APP-090**]. Specifically for Thurrock, refer to the Statement of Common Ground between National Highways and Thurrock Council [**APP-130**].
Page 11 and 12	The Government's Carbon Budget Delivery Plan, March 2023, sets out a broad range of priorities for local	The Applicant does recognise that the Lower Thames Crossing would lead to changes in traffic flows at several locations and

	authorities to deliver the decarbonisation pathways set by the Carbon Budget Orders. This sets the specific Local Authority activities in national policy to deliver net zero pathways. Any secondary impact on these national policy pathways from NISPs would present a significant barrier to national Government meeting its net zero pathways. Local transport plans (LTPs), set by the Transport Act 2000, are an existing statutory planning document that local transport authorities are required to produce which set out strategies for improving transport networks, propose projects for investment and plan how key objectives will be achieved. In the future, LTPs will need to set out how local areas will deliver quantifiable carbon reductions in transport, considering the different requirements of different areas. This was a commitment in the Transport Decarbonisation Plan, 2021 and re-stated in the 2023 Carbon Budget Delivery Plan. The department is updating its LTP guidance. Following a public consultation in 2023, this will be published along with additional standalone quantifiable carbon reductions (QCR) guidance. When used as a part of the LTP development process, the QCR guidance will help local authorities make long term, evidence-based plans for local transport by considering the carbon impacts at a strategic planning stage.	acknowledges the National Highways licence obligations under paragraph 5.19 of the Highways England: Licence (Department for Transport, 2015) to work with local highway authorities and others to align national and local plans and investments, balance national and local needs and support better end to end journeys for road users. The Applicant's transport model, developed in line with the Transport Analysis Guidance, includes traffic growth in line with NTEM 7.2. This growth has been spatially adjusted within Thurrock to account for developments that are under construction or have a planning application or planning permission within the period 2016 until 20 September 2021. The Do-Minimum scenario for each forecast year presents traffic conditions without the Project. The Do-Something scenario presents the change as a result of the Project, and the Environmental Statement [**APP-153**] presents the assessment accordingly on a topic-by-topic basis. The Applicant has provided the Council with significant outputs from the Project's transport model, including a cordon model for the Thurrock area. The Applicant has also undertaken extensive testing for the Council as set out in Appendix A of Localised Traffic Modelling v2.0 [**APP-126**], which included assessing the impact of the Council's emergent local plan. The Applicant will continue to work with local authorities in their delivery of local plans (including the LTP, once the updated LTP and QCR guidance have been published), and support proposals that would facilitate in delivery of the Transport Decarbonisation Plan. Moreover, as local authorities work to deliver their accountability through preparation of local plans, the local authorities may wish to consider opportunities created by the A122 Lower Thames Crossing, notably including: • creation of new routes and reduction of congestion on existing routes supporting new routes, or shorter journey

		times and reliable journeys between Essex and Kent, and within the local authority areas • integration of the new and enhanced connectivity on WCH provided by the project into local active travel plans The Applicant will carry out a monitoring programme of the traffic flows after the construction of LTC (Wider Network Impacts Management and Monitoring Plan (WNIMMP) [**APP-545**], including on some local roads, but these do not necessarily match the policy monitoring requirements. The initiative for adjusting local plans, addressing challenges or opportunities, lie with the local authorities.
Page 12 and 13	The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 Schedule 4 Regulation 14(2) Information for inclusion in environmental statements paragraph 5 (page 37) states the requirements of the EIA to assess the likely significance of secondary affects: *'The description of the likely significant effects on the factors specified in regulation 5(2) should cover the direct effects and any indirect, secondary, cumulative, transboundary, short-term, medium-term and long-term, permanent and temporary, positive and negative effects of the development. This description should take into account the environmental protection objectives established at Union or Member State level which are relevant to the project, including in particular those established under Council Directive 92/43/EEC(a) and Directive 2009/147/EC(b)'*. The Applicant has submitted an EIA that does not current conform to requirements as set out in policy. No impact assessment was undertaken by National Highways on how LTC would affect the Council's ability to enact their policy responsibilities set within in the aforementioned Government's national policy regime. As an example, there has been:	As pointed out above, Thurrock Council does not have the policy responsibility for the GHG emissions within their geographical area and the national policies do not require a localised assessment. As set out above, there has been ample interaction between the Applicant and Thurrock Council and relevant generated information / data was provided when requested and feasible. The Applicant will continue to work with Thurrock Council and other local authorities in their delivery of local plans, and support proposals that would facilitate in delivery of the Transport Decarbonisation Plan.

	a. No assessment of the impact on local energy demand and supply networks arising from energy consumption during both construction and operation; *b. No assessment of the impact of the forecast increased car trips and ownership on Thurrock's ability to deliver transport decarbonisation plans; and* *c. No assessment of additional waste generation rates on waste related GHG emissions in the district.*	
Page 14	The scientific basis for localised assessment follows from the requirements set out in the Paris Agreement for greenhouse gas emission inventory development to be consistent, complete, comparable and accurate. UNFCC emissions accountability is organised on a territorial basis. These principles are further demonstrated by the UK National Atmospheric Emission Inventory (NAEI), which is the single source of emissions reporting that is used to retrospectively monitor the UK's transition against the national emission budgets. The NAEI approach applies a bottom-up methodology to establishing sectoral emissions across an extensive range of sectors: energy, business, transport, public, residential, agriculture, industrial processes; land use, land use change and forestry and waste management. However, LTC has appraised the total potential emissions from only three of the sector emission segments: construction materials and fossil fuel use in construction, road traffic and energy. The LTC approach has therefore attempted to compare emission totals arrived at through very different methods, such that the scope of emissions included in the local calculation for the scheme does not include a number of sectors that are included in the national emission budget as calculated by NAEI. The Council therefore concludes that there is a scientific basis for localised assessment, as demonstrated by the	The Paris Agreement sets out inventory requirements for the governments of the countries that have signed up to it and therefore has no direct application to 'projects'. Moreover, the NAIE approach is not exclusively a bottom-up approach and not limited to drawing upon a single source per geographical area. The Applicant notes that the Carbon and Energy Management Plan (C&EMP) [**APP-552**] presents details of the quantification of the carbon impacts carried out in line with PAS2080, which is a recognised specification. The C&EMP Appendix B of the outlines the scope of the Applicant's carbon management approach. Appendix C explains how emissions were quantified and Appendix D presents the results of that quantification. As shown in the C&EMP, the carbon quantification is comprehensive and has not disregarded any relevant sectors. Reference is made to the report by an independent expert, UKCRIC Limited provided under separate cover.

	NAEI, and that by not undertaking one the approach taken by NH is not comparable with national budgets, complete or accurate, and therefore does not meet the test of transparency set within the Paris Agreement.	
Page 11 and 12	Seven recent DCO's from 2022 onwards are considered here, noting however that this is review is indicative and not exhaustive and there are likely to additional precedents in other DCOs. The Council's review found that all of the DCOs did undertake the local assessment of carbon and climate that is missing from the Applicants submission. All of these DCOs have assessed the significance of GHG emissions in the context of sectoral and/or local emission emissions budgets. The key findings are: • All transparently show approaches to setting local and/or sectoral budgets and targets to determine significance DCO projects have been quantitatively and qualitatively appraised to determine local government ability to achieve their net zero obligations.	None of the example projects has undertaken a localised assessment in terms of (in the words of Thurrock Council in their response) *'assessed the significance of GHG emissions in the context of ……local emission budgets'* (top of page 10 and top of page 15) or *'show approaches to setting local ….. budgets and targets to determine significance'* (page 10). Refer to the responses to the DCO examples below for details on this finding. Responses to other matters raised by Thurrock, notably assessment against sectoral targets / budgets and assessment of the significance of the effects of LTC's GHG emissions, are also responded to below.
Page 11 -17	**Project 1 – Hinckley National Rail Freight Interchange** • Page 66 Paragraph 18.217: *'Unmitigated, and in comparison with **regional trends** (i.e. an average annual reduction of 0.3 ktCO2e), this net value would represent an increase that is considered a **major adverse effect** as it is locking in emissions and does not make a meaningful contribution to the region's trajectory.'* The analysis assesses total construction and operational emissions (341,000 tCO2(e) and 256,630 tCO2(e) respectively) against the relevant carbon budget and identifies, in terms of an EIA, that these are a moderate adverse effect and therefore significant impact. • Page 70 Paragraph 18.235: *'Prior to mitigation, construction and operation of HNFRI is estimated to give*	The Environmental Statement (ES) of the Hinckley National Rail Freight Interchange project does contain a comparison of the carbon emissions resulting from construction related road traffic against the regional road traffic trajectory trend (paragraph 18.217). However, comparing the magnitude of construction emissions with a regional trend is not a statutory test or contextualisation as meant by IEMA. This comparison is also not listed in the criteria in Table 18.7 (significance criteria for GHG emissions) of the Hinckley National Rail Freight Interchange ES. Furthermore, this comparison does not comply with the suggested definition of localised assessment of Thurrock Council in their response: *'assessed the significance of GHG emissions in the context of ……local emission budgets'* (top of page 10 and top of page 15) or *'show*

	rise to approximately 584.0 ktCO2e for all sectors. This figure represents 0.06% of the UK's 6th Carbon Budget, more specifically, 0.34% of the specific budget for 2036 (170,000 ktCO2e), which is considered to result in a ***permanent moderate adverse effect****. In accordance with the methodology for determining significance, this is considered to be a* ***significant impact*** *in EIA terms.'* Approach applied to LTC Following the approach taken within this assessment LTC's local, sectoral and overall emissions would be defined as a **significant impact**	*approaches to setting local…..budgets and targets to determine significance'* (page 10). Hence, the Applicant considers that this project does not qualify as an example of a localised assessment of carbon, as requested by the ExA.
Page 17	**Project 2 Great Yarmouth Third River Crossing** The methodology for assessing significance of impact of the measured carbon emissions of the road river crossing scheme included a localised assessment. • Page 729 Paragraph 13.5.17 *IEMA guidance (Ref 13.3) and professional judgement, based on knowledge of similar schemes, has been used to assess the significance of effects relating to GHG emissions. This is done by comparing estimated GHG emissions arising from the Scheme (taking into account embedded mitigation) with the respective UK Carbon Budgets (presented in Table 13.6) which have been set by the UK government covering 2018 to 2032, and total road GHG emissions from Norfolk in 2016* Approach if applied to LTC Following the approach taken within this assessment LTC's local emissions would be contextualised against the local GHG emission totals.	Paragraph 13.5.17, quoted partially by Thurrock Council in their response, ends as follows: *'It is considered that the impacts are more significant the greater the total GHG emissions and the greater the proportion they represent of the Carbon Budget*'. A comparison against the total road GHG emissions from Norfolk in 2016 is not mentioned in the Great Yarmouth Third River Crossing Environmental Statement as a criterion for the assessment of the significance in paragraph 13.5.17 and not used as such in the assessment on pages 736 – 740 (from paragraph 13.5.36 onwards). Therefore, it does not qualify as a *'localised assessment*' as defined by Thurrock Council themselves in their response. Hence, the Applicant considers that this project does not qualify as an example of a localised assessment of carbon, as requested by ExA.
Page 18	**Medworth Energy from Waste Combined Heat and Power Facility** The Environmental Statement assesses the impact of the local road vehicle increase due to the new EfW facility, and	The significance of the effects of the project's GHG emissions is described in the 'Medworth CHP Facility' Environmental Statement starting with paragraph 14.9.44 under the header 'contextualisation against relevant UK carbon budgets'. The

	balances this against a derived benefit from the decarbonisation of the waste sector (landfill avoidance) and energy sector (cleaner power). The methodology not only defines local impact in this regard but also sets the project in the context of local ability to achieve net zero, noting that Government's commitment to delivering net zero is beholden on local geographies to deliver it. Page 14 14.9.51 *'At a local level, CCC has a vision to deliver net zero emissions for Cambridgeshire by 205028 while Norfolk County Council are aiming to work towards carbon neutrality by 2030 in the wider area. The assessment above demonstrates that over these timescales the Proposed Development can have a beneficial local effect in terms of achieving these carbon reduction targets, but this will depend on whether landfill would otherwise be used for residual waste management in these regions. The GHG emissions for the 'without Proposed Development' case have been calculated assuming waste is collected and transported to available landfill sites'.* Approach if applied to LTC - The methodology presented within the Medworth report shows a qualitative approach take to determine how the DCO project impacts local ability to meet local government net zero obligations. This approach has not been considered by the LTC application.	assessment of significance is concluded in paragraph 14.9.49 without taking local policies or the local government ability to achieve their net zero obligations into account. This does not comply with the suggested definition of localised assessment of Thurrock Council in their response: *'assessed the significance of GHG emissions in the context of ……local emission budgets'* (top of page 10 and top of page 15) or *'show approaches to setting local ….. budgets and targets to determine significance'* (page 10). Moreover, paragraph 14.9.51 then goes on and provides a general statement that *'..the Proposed Development **can have** a beneficial local effect in terms of achieving these carbon reduction targets, **but this will depend** on whether landfill would otherwise be used for residual waste management in these regions'* (emphasise added). In other words, if the regions decide to focus their waste management on minimisation, reuse and recycling (which should be preferred from the waste hierarchy point of view), carbon emissions from landfills would also be reduced. In that case the Medworth CHP Facility would still be functioning (possibly with 'imported' waste) and still be emitting carbon. With this uncertainty, a localised assessment would have taken the residual emissions as a starting point in the assessment of the significance, not the benefits that are not assured.
Page 18 and 19	**Project 4 – Immingham Eastern Ro-Ro Terminal** The approach taken for construction (embodied emissions) of the Ro-Ro Terminal was to compare PAS 2080 defined GHG emissions to the Green Construction Board's Net Zero Whole Life Road Map to provide appropriate context as outlined below. • Page 8 Paragraph 19.3.12 *'To provide further context on the magnitude of IERRT project emissions construction emissions from the project have been compared to the Green Construction Board (GCB) Net Zero Whole Life*	The Applicant considers that contextualisation against sectoral benchmarks is not an example of a localised assessment. There are no statutory sectoral budgets. The Applicant considers a contextualisation against sectors not meaningful as instead of a further comparison of numbers the following principle from the IEMA guidance (page 24) that is at the basis of the IEMA's significance criteria has been preferred for the assessment: *'The crux of significance therefore is not whether a project emits GHG emissions, nor even the magnitude of GHG emissions alone, but whether it contributes to reducing GHG*

	Carbon Roadmap (2021). The GCB Net Zero Whole Life Carbon Roadmap for the Built Environment serves as a visual tool enabling stakeholders to understand the policies, actions and key decision points required to help the construction sector contribute towards the UK achieving a transition towards a net zero carbon economy by 2050.' • Page 88 Paragraph 19.3.13 *'Therefore, to contextualise the IERRT project's construction impact on the UK's transition towards a low carbon economy, the GCB's sectoral commercial carbon budget was used as a comparison against the IERRT project's material embodied carbon'.* • Page 28 Paragraph 19.8.22 *'To put the magnitude of construction emissions into context embodied carbon from construction of the IERRT project has been compared to the Green Construction Board's Embodied Carbon Budget for Infrastructure. The IERRT project is predicted to account for approximately 1% of this budget (see Table 19.17 below). The IERRT project's impact on the Embodied Carbon for Infrastructure Budget and the UK's transition towards a net carbon economy is therefore negligible.'* Approach if applied to LTC Following the approach taken within the Immingham assessment LTC's construction (embodied) emissions would be approximate 5% of the identified annual sectoral benchmarks for embodied carbon, which is significant in the overall context of construction sectoral emissions.	*emissions relative to a comparable baseline consistent with a trajectory towards net zero by 2050'*. This is in line with the IEMA guidance that states on page 27: *'It is down to the practitioner's professional judgement on how best to contextualise a project's GHG impact.'* Consequently, the Applicant has focused the assessment on alignment with the up-to-date net zero policies. This is reflected in the first instance by the secured commitment to ensure that net construction emissions do not exceed 1.763 million tCO2e (refer to CBN04 in Table E.1 in the C&EMP [**APP-552**]). This emission level complies with current up-to-date policies, which renders the Project's GHG emissions 'minor adverse' and not 'significant' as per the IEMA guidance. However, policies, including sectoral policies, are developing rapidly and to ensure that the Project stays aligned with up-to-date policies, secured mechanisms are included in the C&EMP [**APP-552**]. By approaching carbon reduction not only in the preliminary design / DCO stage, but also through procurement, commercial incentives and management arrangements in the detailed design and construction phases, the Applicant has gone beyond the IEMA guidance.
Page 19	**Project 5 – Gate Burton Energy Park** Source reviewed: *Environmental Statement, Volume 1, Chapter 6: Climate Change* Document Reference: EN010131/APP/3.1 January 2023, AECOM	The Applicant considers that contextualisation against sectoral budgets is not an example of a localised assessment.

	The approach taken for assessing significance of greenhouse gas emission impacts included contextual appraisal against sectoral carbon budgets. • Page 36 Paragraph 6.10.43 *'In line with IEMA guidance on Assessing Greenhouse Gas Emissions and Evaluating their Significance, the sectoral carbon budgets for electricity supply have also been used to contextualise emissions from the Scheme.'* The assessment of significance states that 3.3 million tonnes of CO2(e) savings over its lifetime relating to the carbon intensity of energy is significant. • Page 38 Paragraph 6.10.51 *'As the operational carbon intensity of the Scheme remains below the CCGT facility throughout its lifetime, it is considered that the overall GHG impact of the Scheme is **beneficial** and **significant**, as it will play a part in achieving the rate of transition required by nationally set policy commitments and supporting the trajectory towards net zero.'* Approach if applied to LTC The approach taken for Gate Burton Energy Park shows is it entirely possible to compare a DCO's GHG emissions to sectoral budgets to provide context to support benefit and disbenefits of the project. It is also important to note that 899,933 tCO2(e) (the total lifetime emissions from construction, operation and decommissioning) were determined as significant. Using the context of scale presented this would determine LTC's emissions as also significant.	A response to the matter of contextualisation against sectoral targets / budgets is provided in the response to 'Project 4 – Immingham Eastern Ro-Ro Terminal'.
Page 19 and 20	**Project 6 – Mallard Pass Solar Project** Document reviewed: PINS Ref: EN010127 *Environmental Statement Volume 1 Chapter 13: Climate Change* November 2022 Document Reference: EN010127/APP/6.1	The Applicant considers that conclusion on the significance of effects does not represent an example of a localised assessment. The Applicant further notes that the Mallard Pass Solar Project Environmental Statement does not contain a comparison

	The project has taken a sectoral approach to assessing the significance. The methodology included establishing energy sectoral targets through independent reference documents for comparison. The scale of benefit i.e. 1.9 MtCO2 was considered a material change to the UK's emissions and therefore significant. Approach if applied to LTC The approach taken by the Mallard Pass Solar Project shows is it entirely possible to compare a DCO's GHG emissions to sectoral targets (in this case energy supply) created through research to provide context to support benefit and disbenefits of the project. It is also important to note that the reported total savings of 1.9 MtCO2(e) were determined as significant as a mass of pollutant and a material change to UK's emissions. Using the context of scale presented this would determine LTC's emissions as significant and a material change to UK's emissions.	against UK carbon budgets and states the following in paragraph 13.1.8: *'The level of significance associated with the GHG impact of a project within the CCIA is to be contextualised and assigned through the professional judgement of the appropriate practitioner in accordance with the IEMA guidance, which provides the framework for the assessment criteria within this assessment.'* The following principle from the IEMA guidance (page 24) is at the basis of the IEMA's significance criteria: *'The crux of significance therefore is not whether a project emits GHG emissions, nor even the magnitude of GHG emissions alone, but whether it contributes to reducing GHG emissions relative to a comparable baseline consistent with a trajectory towards net zero by 2050'.* Following the IEMA significance criteria on page 25 of the guidance, a project with net GHG emissions can be assessed as 'not significant' or 'significant' depending on its alignment with net zero trajectory policies. The IEMA guidance classifies a beneficial effect as 'significant', irrespective of the magnitude of GHG emissions avoided. Hence, in the IEMA guidance the significance is not determined by the magnitude of the emissions or beneficial effect. Therefore, no conclusions can be drawn from a comparison of numbers.
Page 20	**Project 7 – Cottam Solar Project** PINS reference: EN010133 Environmental Statement Chapter 7 Climate Change, January 2-23 Document reference: APP/C6.2.7 APFP Regulation 5(2), Bureau Veritas The application notes that the 5,973,729 tCO2e reduced by this project is major beneficial significant effect. • Page 40 Paragraph 7.8.69 *'Compared to other types of electricity generation; the Scheme is expected to have a major beneficial significant effect on the climate.'* Approach if applied to LTC	The Applicant considers that the quoted paragraphs on the significance of effects do not represent an example of a localised assessment. The Applicant notes that paragraph 7.8.69 states '*Compared to other types of electricity generation'.* The conclusion is not drawn based on a comparison against the UK carbon budgets and / or criteria from the IEMA guidance. There is no merit in comparing the emissions from the LTC project with 'other types of energy generation'.

	The approach for the Cottam Solar Project shows the scale of emission savings, i.e. 5,973,729 tCO2(e) is considered a significant as a volume of pollutant in relation to impact on the climate. This figure is almost 1 million tonnes lower than the estimate presented by LTC and this means that the LTC scheme would be assessed as having a **significant** effect.	
Page 20 and 21	**Project 8 – Cambridge Waste Water Treatment Plant Relocation** PINS Reference WW01003 Environmental Statement Chapter 10: Carbon Application Document Reference 5.2.10 The project applied IEMA guidance directly to setting significant criteria. It notes that all emission contributes to climate change and therefore are significant. • Page 31 4.2.12 *'Table 2-1 sets out the significance criteria adapted from the IEMA Guidance. The construction of the Proposed Development leads to carbon emissions which contribute to global climate change.'* The document notes on page 43 and page 44 that the emission impacts of between 122900 to 32330 t CO2 were all rated as significant, regardless of geographical, sectoral or national context. Approach if applied to LTC This scheme was another example of an application that reports total emissions that are significantly lower than LTC, but still considers them to be significant.	The Applicant considers that the quoted paragraph on the significance of effects does not represent an example of a localised assessment. The Applicant further notes that paragraph 4.2.12 fully reads as follows (5.2.10 ES Volume 2 Chapter 10 Carbon (planninginspectorate.gov.uk)): *'Table 2-1 sets out the significance criteria adapted from the IEMA Guidance. The construction of the Proposed Development leads to carbon emissions which contribute to global climate change. The construction footprint shows a moderate adverse impact, which is rated as significant'*. Table 2-1 does not reflect Thurrock Council's statement that *'It notes that all emission contributes to climate change and therefore are significant'.* In the IEMA guidance, the significance is not determined by the magnitude of the emissions or beneficial effect and therefore no conclusions can be drawn from a comparison of numbers (refer to the response to 'Project 6 – Mallard Pass Solar Project '. The Applicant could not locate the following Thurrock Council statement in the ES *'The document notes on page 43 and page 44 that the emission impacts of between 122900 to 32330 t CO2 were all rated as significant, regardless of geographical, sectoral or national context'* and is therefore unable to respond to it.
ExQ1 8.1.2		
Waste and Materials ExQ1 Question to Thurrock Council:		

With particular regard to excavated material associated with the northern tunnel portal construction compound, please indicate if/ how you consider that the applicant's strategy for handling excess waste is adequate or otherwise? What measures do you consider should be secured within a DCO to ensure any excess excavated materials, i.e. those not reused within the Order Limits) is handled appropriately?		
Page no.	**Thurrock Council's Response**	**Applicant's response**
Page 72	The applicant has not undertaken sufficient intrusive investigations to enable them to robustly identify the potential contaminants present within the waste that will need to be excavated. The need for additional investigation is acknowledged by the Applicant (Appendix 10.11 – Remediation Options Appraisal and Outline Remediation Strategy para 6.1.1 [**APP-434**]), however, there is no detail on what will be undertaken and GS001 does not require engagement and agreement with the LPA. The Council therefore requires the REAC commitments to be reworded and for additional commitments to ensure LPA engagement and agreement to all further ground conditions work including provision of a written scheme of investigation, ground investigation reports and assessments, remedial strategies and verification.	With regards to Project commitment GS001 the Applicant confirms that the method statements, which would include the scope of works, for supplementary investigations will be provided to the Environment Agency and relevant Local Authorities. This has been clarified through revised wording for GS001, submitted at Deadline 5 [**REP5-048**]. With regards to Project commitment GS027, the Applicant can confirm that the supplementary investigation assessment reports can be shared with the relevant Local Authorities. The Applicant confirms that revised wording to GS027 has been submitted at Deadline 5 to clarify this position [**REP5-048**]. Furthermore, please refer to the Applicant's submission at DL6 [9.152 Responses to the Examining Authority's ExQ2 Appendix D – 6, 7, 8] for the Applicant's response to ExQ2_Q6.1.2].
Page 73	Commitments must be included within the DCO and Control Documents to provide a suitably tight Rochdale Envelope in which the contractors must operate. This may be best achieved through amending REAC MW011, so that the commitment is made in terms of a maximum quantity of excavated material exported from site rather than a % of the total arisings.	The Applicant believes that the suggestion of a maximum quantity of excavated materials is related to vehicle movements and that concerns should be addressed through transport related matters. Applying such measures to waste are constraining the wrong work activity. The Applicant does not find the introduction of a blanket vehicle cap to be an effective approach, considering the varied locations, periods, and intensities involved in transporting excavated material across different compounds. Instead, specific controls have been implemented to ensure that the construction works are constrained in a manner that directly addresses their impact on the road network, providing a more nuanced and tailored solution.

		The appointed contractor would be required to manage deliveries to compounds using vehicle booking systems, as outlined in para 3.5.11 of the oMHP [**REP5-050**]. In addition, the Project has set out its approach to monitoring of vehicle movements on the road network to and from compounds to promote improvements in road safety and to minimise Project construction traffic and environmental impacts on the road network and local communities. This is set out in detail in Section 2 of the oTMPfC [**REP5-057**].The Applicant believes that imposing a vehicle cap would be ineffective and constrain the ability to adapt to changes that would minimise impacts of construction traffic. The Applicant does not agree that a commitment to a maximum quantity of excavated materials is appropriate. Please refer to the Applicant's submission at DL6 [9.152 Responses to the Examining Authority's ExQ2 Appendix D – 6, 7, 8] for the Applicant's response to ExQ2_Q8.1.4].
ExQ1 8.1.4		
Waste and Materials ExQ1 Question to Thurrock Council: **Waste Management** Can the Local Authorities set out whether you consider: • The measures in the dDCO, specifically the commitments in the Register of Environmental Actions and Commitments (REAC) [**REP1-157**] (e.g. Commitment MW007) to adhere to the waste hierarchy, are adequate in terms of waste management? • If not, please identify what alterations or additions you would consider to be necessary?		
Page no.	**Thurrock Council's Response**	**Applicant's response**
Page 75	The Council believe that the DCO commitments to delivering the waste hierarchy can and should be improved through the strengthening of the following REAC commitments:	The Applicant does not feel it necessary to reword Project commitment MW007 [**REP5-048**] as the existing wording already provides adequate assurance that excavation wastes would be minimised and preferentially re-used. Through the commitment, reuse, recycling and recovery on-site within Order

	• The Council believes a more robust commitment could be made within MW007 along the lines of *'All Reasonable Endeavours will be made to ensure that the Works comply with the waste hierarchy and that disposal of waste is reduced, where materials are recovered or disposed of it should be evidenced that no practicable alternative management route was available.'*	Limits would be maximised with disposal being the last resort, in line with the waste hierarchy. However, the Applicant has clarified this position by amending Project commitment MW007 as follows: …The final option would be disposal *and it would be reported in the CSWMP that no practicable alternative management route was available.* This change would be reflected within the updated Code of Construction Practice, First Iteration of Environmental Management Plan (Clean version) [**REP5-048**], submitted at Deadline 6.
Page 75	Within MW013 the Council believes that the applicant should set individual, material-level targets for re-use and recycling (combined with the additional MW007 drafting) would more effectively incentivise compliance with the waste hierarchy.	The Applicant does not believe setting individual material level targets is appropriate. With detailed design yet to be undertaken, the potential for unknown ground conditions and post-DCO permitting consents, which may influence how excavated arisings are used within the Project, it is more likely than not that setting such targets, particularly at an individual material level will unnecessarily constrain the Contractor. It should also be acknowledged that the Project already has set targets around reuse/recycling/recovery as set out in the CoCP MW001, MW007, MW011, MW013 and MW015 [**REP5-048**] which is commensurate with similar transport related NSIPs and Hybrid Bill schemes. An additional significant factor is the fact that for the sustainable use of wastes leaving the site the Contractor has no control over external forces and market conditions. The Applicant does not want to restrict the Contractor by setting individual material level targets which, with unknown changes in the external market, may dictate that sub-optimal choices are made; such as increased transport of waste, more carbon intensive solutions, conflict with other post-DCO requirements or higher cost.

ExQ1 8.1.6		
Waste and Materials ExQ1 Question to Thurrock Council: **Waste Management** Beyond the matters secured by the dDCO as currently drafted, and the consenting/ environmental permitting requirements that will apply, are there other matters in terms of waste management that you consider need to be clarified/secured?		
Page no.	**Thurrock Council's Response**	**Applicant's response**
Pages 75 & 76	The applicant should either amend the drafting of MW011 and MW 013 as proposed within our responses to Q8.1.2 and Q8.1.4 or clarify their proposals within the oSWMP to providing greater detail.	The Applicant believes that the level of detail provided in the oSWMP [**APP-337**] is adequate for this stage of the Project. It provides an appropriate strategy for waste and material management during construction. These measures would be incorporated into the EMP (Second Iteration) on which Thurrock Council will be consulted and implementation would be the responsibility of the Contractor(s).
Page 76	The applicant must commit within the oMHP that the Excavated Material that is projected to be moved from the Roads North contract to the Tunnelling works contract that the material should be moved within the trace as soon as the Tilbury Viaduct is structurally complete to carry the associated loads. That will remove the movement of that material from the local road network.	In the absence of a detailed design that would inform the earthwork strategy and construction programme, committing to specific phasing at this stage would not be appropriate. Instead, the Applicant has focused on developing a set of comprehensive control documents to ensure efficient management of the construction impacts. These documents, which include the Outline Materials Handling Plan [**REP5-050**], Outline Site Waste Management Plan [**APP-337**], and Outline Traffic Management Plan [**REP5-056**], prioritise the use of designated haul roads for accessing project sites and maximising the use of material on site as per the waste hierarchy. Additionally, within the Order Limits, provisions have been made to establish haul routes connecting the Strategic Road Network (SRN) directly to work sites wherever feasible. In cases where direct SRN access isn't feasible, construction traffic would utilise local road networks and, where necessary, sections of the Local Road Network (LRN). The Applicant has undertaken a bulk earthwork assessment of the preliminary design which has identified the need of material

		to be transported between work sites located either side of the Tilbury Loop rail line. A large quantity of this material is anticipated to be used for the construction of the Tilbury via duct embankment but is a level of detail that would be confirmed as part of the detailed earthwork strategy aligned to the detailed design. Regarding the specifics of transportation of excavated material over the Tilbury Loop Railway Line toward the North Portal Site, the construction of the Tilbury Viaduct necessitates construction of an embankment, potentially requiring the movement of excavated material from sites north of the Tilbury Loop Railway Line, subject to earthwork strategy developed during detailed design. The Materials Handling Plan, prepared in response to the Outline Materials Handling Plan, would consider this sequencing of movements and deliver this outcome through an appropriate detailed design process at the times. Given the absence of a detailed design associated construction program and detailed earthwork strategy, the Applicant has adopted a proportionate approach. This approach retains flexibility to explore opportunities while implementing controls to mitigate impacts where reasonably practicable. Committing to specific routes or methods, which is dependent on detailed phasing of the works and in absence of the detailed design, associated construction methodology and earthwork strategy could inadvertently create more issues than solutions. By maintaining appropriate flexibility, within the scope of the control document, the Applicant has struck a balance between promoting efficient project delivery and ability to minimising adverse impacts should the arise through avenues such as the Traffic Management Forum.
Page 76	The applicant should amend the drafting of the oSWMP and oMHP to be cognisant of the temporal phasing of the works and the spatial distribution of the arisings as the duration	The oMHP [**REP5-050**] and oSWMP [**APP-337**], serve as frameworks for their respective plans (CSWMP & MHP) developed during the construction phase by the contractor. These plans would be produced as control documents for the activities during the construction phase and be updated to

	and extent of the works are too extensive to be covered by a basic structure SWMP provided	reflective the evolving nature of the works. A MHP is established for each element of the works, as indicated in paragraph 3.2.1 of the oMHP [**REP5-050**]. Furthermore, the construction of the relevant part of authorised development must be carried out in accordance with the EMP (Second Iteration) approved for that part, as stipulated under Article 3 Requirement 4 within the draft Development Consent Order (DCO) [**REP5-024**]. This requirement ensures that the plans represent the construction work being done and that they are updated as needed due to the evolving nature of the construction works. Therefore, the Applicant does not believe the oSWMP and oMHP require amendment.
Page 76	The applicant should clarify the required approach of the contractors to the monitoring and reporting of the waste generated/exported from the Order Limits within the drafting of the oSWMP.	Section 6.5 of OSWMP [**APP-337**] provides information on the monitoring and reporting requirements.
Page 76	The applicant should commit to placing all sites storing, processing or consigning waste under an environmental permit, by committing to doing so it will ensure that all activities will be subjected to monitoring and auditing by the Environment Agency, the use of alternative routes means that activities are self-regulating.	Environmental permit discussions with the Environment Agency have been ongoing through the pre-examination and examination phase with collaborative workshops undertaken between the Applicant and the Environment Agency. The Applicant is discussing a permitting strategy with the Environment Agency as documented in the SoCG [**REP1-058**]. An updated SoCG was submitted at Deadline 5 [**REP5-034**]. As detailed in the Consents and Agreements Position Statement [**REP1-047**], the permits are subject to detailed design and the chosen Contractor will further develop the permit options with the Environment Agency during the pre-application phase.
Page 76	The applicant must require and incentive its contractors along the principles of the waste hierarchy and having exhausted 'remove' and 'reduce' that the contractors should minimise the movement of material and the distance carried for reuse within the project.	REAC MW007 already places a requirement for the contractor to apply the waste hierarchy and as set out above, there are measures in place to encourage preferential treatment.

ExQ1 8.1.9		
Waste and Materials ExQ1 Question to LPAs and Environment Agency: **Monitoring Consultation/ Approval/ Timescales** Section 11.8 of ES Chapter 11 – Noise and Vibration [**APP-149**] deals with monitoring. Can you provide your views on: • The Applicant's strategy for waste and material management during construction? • The Applicant's strategy for waste and material management during the operational phase? • The Applicant's suggested approach to consultation and approval of these matters through the dDCO [**REP2-004**], as currently drafted, and the associated REAC within the CoCP [**REP1-157**]?		
Page no.	**Thurrock Council's Response**	**Applicant's response**
Page 79	Within the oSWMP there is a high-level specification of the information to be recorded (although this is statutory minimum to comply with DoC) and a suggestion that electronic delivery notes could be recorded, but no specification provided of how the applicant requires the information to be provided or evidenced. The scale of waste movements out of the Order Limits is comparable to a large-scale waste site where good practice would include live electronic recording of waste movements with immediate access to quantities as opposed to the quarterly reporting proposed within the oSWMP. The applicant should revise the oSWMP to make their positions on these issues clear.	Section 6.4 and 6.5 of oSWMP [**APP-337**] provides details on the monitoring and reporting requirements. Its states that the CSWMP would be updated on a daily basis or as needed basis to record accurate information to progress and whenever changes occur onsite or relating to materials. Therefore, the Applicant does not believe the oSWMP would require any further update.
Page 79	The approach for the monitoring (and management) of operational phase waste arisings is very limited to the extent that it is not possible to make comment on the applicability of the applicant's proposals.	The Applicant added MW016 in the CoCP [**REP5-049**] following a request from Thurrock Council. The Applicant believes that MW016 provides the adequate and necessary controls for the management of operational waste and therefore no further commitment is required.

Glossary

Term	Abbreviation	Explanation
A122		The new A122 trunk road to be constructed as part of the Lower Thames Crossing project, including links, as defined in Part 2, Schedule 5 (Classification of Roads) in the draft DCO (Application Document 3.1)
A122 Lower Thames Crossing	**Project**	A proposed new crossing of the Thames Estuary linking the county of Kent with the county of Essex, at or east of the existing Dartford Crossing.
A122 Lower Thames Crossing/M25 junction		New junction with north-facing slip roads on the M25 between M25 junctions 29 and 30, near North Ockendon.
A13/A1089/A122 Lower Thames Crossing junction		Alteration of the existing junction between the A13 and the A1089, and construction of a new junction between the A122 Lower Thames Crossing and the A13 and A1089, comprising the following link roads: • Improved A13 westbound to A122 Lower Thames Crossing southbound • Improved A13 westbound to A122 Lower Thames Crossing northbound • Improved A13 westbound to A1089 southbound • A122 Lower Thames Crossing southbound to improved A13 eastbound and Orsett Cock roundabout • A122 Lower Thames Crossing northbound to improved A13 eastbound and Orsett Cock roundabout • Orsett Cock roundabout to the improved A13 westbound • Improved A13 eastbound to Orsett Cock roundabout • Improved A1089 northbound to A122 Lower Thames Crossing northbound • Improved A1089 northbound to A122 Lower Thames Crossing southbound
A2		A major road in south-east England, connecting London with the English Channel port of Dover in Kent.
Application Document		In the context of the Project, a document submitted to the Planning Inspectorate as part of the application for development consent.
Construction		Activity on and/or offsite required to implement the Project. The construction phase is considered to commence with the first activity on site (e.g. creation of site access), and ends with demobilisation.
Design Manual for Roads and Bridges	**DMRB**	A comprehensive manual containing requirements, advice and other published documents relating to works on motorway and all-purpose trunk roads for which one of the Overseeing Organisations (National Highways, Transport Scotland, the Welsh Government or the Department for Regional Development (Northern Ireland)) is highway authority. For the A122 Lower Thames Crossing the Overseeing Organisation is National Highways.
Development Consent Order	**DCO**	Means of obtaining permission for developments categorised as Nationally Significant Infrastructure Projects (NSIP) under the Planning Act 2008.

Term	Abbreviation	Explanation
Development Consent Order application	**DCO application**	The Project Application Documents, collectively known as the 'DCO application'.
Environmental Statement	**ES**	A document produced to support an application for development consent that is subject to Environmental Impact Assessment (EIA), which sets out the likely impacts on the environment arising from the proposed development.
Highways England		Former name of National Highways.
M2 junction 1		The M2 will be widened from three lanes to four in both directions through M2 junction 1.
M2/A2/Lower Thames Crossing junction		New junction proposed as part of the Project to the east of Gravesend between the A2 and the new A122 Lower Thames Crossing with connections to the M2.
M25 junction 29		Improvement works to M25 junction 29 and to the M25 north of junction 29. The M25 through junction 29 will be widened from three lanes to four in both directions with hard shoulders.
National Highways		A UK government-owned company with responsibility for managing the motorways and major roads in England. Formerly known as Highways England.
National Planning Policy Framework	**NPPF**	A framework published in March 2012 by the UK's Department of Communities and Local Government, consolidating previously issued documents called Planning Policy Statements (PPS) and Planning Practice Guidance Notes (PPG) for use in England. The NPPF was updated in February 2019 and again in July 2021 by the Ministry of Housing, Communities and Local Government.
National Policy Statement	**NPS**	Set out UK government policy on different types of national infrastructure development, including energy, transport, water and waste. There are 12 NPS, providing the framework within which Examining Authorities make their recommendations to the Secretary of State.
National Policy Statement for National Networks	**NPSNN**	Sets out the need for, and Government's policies to deliver, development of Nationally Significant Infrastructure Projects (NSIPs) on the national road and rail networks in England. It provides planning guidance for promoters of NSIPs on the road and rail networks, and the basis for the examination by the Examining Authority and decisions by the Secretary of State.
Nationally Significant Infrastructure Project	**NSIP**	Major infrastructure developments in England and Wales, such as proposals for power plants, large renewable energy projects, new airports and airport extensions, major road projects etc that require a development consent under the Planning Act 2008.
North Portal		The North Portal (northern tunnel entrance) would be located to the west of East Tilbury. Emergency access and vehicle turn-around facilities would be provided at the tunnel portal. The tunnel portal structures would accommodate service buildings for control operations, mechanical and electrical equipment, drainage and maintenance operations.
Operation		Describes the operational phase of a completed development and is considered to commence at the end of the construction phase, after demobilisation.

Term	Abbreviation	Explanation
Order Limits		The outermost extent of the Project, indicated on the Plans by a red line. This is the Limit of Land to be Acquired or Used (LLAU) by the Project. This is the area in which the DCO would apply.
Planning Act 2008		The primary legislation that establishes the legal framework for applying for, examining and determining Development Consent Order applications for Nationally Significant Infrastructure Projects.
Project road		The new A122 trunk road, the improved A2 trunk road, and the improved M25 and M2 special roads, as defined in Parts 1 and 2, Schedule 5 (Classification of Roads) in the draft DCO (Application Document 3.1).
Project route		The horizontal and vertical alignment taken by the Project road.
South Portal		The South Portal of the Project (southern tunnel entrance) would be located to the south-east of the village of Chalk. Emergency access and vehicle turn-around facilities would be provided at the tunnel portal. The tunnel portal structures would accommodate service buildings for control operations, mechanical and electrical equipment, drainage and maintenance operations.
The tunnel		Proposed 4.25km (2.5 miles) road tunnel beneath the River Thames, comprising two bores, one for northbound traffic and one for southbound traffic. Cross-passages connecting each bore would be provided for emergency incident response and tunnel user evacuation. Tunnel portal structures would accommodate service buildings for control operations, mechanical and electrical equipment, drainage and maintenance operations. Emergency access and vehicle turn-around facilities would also be provided at the tunnel portals.

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