TR010032 Lower Thames Crossing

Gravesham Borough Council

(IP ref: 20035747)

Submission at Deadline 2: 3 August 2023

1. Introduction

1.1. This document and its companion appendix and documents cover:

- Comments on National Highways Response of Gravesham Relevant Representations (pages 49-71 of REP1-180) – Appendix 1 and the draft SoCG (REP1-101 tracked changes version) – section 2
- Updated PADS to reflect changes to the draft SoCG (REP1-101) – section 2
- Comments on updated application documents will be provided at Deadline 3. It is understood additional material will be submitted at Deadline 2.
- Comments on LIR's and WR's – section 3
- Comments on REP1-178 9.2 Amended Proposed accompanied site inspection itinerary – section 4
- Comments on the Applicant's responses to Action Points consequent upon ISHs – section 5
- Comments on Applicant's amended dDCO: article 2 – section 6

1.2. The current draft SOCG is authored by National Highways and in its current form represents their views. It should be noted that the draft SoCG has been extended to cover an additional 23 points from the Gravesham RR's that are not in the original SoCG. The original SoCG is in itself a distillation, by National Highways, of the comments made over the 6 consultations leading to the application being made in 2022 as well as original Environmental Scoping consultation. Some of those points have either been superseded or are no longer relevant.

1.3. The Gravesham PADS has been updated to reflect the changes referred to above, which include the addition of two new issues and is attached in clean and tracked changes versions.

1.4. As a general comment the responses in the current draft SoCG from National Highways in general refer reader (whether the ExA or the Council) to submission documents, on the basis that National Highways considers these will answer the question or concern raised. That view is not shared by the Council. To date substantive progress has not been made on any of the issues where it might be reasonable to expect that agreement could be reached, though there are some signs that this is changing. Meetings are being arranged on the SEE Strategy (e.g. skills co-ordinator and Green skills hub) and a potential s.106 agreement.

2. Comments on RR's and updated SoCG

2.1. The applicant has submitted a document (pages 49-71 of REP1-180) that reviews the Relevant Representations and a revised, by them, draft Statement of Common Ground. As a natural by-product of this process is that some 23 points have been

added to the SoCG. This has also resulted in the amendments to the PADS document including the addition of new points.

2.2. Appendix 1 contains a schedule of comments on National Highways RR comments and consequential changes they have made to the draft SoCG at this point in time.

2.3. One issue that does not fit into the table in space terms is comment on the carbon budget (SoCG new 2.1.151, PADS GBC100). '*It is not considered likely that the Project will have any impact on Gravesham Borough Council being able to achieve its carbon target, as the emissions from the strategic road network are not allocated by the Government to local authority budgets. There are no statutory duties for local authorities to take account of the UK's net zero targets, although it is acknowledged that voluntary targets to do exist. IEMA has recently published guidance for local authorities to decarbonise local development plans, recognising that this is the best way for them make an impact at scale on local emissions (IEMA, 2023, Practical steps for decarbonising local development plans). The Project is a Nationally Significant Infrastructure Project and not part of a local plan.*'

2.4. As a minor point the A122 will be in due course shown on the Local Plan Proposals Map, as it is safeguarded. Nonetheless, the Council recognises that the Lower Thames Crossing is not a proposal of the Local Plan (either adopted or forthcoming).

2.5. Within the Council's climate change strategy 2022-2023, the Council recognises that there are emissions it can control directly (because they stem from the Council's own activities), emissions it can influence, including through planning policy and strategic decisions, and emissions where the Council has little direct influence but has a role as a communicator and educator to start to make a change. In this latter capacity (Gravesham as a community leader), it is the aim to reduce borough-wide emissions in all categories (including transport) through influence, support and advocacy. The baseline benchmark for this is the UK local authority greenhouse gas emissions estimates published annually by BEIS (formerly) and (now) by DESNZ[1]. The purpose of these estimates is to assist those wishing to understand the sources and assess changes in emissions from local authority areas.

2.6. Local authorities are not mandated to have greenhouse gas emissions reduction targets, but many local authorities, including Gravesham, do have such targets. These statistics allow local authorities to track their greenhouse gas emissions trends over time and measure progress against any targets they have. Transport emissions specified in the estimates include freight and passenger transport, both for private and business purposes. The estimates are based on the distribution of traffic. Therefore some of the emissions within an authority represent through traffic, or part of trips into or out of the area, whether by residents or non-residents. In some authorities, such as Gravesham, this can be particularly significant and should be considered when looking at either totals or per capita estimates. The Technical Report supporting the DESNZ estimates (Local and regional greenhouse gas emissions estimates for 2005-2021 for the UK: technical report)[1] shows how the road traffic estimates break down.

[1] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1168163/uk-local-and-regional-ghg-emissions-2005-to-2021- technical-report.pdf

2.7. Areas with higher emissions are more likely to be those with motorways and major roads carrying a lot of through traffic, while the areas with the lowest levels of emissions per capita are typically built-up highly populated areas with a high use of public transport.

2.8. In 2021 the estimated CO2 emissions across all categories within Gravesham were as follows:

Gravesham	**kt CO_2E**	**Percentage**
Industry	81.8	20.2%
Commercial	17.5	4.3%
Public Sector	10.3	2.5%
Domestic	136.9	33.8%
Transport	162.6	40.1%
Forestry/Land Use	-6.5	-1.6%
Agriculture	2.5	0.6%

2.9. Transport accounted for the highest quantity of emissions in the borough (40%) compared to other categories. Within the transport category, the breakdown of contributors is as follows:

Transport	**kt CO_2E**	**Percentage**
A Roads	116.6	71.7%
Motorways	14.1	8.7%
Minor Roads	30	18.4%
Diesel Railways	0.9	0.6%
Transport Other	1.1	0.7%

2.10. It is clear that A Roads already contribute the highest amount of transport emissions within the borough (nearly 72%). The A2, which dissects the borough east to west and carries a significant amount of through traffic, will also carry the majority of traffic to the Lower Thames crossing via the new A122, which, rather than reduce emissions, will push this figure much higher and offset any work done in other areas such as requirements specified within the Local Plan. The Council does not therefore agree with National Highways that the effects of the LTC on carbon emissions within Gravesham are of no concern to the Council.

2.11. It is noted that REP1-323 Climate Emergency Policy and Planning (CEPP) WR contains a great deal of information and views on this subject that the Council is currently reviewing.

3. Comments on LIR/WR's

3.1. These comments are confined to issues where Gravesham Council believes that it has additional relevant material to add to, or support, what is in the Gravesham LIR (REP1-228 to REP-234). Lack of comment on a potentially relevant LIR/WR does not imply any form of acceptance or rejection of the views expressed.

3.2. Issues where comment has been made:

- Traffic and modelling
- Cultural Heritage
- Landscape and Biodiversity
- Port of London
- Emergency Services

Traffic and modelling

3.3. The Council has criticised the Lower Thames Area model in its LIR as a tool for looking at the local issues. Its view is that the model underestimates the traffic flows, and this then feeds through into other issues in the Environmental Impact Assessment where this is relevant such as air quality, noise and biodiversity.

3.4. REP1-187 9.15 Localised Traffic Modelling at table 3.2 on page 12 contains a list of localised traffic modelling which includes 7 microsimulation models that relate to Gravesham (27, 31 to 36). Paragraph 3.3.4 says '*….no requests were made for this information and so has not been shared to date.*' The Council was aware that some models were being created and has consistently expressed concern to National Highways over potential issues on the local road network. It has never been informed despite inquiries in relevant meetings as to what microsimulation models existed or what the results were. It is therefore unsurprising that the Council did not make earlier requests for specific modelling results.

3.5. A formal request in writing was made to National Highways after the ISH1 hearing where this was discussed to which the Council has now had a response. The information is contained in REP1-193 9.15 Localised Traffic Modelling Appendix G. This information will be reviewed, and comment made at a later date, however at first sight the concerns raised by this Council and others about the impacts on the local network seem to be amply justified. It is noted there is also information about a model of Blue Bell Hill mentioned in REP1-187 Table 3.1 and the Council assumes that it will be made available as well.

3.6. The Council is concerned that, as regards undertaking operational traffic modelling at other locations (not included in what the Applicant has provided), the Applicant has set so-called 'criteria' before it will consider responding to any requests for such modelling (at paragraph 3.5.9 of REP1-187). Those criteria would preclude any request by the Council from being favourably considered because, despite being a host authority affected by the largest part of the works south of the River Thames, the Council is not a local highway authority for any roads, either within its area or nearby.

3.7. This criterion wrongly assumes that traffic impacts, such as congestion, rat-running, severance, traffic noise and vibration, air quality, intimidation of non-motorised users, are matters only of concern to a highway authority or traffic authority. However, the impacts of traffic on communities and businesses in Gravesham (both existing and prospective as regards potential new development) are also matters of legitimate concern to the Council, both as a host authority and as a local planning authority. The Council notes that Action Point 10 made specific reference to the Council, but the criteria set by the Applicant would preclude it. The Council does not therefore consider that the Applicant's self-selected criteria for responding to

requests for operational traffic modelling are appropriate and respectfully invites the ExA to give further guidance on this matter.

3.8. Within the document REP1-187 Lower Thames Crossing – 9.15 Localised Traffic Modelling the applicant relies on paragraph 4.6 of the NPSNN to justify the approach taken to transport modelling:

> *3.2.1 The Applicant also wishes to highlight paragraph 4.6 of the National Networks National Policy Statement which sets out that "The Examining Authority and the Secretary of State do not need to be concerned with the national methodology and national assumptions around the key drivers of transport demand. We do encourage an assessment of the benefits and costs of schemes under high and low growth scenarios, in addition to the core case. The modelling should be proportionate to the scale of the scheme and include appropriate sensitivity analysis to consider the impact of uncertainty on project impacts*."

3.9. The Applicant (at paragraph 3.2.2) seems to have inferred from this guidance that any questioning of how the Applicant has used WebTAG guidance in its modelling is an impermissible challenge to "national methodology and national assumptions". The Council does not agree that this is a correct interpretation of paragraph 4.6 of the NNNPS. Gravesham has not raised issues about 'national methodology and national assumptions around the key drivers of transport demand' rather local uncertainty and whether this has been properly taken into consideration within the transport modelling.

3.10. On this, it is important to consider that the primary purpose of WebTAG guidance is to provide a Treasury Green Book compliant methodology for comparing projects when making investment decisions and not necessarily understanding the full impact of a project for EIA purposes[2].

3.11. On the latter, GBC notes the EIA Scoping Opinion issued by the Secretary of State in 2017 stated:

3.3	3.3.12	Forecasting methods or evidence	The traffic modelling applied to the assessment is likely to have implications for the design of the Proposed Development, and subsequently the basis for the assessments in the ES. The Applicant should seek to agree the approach to the traffic modelling with the relevant statutory consultees. Transport for London (TfL) have provided specific comments on the approach and methodology applied to the traffic model and the scope of the assessment of traffic effects. The Applicant should ensure that the scope and methodology are fully explained in the ES.

[2] See TAG overview https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1161977/tag-unit-m4-forecasting-and-uncertainty.pdf

7	13.8.16	Operational effects	It will be important to explain in the ES the significance of air quality and noise effects in relation to amenity, with appropriate cross-reference to the relevant aspect chapters. The Inspectorate notes that Medway Council (MC) have provided information on the predicted growth in Medway and the emerging development strategy, with respect to the Lower Thames Area Model for traffic modelling proposed in the Scoping Report. This information is also likely to be relevant to the Air Quality and Noise assessments. ECC have also provided advice regarding growth on the A127 corridor and emerging Local Plans. The assessment in the ES should take this information and any other relevant information of this sort into account.

3.12. From responses received to the consultation and statements made by other interested parties, it remains far from clear as to whether the applicant has complied with this instruction. The submissions made by Medway Council at Deadline 1 being a case in point (REP1–256 and REP1-258). The submission of the Port of Tilbury London Limited (REP1–274) is also of interest given that not only would the creation of the Freeport be likely to result in an increase in commercial traffic, the proposed Tilbury Link Road could result in a significant reassignment of cross-river flows.

3.13. Irrespective of the latter, the ExA is invited to consider whether the modelling undertaken by the applicant meets the requirements of the Scoping Opinion set out above and whether there has been compliance with Regulation 14(3)(a) of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017. It is noted that this requirement was specifically inserted into the revised 2017 Regulations (see Explanatory Memorandum).

3.14. In any event, GBC is of the opinion that requiring the applicant to undertake sensitivity testing to properly consider local uncertainty is consistent with the NPSNN at paragraph 4.6 is consistent i.e. that "the modelling should be proportionate to the scale of the scheme and include appropriate sensitivity analysis to consider the impact of uncertainty on project impacts."

3.15. The basis by which WebTAG approaches uncertainty is set out in Unit M4: Forecasting and Uncertainty (latest version May 2023)[3]. The most significant issue Gravesham has with the LTAM is that it is constrained to TEMPRO or NTEM outputs (as set out in the Council's LIR), with local uncertainty only being introduced within these limits to define where the origins and destinations of trips may be close to the project itself.

3.16. The High and Low Growth Scenarios do not necessarily capture the full impact of local uncertainty where growth levels are anticipated to exceed trip generation constrained to NTEM outputs. This could well be the case where there is significant development already permitted, such as in Medway on the Hoo Peninsula. Even if this is included in the uncertainty log, there is no guarantee that the modelled trips

[3] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1161977/tag-unit-m4-forecasting-and-uncertainty.pdf

will reflect the full impact if those trips are capped to meet the limits of model functionality.

3.17. In addition to Unit M4, the Department for Transport has also published the TAG Uncertainty Toolkit (May 2023)[4] which anticipates that transport schemes should be supported by a proportionate analysis of alternatives to understand the implications of uncertainty. This states at paragraph 1.3 that:

> *'Analysis should not focus exclusively on a core scenario. Uncertainty analysis and the consideration of wider 'what if' scenarios should be undertaken as standard. To help navigate uncertainty in transport analysis, decision makers need to be provided with analysis showing how different futures may affect the outcomes of the decisions they are taking today.'*

3.18. Gravesham believes therefore that national policy, Department for Transport Guidance and the requirements of EIA are consistent with any request that the transport modelling should reflect likely levels of growth in the area and in particular already committed development in Medway on the Hoo Peninsula. The ExA is also reminded that if the LTAM outputs do not accurately reflect traffic levels that may result from planned growth and these have been used as inputs into the junction micro-simulation models, those outputs may also be flawed.

3.19. The applicant has supplied in (REP1-183) 9.10 Post-event submissions, including written submissions of oral comments, for ISH1 at Annex H (page 86) comments about the sensitivity of time. Given a base BCR of 1.22 on assumptions used Table H.1 shows a variance between 0.99 and 1.45. This is a surprising level of variability. See section 5 below for further comments.

3.20. The Council also notes that section 7.2 various tables cover the Value of Time (VOT) and Vehicle operating Costs (VOH) along with LTAM matrix totals. This includes cars being used for employers' business and for commuting at different income levels, starting from a 2016 base. As pointed out by Thurrock there has been a significant shift in work patterns, both in terms of commuting and business meetings following COVID but accentuating a trend that was already apparent before that. Using rail passenger journey data[5], Southeastern in January to March 2023 compared to the same period in 2019 is carrying only 62% of passengers, South Western Railway 63% Chiltern 65%, C2C 69% and Thameslink (which includes Southern) 71%. These number suggest a significant shift in travel patterns. A question of the applicant is do they have any current survey information to validate the use of 2016 proportions.

3.21. Kent County Councils Local Impact Report (REP1-241) includes as Appendix B a report by consultants WSP using the Kent Traffic Model on the impacts of the Lower Thames Crossing. This includes a disclaimer statement from National Highways, '*the Kent Wider Network Impact (WNI) Study is a KCC owned study, funded by National Highways, to investigate impacts on the wider network in Kent. National Highways does not consider that the proposed interventions are required to make the Lower Thames Crossing acceptable, and that they should be developed in line with Government policy and funding mechanisms outside of the Lower Thames*

[4] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1164846/tag-uncertainty-toolkit.pdf

[5] https://dataportal.orr.gov.uk/media/2207/passenger-rail-usage-jan-mar-2023.pdf Note Southeastern figures are also negatively impacted by the opening of the Elizabeth line.

Crossing. National Highways has said, pursuant to its licence, that it will cooperate with KCC in this matter.'

3.22. As the Council understands it this work uses data from National Highways as input to the Kent Transport Model, which includes a much finer grained highway network, thereby meeting one of the issues raised in the Gravesham LIR. It is unclear from the WSP report what levels of development have been used. Various metrics have been used to assess junction and link performance, with concerns raised about (REP1-243 KCC WR para 8.17):

- M25 J2 (A2/A282)
- A2 Pepper Hill (Hall Road)
- A2/A227 (Tollgate)
- A2 Gravesend East (Valley Drive)
- M2 J2 (A228)
- M2 J3 (A229)
- M20 J6 (A229)

3.23. Various other junctions are also of concern, with specific mention on M2 J1 (Three Crutches), where KCC supports Medway Council's comments.

3.24. The WSP report identifies the following corridors as concerns:

- *The A2 between Springhead and Gravesend East: Impacts for this corridor include the SRN junctions mentioned earlier (Pepper Hill, Tollgate and Gravesend East). Tollgate and Gravesend East are also forecast to experience queue lengths blocking back through upstream junctions in the with-LTC scenario, with associated delays and road safety risks. Journey time increases of up to 6% on roads north of the SRN junctions to/from Gravesend are forecast with LTC, resulting in congestion and delays.*
- *The A227 between the A2 and the M20: Implementation of the LTC leads to significant increases in heavy goods vehicle (HGV) traffic on alternative routes between the A227 / Green Lane and A2 to access the LTC, including the villages of Meopham, Hook Green, Sole Street and Cobham.*
- *The A228 between the M2 and the M20: The vast majority of junctions along the A228 are forecast to see significant increases in traffic in the with LTC scenario; with particularly HGV traffic flows along the A228 increasing by up to 160 vehicles per hour. A number of junctions are also forecast to operate over capacity with LTC, leading to further congestion and use of inappropriate alternative routes.*
- *Cycleway corridors: These corridors include sections of the A226 between Gravesend and Strood and a section of Chatham Road adjacent to the A229. Here the 2045 with-LTC scenario increases traffic flows in turn increasing the safety risks to cyclists in view of current active travel provision.*

3.25. This is a useful overall summary of the position. Stage 2 of the work by WSP is looking in more detail about what interventions might be needed by way of mitigation. The principle is however (which National Highways have yet to accept) that they should be prepared to deal with issues on the local network that arise

directly from their scheme. A detailed monitoring strategy can cover that and identify what the actual issues are in due course.

3.26. National Highways are not being expected to solve all of Gravesham's highway issues (existing or from new development), but they do need to be an active part of the monitoring process and contribute appropriately to impacts they cause.

3.27. On the cycling, the concept of rebuilding the A226 from Gravesend through to Strood has been mooted by Higham Parish Council. Originally this was wider carriageway with footway on north side. For safety reasons it was reconfigured into its current form, but the ideal would be to have separate carriageway, cycleway and footway for which there is space in theory, apart from pinch points like Gads Hill in Higham. The project could deliver this at Chalk where the construction accesses meet the A226.

3.28. Blue Bell Hill junction and the A229 (M2 J3 to M20 J6) remain a concern due to the knock on impact on the A228 and A227 though traffic trying to find alternative routes. It is noted that Kent CC is asking for £35m match funding (KCC WR page 5) to go with the potential funding from Large Local Major funding they have applied for. Should the LLM funding not be forthcoming the full funding should be required.

3.29. The Council fully support the KCC comment on construction, including the use of internal haul roads by as much construction traffic as possible. Higham (REP1-351) and Shorne Parish (REP1-408) Councils WR's raise concerns over the impact of car and van traffic on small country roads and also the pinch points on the A226, notably at Gads Hill. There are questions over surfaces on the main north south haul road, as well as the various PROW routes during construction and then operation.

3.30. Medway Council's LIR (REP1-258) also includes a substantial analysis of modelling done by Systra that looks at the impact on the Medway Towns of the Lower Thames Crossing and with a possible Local Plan scenario included. This shows that concerns over the sub networks examined, with a strong indication that some demand is not showing up as it cannot access the network or is held at other junctions (section 3.4 page 29). This includes the M2 J2-J4 and A228 Cuxton and Halling. Discussions are taking place on the current issues with M2 J1.

3.31. Medway Council's WR (REP1-256) highlights that:

- The uncertainty log does not contain certain key developments (Brentwood Borough Council (REP1-219) raises a very similar issue at the northern end of the project
- The development quantities in the emerging Local Plan are not catered for, for which access to and along the M2 is essential
- Lack of commitment to mitigation

3.32. Thurrock Council LIR (REP1-281) has a significant discussion of transport modelling, local road impacts and the business case. Among many points made the following would be highlighted:

- 2016 base for LTAM is out of date
- The M25 traffic is only served by relief primarily from A2/M2/M20/A20 traffic

- Importance of sensitivity testing – Gravesham has already highlighted the value of time issue and has noted the potential impact of COVID on business trips and commuting
- Lack of any information on resilience
- Reliance of the business case on wider benefits to raise the BCR above 1

3.33. Port of Tilbury (REP1-274) is approaching the issues from the perspective of supporting the project but highlighting the access issues via the A1089 and therefore the importance of the Tilbury Link Road (TLR). Access from south of the river seems to differ across time periods suggesting the LTC and A13 junction may not be the quickest route from Rochester point at all times.

3.34. They are pressing for modelling of the TLR as well as understanding the impacts on the A1089 junction and those approaching the port.

3.35. DP World London Gateway (REP1-133) raise, from their own perspective very similar points about the operation of the their port and the implications for the Orsett Cock and Manorway junctions along the A13. In addition they note the lack of analysis of the operation of the network from incidents at the Dartford Crossing, which for 2019 are estimated by the applicant to be 1.5 hours a day (see DTA Planning Consultants report for detailed information).

3.36. Some background information on commuting to set the context of Gravesham residents travel patterns. From the 2011 Census (as the 2021 Census took place in a lock down the results are not representative), 57% of residents remain in the North Kent (Dartford, Gravesham & Medway) for work and 27% go to Greater London area. In Gravesham 78% of workers come from North Kent and only 6% come from GLA. 65% travel by car (including as passengers and on a motorcycle) and 27% by public transport. Only 8% worked at home (26% in 2021 Census with obvious caveats). Cross river travel is on a very small scale, though historically there many who worked in Tilbury (port or on the boats) who lived in Gravesend.

3.37. The conclusion of the review of the transport elements of these LIR's and WR's is clear, and that the concerns are in general shared by both interested parties who support the project and those who do not:

- There are obvious concerns that the modelling is constraining local development to levels below that expected by Government housing policy and is therefore not providing a proper picture of the potential impact as required for an environmental assessment
- The highway networks are already under stress at peak times, with the morning peak on the strategic network (7-8 as modelled) different from the local road network (8-9).
- If the concerns the modelling is suggesting become reality it follows that the claimed wider economic benefits claimed by the scheme will not be realised as the road capacity simply is not there
- Detailed modelling of particular junctions has just become available and will need to be analysed
- Resilience has not been given enough attention as to what the actual benefits will be

- From the Gravesham perspective the keys issues are:
    - Junctions along the A2 are showing stress even if the mainline flow west of the A122 benefits
    - M2 J4 to M20 J6 A229 is stressed, and this is leading to flows diverting to A228 and a lesser extent A227 corridor
    - HGV's increase on the A227 and there is evidence of potential use of Sole Street/Henhurst Road to reach Marling Cross
    - A226 cycle lanes – suggestion has been made originally by the Higham Parish Council that A226 be reengineered as separate carriageway, footway and cycleway
    - During construction there are concerns about cars and van using local roads to access site compounds as well as the implications of HGV's using local roads, in particular A226 as highlighted by Higham Parish Council.

Cultural Heritage

3.38. KCC LIR has provided more information on the archaeology of the area, and the appropriate approach to the necessary investigations, especially on the sites that have not been surveyed in detail to date. Taken with the Gravesham material LIR Appendix 6, this provides a comprehensive context in which to place the landscape and heritage features . Historic England's comments focus on the LCC cottages (non-designated heritage assets) on the north side of Thong. Their contribution needs to be set in the wider historical setting which provided a context for landscape and nature conservation.

Landscape and Nature Conservation

3.39. Kent Downs AoNB unit WR (RES1-378) focuses on the landscape within and the setting of the AoNB, and highlighting that the impacts only became apparent after the original route choice and that the utilities corridor (with its ancient woodland and SSSI impact) was an even later addition with the discovery of the size of a large gas main under the A2.

3.40. The constraints of the area mean that there is very little scope for mitigation actually around the project, so some wider package of measures is required. The scheme removes the central reservation planting and some of that along HS1 accentuate the impact.

3.41. Natural England WR (RES1-262) on landscape is clear that the proposal has a major impact on the Kent Downs AoNB and its setting. The contrast is made between the 2020 version and 2022 which seems to have downplayed the impacts without explanation, a matter highlighted by Gravesham and AoNB unit. Both highlight the discrepancy over the boundaries between the Shorne and Cobham local character sub areas.

3.42. There is concern over the degree of flexibility in the proposed securing mechanisms, which include too much use of the phrases like 'substantially in accordance' or 'reasonably practical'. More clarity is needed now over what will provided and in the Council's opinion how all the sites integrate together. A specific example is the proposed car park site off Thong Lane.

3.43. Kent Downs AoNB unit have just been awarded funds from National Highways Designated Funds to look at the Cobham/Shorne/Cuxton/Luddesdown area to by March 2025 develop the strategy and implementation area wide plans identified from workshops involving relevant parties. This fits into a context Natural England looking at a Super National Nature Reserve. The study will allow bidding into appropriate sources of funding in the future.

3.44. Specifically, areas of study are:

- Landscape Character Assessment and Implementation Plan
- Community and Public Consultation and Implementation Plan
- Veteran Tree Strategy and Implementation Plan
- Heritage Assessment, Strategy and Implementation Plan
- Visitor Access & Engagement Strategy and Implementation Plan
- Grazing Strategy and Implementation Plan
- Deer Management Strategy and Implementation Plan
- Environmental and Ecological Management Strategy and Implementation Plan

3.45. On Green Belt Thurrock Council LIR (REP1-281), especially appendix L (REP1-293) provides very similar comments to those set out by Gravesham in its LIR. Both Authorities feel that the analysis provided is insufficient to make the judgement needed on the impact.

3.46. Natural England nature conservation comments requests more detailed information about the nature and scale of what is being lost and how the mitigation areas relate to this. Natural England support the target of the project providing at least 10% biodiversity net gain.

3.47. KCC Nature conservation comments provide some more detail about the impacts on specific species, and the lack of clarity of what there are and what is being done to mitigate, a lot of which revolves around the detail of site management.

3.48. The Woodland Trust WR (REP1-306) makes it clear that they have three major concerns, as owners of Ashenbank Wood:

- Its negative impacts to ancient woodland and veteran trees
- The deeply troubling carbon impacts and nitrogen-based pollution
- The lack of transparency around the scheme

3.49. Taken together all these contributions support the need to provide a comprehensive landscape and ecology plan over the area which looks to integrate the planting areas together into a unit rather than on a site by site basis, taking into account factors like the historic context and access routes etc.

Port of London

3.50. Port of London Authority WR (REP1-269) raises two issues of. It is important to ensure safe navigation of the river for port traffic, which requires the ability to dredge to appropriate depths, and that in turn requires the appropriate safety margins for any tunnel beneath it. The upward Limit of Deviation of the tunnel therefore poses a potential issue as understood from the submissions made to the

operation of the river, which the Council supports. It is also relevant to point out that the tunnel going deeper would also raise issues because of the possible knock on effects on the approach gradients or related matters.

3.51. The explosives anchorage is shown on the Council's constraint's maps used in assessing planning applications. It may be rarely used but it is part of the overall logic the Council's approach is that applicants should seek to replace 'things' that get displaced by their development proposal.

Emergency Services and Safety Partners Group

3.52. Emergency Services and Safety Partners Group, of which Gravesham Council is part, raise a number of concerns in its WR (REP1-337). The Council has an interest from its role in the Kent Resilience Forum, as well as any planning implications that may arise from the construction and operation of the project. The planning issue is over what a RVP consists of and how it is maintained in a Green Belt location given that it will very rarely used. Another an example a single boring machine means that emergency services in Kent need a plan to deal with an emergency during construction in the northbound tunnel that would not be needed if both were bored from the north.

3.53. It has been disappointing to see how little progress has been made on the original 56 issues put forward by the group. The original TDSG group did not operate satisfactorily as issues like the different nature of electrical to petrol fires or the evacuation plans for the disabled did not seem to have been thought through. The Council supports the group is seeking to achieve from a safety point of view a good design and robust safety plans (including ensuring speedy response times).

4. Accompanied Site Inspection Itinerary

4.1. Gravesham has reviewed the amended site inspection itinerary in association with the record of the unaccompanied site inspections (SI-001 to SI-005). The following comments are offered:

- The proposed itinerary covers the rural local roads that may be impacted by the scheme in construction and/or operation. It is noted that as drawn on the plan (figure 1) the drive along Henhurst/Jeskyns Roads is shown as proceeding through Cobham on The Street, allowing sight of the physical restrictions. The route seems to terminate at The Street/Cobhambury Road (which connects to Cuxton) /Halfpence Lane junction. It would be logical to drive north on Halfpence Lane to join Darnley Lodge Lane and Thong Lane enroute to Shorne Ifield Road. This also gives views over Cobham Park from the west side in passing.
- The drive along Thong Lane through Thong allows view over the land east of Thong as well as west to the A122 alignment and across to the surrounding residential areas and Clay Lane Wood.
- Both the Shorne nitrogen deposition sites (Court Wood and Fenn Wood) require walking for access and parking reasons. Court Wood can be reached from Swillers Lane, where parking is possible. Fenn Wood can be reached on an extended walk from Shorne Woods Country Park or from Shorne village centre. These can be done as USI as there a footpaths.
- Gravesham do not need to attend the visit to the Dartford Crossing Control centre having had a tour on a previous occasion

5. Comments on the Applicant's responses to Action Points consequent upon ISHs

5.1. The Council has already drawn attention to its concerns about the Applicant's approach to modelling requests in response to Action Point 10 following ISH1.

5.2. The Council also notes the information that the Applicant has provided in Annex H of its Post Hearing submissions for ISH1 [REP1-83], at pp.88-89, which addresses Action Point 7 following ISH2 (as indicated at paragraph 4.8.2 of REP1-83). It appears that the Applicant has changed its position on the provision of a sensitivity test for the value of time, which the Council welcomes. The Applicant in section H.2 of Annex H of REP1-83 has presented the results of the additional sensitivity tests, which are based only on the Core Scenario. Even so limited, the Council notes that the composite effect of using the lower band parameters for the value of time (as recommended in WebTAG Unit A1.3) leads to an adjusted BCR of 0.99 and the composite effect of using the upper band parameters leads to an adjusted BCR of 1.45. The Applicant has chosen not to present the results for the initial BCR in any of the scenarios, but it would be reasonable to expect that the initial BCR (excluding wider benefits) would be lower than the adjusted BCR in all cases. It can be noted that a BCR of 0.99 would fall into the 'poor' Value for Money (VfM) category according to DfT guidance[6], whereas a BCR of 1.45 would still be in the 'low' VfM category (as is the existing BCR of 1.22 put forward by the Applicant without this sensitivity testing).

5.3. It can also be noted that the Applicant has not commented on the VfM implications of the sensitivity tests it has now carried out. The Council's comment is that the sensitivity tests show quite how much the adjusted BCR is influenced by the 'value of time' input, and that this reinforces the Council's concerns that the benefits of the LTC are marginal at best. The sensitivity tests show that using different inputs for the value of time serves to weaken further the VfM credentials of the LTC. This tends to underscore the Council's concerns about the project as an inappropriate 'answer' to the problems presented by the existing Dartford Crossing.

5.4. The Council also notes that the Applicant has responded to Action Point 7 following ISH2 in its Post-Event Submissions for ISH2 [REP1-184]. Albeit that the response (at para 1.3.23 of REP1-184]) is somewhat cryptic, the Council takes it, both from what is said and from what is not said, that the Applicant is not aware of ANY instances where the bespoke DfT discharging unit has refused to approve a submission by National Highways for the discharge of (or under) a Requirement of a highways DCO. It would be reasonable to infer that had there been such a refusal, the Applicant, as the body making the application that led to such a refusal, would be well-aware of it. The Council therefore maintains its concerns that the process does not provide adequate reassurance that there will be rigorous and robust external scrutiny of the discharge of Requirements, and that the local authorities would, in the context of the LTC, be better placed to fulfil this role.

6. Comments on Applicant's amended dDCO: article 2

6.1. REP1-042 amended DCO Article 2 includes a new definition of "begin". Requirement 2 provides the authorised development "must begin no later than the expiration of 5 years beginning with the date that this Order comes into force".

6.2. The definition of "begin" includes any material operation and any preliminary works, the latter of which are defined in paragraph 1 of Schedule 2. Certain of the

[6] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/918481/value-for-money-supplementary-guidance-on-categories.pdf

preliminary works are minor in nature and so Requirement 2 could be discharged by the developer carrying out a minor work only.

6.3. Since, in the usual way, there is no deadline for completing the authorised development once it is begun, the developer could begin it and then not do anything for as long as the developer likes, particularly if the developer has exercised its powers to acquire land compulsorily under article 27 within the deadline set out in that provision.

03 August 2023

Appendix 1

Gravesham comments on applicants response to Relevant Representation (REP-268)

It essentially divides matters between those in the SoCG and 'new' matters

The tables summarised issues, adds a PADS reference where relevant, and notes current position from Gravesham perspective

Original SoCG is APP-125 – now updated as REP1-100 (clean) and REP1-101 (tracked changes) and includes 23 new entries

Heading	Topic	SoCG#	PADS#	Current position
Charging	Principle of discounts for Local residents	2.1.47	GBC037	2.1.47 marked as agreed refers to discount on LTC but not the Dartford Crossing
	Timing and Approach to Equity - Dartford Crossing	2.1.48	GBC037	No change in applicant position of no discount for Dartford Crossing – simple matter for them to resolve
Construction	Effects on Living Conditions /Habitability of Properties	2.1.25	GBC025	Polperro et al – response refers to SoCG etc. but does not address basic issue
	Construction Workforce Effects on Accommodation	2.1.24	GBC024	NH still assert not an issue
	LRN Construction Access Points - Marling Cross	2.1.34	GBC029	APP-547 – HGV traffic banned from Thong Lane but not cars and vans
	Use of the River - Local Road Network	2.1.27	GBC026	River usage – not proposed APP-338
	Temporary Diversions of Highway during Construction	2.1.43	GBC032	Brewers Road closure issue – really about local engagement and management (and monitoring) of impacts
Cultural Heritage	Mitigation: Cultural Heritage Mitigation Strategy	2.1.84	GBC061	Applicant relies on APP-144 6.1 ES Chapter 6. No progress
DCO and Consents	Discharging Requirements	2.1.1	GBC001	See GBC position in ISH2 Post hearing submission REP1-236 item 4(d).
	A2 junction	2.1.19	GBC019	Design matter

Heading	Topic	SoCG#	PADS#	Current position
Design - Roads, Tunnels, Utilities	Width of Green Bridges (Thong Lane North & South and Brewers Road)	2.1.21	GBC021	Thong Lane north OK, Thong Lane south could be expanded. Brewers Road constrained by HS1 and SSSI to north. Suggested Park Pale could be rebuilt in LIR – worth pursuing? Applicant feels adequate provision has been made.
EIA Methodology	Approach to EIA Regulations and DMRB	2.1.63	GBC039	Applicant has not altered position
	Comprehensive Monitoring Strategy	2.1.61	GBC046	Applicant has not altered position
	Comprehensive and Interactive Mitigation Strategy (LVIA, Biodiversity, Historic Environment)	2.1.62	GBC047	Applicant has not altered position
	Cumulative, In-Combination Impacts on Local Communities	2.1.67	GBC049	Applicant has not altered position
Landscape and Visual	Effects on the setting of the AONB	2.1.85	GBC065	Applicant has not altered position
	Effects on existing habitat replacement (Channel Tunnel Rail Link (CTRL))	2.1.102	GBC079	Applicant has not altered position
	Chalk Park	2.1.96	GBC072	Applicant has not altered position
Operations and Maintenance	Lack of Rest and Service Area in Project	2.1.44	GBC040	Applicant has not altered position
Planning Statement/Policy	Green Belt – Inappropriate Development in the Green Belt	2.1.4	GBC007	Refers to Planning Statement – see LIR for current GBC position
	Green Belt - Very Special Circumstances	2.1.5	GBC007	Refers to Planning Statement – See LIR for current GBC position See REP1-293 Thurrock LIR Appendix L
Population and Human Health	Consideration of effects on the Tilbury-Gravesend Ferry	2.1.110	GBC089	Applicant has not altered position – see LIR

Heading	Topic	SoCG#	PADS#	Current position
	NMU Crossing of the LTC/River	2.1.111	GBC090	Applicant has not altered position – see LIR
	Construction Effects, Closures and Diversions of PRoW	2.1.108	GBC087	Applicant has not altered position – see LIR Applicant has not altered position – see LIR REP1-241 KCC LIR section 9, & REP1-306 Woodlands Trust WR
	PRoW access during construction	2.1.112	GBC087	Applicant has not altered position – see LIR REP1-241 KCC LIR section 9, & REP1-306 Woodlands Trust WR
	Effects on National Cycle Route 177 (NCR 177)	2.1.113	GBC091	Applicant has not altered position– see LIR REP1-241 KCC LIR section 9, & REP1-306 Woodlands Trust WR
	Timing, Form and Function of Replacement Open Space	2.1.107	GBC086	Longer explanation of Chalk Park (GBC015) otherwise no change
	Effects on Primary School Children (Construction)	2.1.114	GBC093	Applicant has not altered position
	Assessment of Cumulative Effects on Health	2.1.115	GBC092	Applicant considers under discussion with reference to HEqIA
	HIA Recommendations from Independent review - Monitoring	2.1.126	GBC094	New material in SoCG (2.1.115 to 2.1.134) asking for Gravesham agreement. Detail being reviewed.
Road Drainage and the Water Environment	Cascading drainage attenuation ponds	2.1.137	GBC096	Applicant refers to application documents APP-516 7.5 Design Principles See also Applicant has not altered position – see LIR REP1-241 KCC LIR section 11
Route Selection, Modal Alternatives & Assessment of Reasonable Alternatives	Development in this alignment/location and general approach to consideration of reasonable alternatives	2.1.6	GBC008	Applicant has not altered position
	Opportunities to reduce car use	2.1.9	GBC010	Applicant has not altered position

Heading	Topic	SoCG#	PADS#	Current position
	Alternative Design Parameters and Modes	2.1.7	GBC009	Applicant has not altered position
	Alternatives	2.1.8	GBC009	Applicant has not altered position
Socio-economic	Use of Local Labour	2.1.69	GBC051	Applicant has not altered position
	Implementation of SEE Measures	2.1.70		REF??? Applicant has indicated a readiness to discuss in more detail with selected tenderer
	Southern Valley Golf Course	2.1.71	GBC052	Applicant has not altered position – but there has been a significant change in circumstances
	Effects on Cascades Leisure Centre	2.1.73	GBC054	Applicant has not altered position
	Shorne Woods Country Park (SWCP) Access	2.1.72	GBC053	Applicant has not altered position
Terrestrial Biodiversity	Utility Diversion effects on Ancient Woodland and Planting	2.1.103	GBC080	Makes point land area significantly reduced over time (but was of course not in the originally) See Applicant has not altered position – see LIR & REP1-306 Woodlands Trust WR
Traffic and Economics	Tilbury Junction Arrangement	2.1.56	GBC040	Modelling and Services issue
	Interpretation of DMRB Guidance	2.1.53	GBC039	Applicant has not altered position
	Compliance with EIA Regulations and Reliability of LTAM	2.1.54	GBC039	Applicant has not altered position
	Local Growth Assumptions	2.1.52	GBC038	Applicant has not altered position

New matters (new means from RR's) - SOCG and GBC PADS refs in *red* are new additions to the schedule

Heading	Topic	SOCG#	PADS#	Current position
Climate	Carbon footprint	*2.1.147*	GBC100	Text argues that project needed despite carbon impact and the steps being taken to reduce carbon impact.
	Carbon budget	*2.1.151*	GBC101	Applicant Says no impact on Gravesham Carbon budget because Government does not allocate strategic road emissions by Local Authority. The impact however occurs in a specific geographic location and in this case involves significant change. See fuller discussion in main text of the D2 submission.
Cultural Heritage	Appraisal methodology	*2.1.152*	GBC063	See REP1-232 Gravesham LIR Appendix 6 Cultural Heritage Assessment for comments on methodology in section 3
	Surveys of Southern Valley Golf Course (SVGC) and the nDEP sites	*2.1.153*	GBC060	Applicant now owns SVCG and therefore can carry out surveys and is doing so on this and the nDEP sites. This would resolve the survey issue, but further comment will depend on what is, or is not, found
DCO & Consents	Bluebell Hill issue	*2.1.154*	GBC003	Falls back on the KCC scheme. Note KCC are asking for £35m on the assumption they get funding for SoBC, which is not certain.
	DCO itself and control documents are too flexible	*2.1.155*	GBC004	Claims dDCO accords with advice
	S.106 agreement	*2.1.156*	GBC002/ GBC022	Applicant position set out in APP-505 Section 106 Head of terms. No discussions have been held on moving a s.106 agreement forward.
EIA Methodology	Timetable for delivery of project	*2.1.157*	GBC023	Development must be delivered within 5 years of consent (see AS-038 amended dDCO). Point was made before two year delay to start of construction.

Heading	Topic	SOCG#	PADS#	Current position
Geology and Soils	Perched water tables in Shorne/Cobham	*2.1.158*	GBC095	About monitoring and taking appropriate measures should one of the perched water tables get breached in some way.
Landscape & visuals	Landscape appraisal lacks clarity	*2.1.159*	GBC064	References all the technical documents as to approach and proposed mitigation measures. See REP1-233 Gravesham LIR Appendix 7a Landscape and Visual
Noise and Vibration	Increase in flow along Henhurst Road (including more HGV's)	*2.1.160* 2.1.17	GBC017	Noise impact can be dealt with by monitoring (noise and/or traffic) Traffic impact on Henhurst Road (which also relates to A227 Wrotham Road/Green Lane junction in Meopham) from HGV's highlighted by WSP report for KCC – Appendix B of REP1-241 KCC Local Impact Report
Operation & maintenance	Design standard of A122	*2.1.161*	*GBC108*	Applicant says smart motorway issue does not impact scheme (which is to design standard GD300). Gravesham would comment that if the road is designed to a standard that is not felt to be safe that is the issue. What it is called in legal terms is irrelevant REP1-241 KCC LIR section 8 Transport Impact D on road safety overall
Planning Statement/Policy	Constraint on development and additional transport modelling costs	*2.1.162*	GBC008	Gravesham LIR sets out GBC position in relation to the failure to provide a sensitivity test which reflects the levels of housing development being asked of the Local Authorities by the Government
	Need for project in APP-494 Chap 5			
	APP-529 Chap 7 TA adverse effects see also APP-535 Monitoring & compliance			

Heading	Topic	SOCG#	PADS#	Current position
	Effects on Development Plans in APP-154 & APP-484			
	Assessment on residential development APP-151			
Road Drainage & water environment	Ground stabilisation tunnel and North Kent marshes water table	*2.1.163*	GBC078 GBC033	A concern that can be dealt with by adequate monitoring strategy and outline of actions to be potentially taken if necessary. Related issues are stability of the Thames & Medway Canal and the North Kent railway line from any disturbance due to tunnelling.