

Lower Thames Crossing

9.12 Post-event submissions, including written submission of oral comments, for OFH2

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List of contents

	Page number
1 Introduction	1
2 Submissions from Essex County Council	2
3 Submissions from British Horse Society	3
4 Submissions from Essex Area Ramblers	5
5 Submissions from Thames Crossing Action Group	6
6 Submissions from Mr Francis Wilson	16
7 Submissions from Kathryn Homes Ltd, Runwood Homes Ltd and Runwood Properties Ltd.	19
8 Submissions from Mr Robin Beard	23
9 Submissions from Mr Ian Black	24
In response to green belt:	25
10 Submissions from Stuart Dixon	26
11 Submissions from Ms Leigh Hughes	28
12 Submissions from Ms Cathy Sisterton	34
13 Submissions from Ms Jackie Thacker	37
Compounds in Orsett	37
14 Applicant comments in light of Interested Party Submissions	43
15 Next Steps and Closing	45
Glossary	46

Please note: this document contains the Applicant’s written summary of oral submissions made at Open Floor Hearing 2 held on 28 June 2023, and post-hearing comments in response to submissions made by Interested Parties. Where the comment is a post-hearing comment submitted by National Highways, this is indicated.

1 Introduction

- 1.1.1 National Highways (the Applicant), which is promoting the A122 Lower Thames Crossing (the Project), was represented at Open Floor Hearing 2 (OFH2) by Tom Henderson, BDB Pitmans LLP, Partner (TH). The following person was also introduced to the Examining Authority (ExA):
- a. Dr Tim Wright, Lower Thames Crossing, Head of Consents (TW)
- 1.1.2 The Interested Parties in attendance were:
- a. Gary MacDonnell of Essex County Council (ECC)
 - b. Sarah Rayfield of the British Horse Society (BHS)
 - c. Graham Reeve of Essex Area Ramblers (EAR)
 - d. Laura Blake of Thames Crossing Action Group (TCAG)
 - e. Francis Wilson
 - f. Emma Dring on behalf of Kathryn Homes Ltd, Runwood Homes Ltd and Runwood Properties Ltd
 - g. Robin Beard
 - h. Ian Black
 - i. Stuart Dixon
 - j. Leigh Hughes
 - k. Cathy Sisterton
 - l. Jackie Thacker

2 Submissions from Essex County Council

- 2.1.1 **Post-hearing note:** all of the matters raised by Essex County Council (ECC) at OFH1 are captured in the Deadline 1 version of the SoCG with ECC, which contains the Applicant's position on each of those matters. For that reason, and with a view to minimising duplication, the content of the SoCG is not repeated here.

3 Submissions from British Horse Society

3.1.1 **Post-hearing note:** The table below contains the written responses the Applicant wishes to submit in response to comments made by British Horse Society (BHS) during OFH2.

BHS comment made at OFH2	Applicant's response
Public pathways	
<p>BHS requests up-to-date plans, showing footpaths, bridleways, and public or permissive routes, of existing and proposed rights of way.</p>	<p>Details of existing and proposed public rights of way (PRoW) and general provision for Walkers, Cyclists and Horse Riders (WCH) can be found in:</p> <ul style="list-style-type: none"> • - - Rights of Way and Access Plans - Volume B (sheets 1 to 20) and AS-032 – Rights of Way and Access Plans - Volume C (sheets 21 to 49) • APP-320 – Environmental Statement – Figure 13.4 – Population and Human Health Assessment – Proposed WCH Links • APP-530 – Transport Assessment - Appendix A - Public Rights of Way • APP-512 – Project Design Report Part E - Design for Walkers, Cyclists and Horse Riders.pdf <p>In addition to the above information and subject to agreement by the Examining Authority, the Applicant intends to publish a new set of plans at Deadline 2 which will draw together all the various sources of WCH information into a single place.</p>
<p>BHS believes that a public path can be provided for equestrians south of the A2, between Church Road, Henhurst and Half Pence Lane, north of Cobham. Currently, a permissive path is proposed by the Applicant, which BHS believes provides no future security for equestrians or other users. It has provided a written submissions relating to public bridleways and requests a response.</p>	<p>Horse riders already benefit from the provision of permissive paths, specifically for equestrian use, through:</p> <ul style="list-style-type: none"> • Jeskyns – a community woodland located south of the A2 and to the east of Henhurst Road, managed by Forestry England and owned by the Crown Estate. • Ashenbank Wood – along the Darnley Trail managed by the Woodland Trust. <p>Through Ashenbank Wood the Applicant proposes to temporarily resurface the Darnley Trail to cater for cyclists. At Jeskyns there will be no change to the existing equestrian amenities. However, further temporary permissive paths for walkers and cyclists are proposed through Jeskyns to both augment the existing network and cater for other users, most notably cyclists who will make use of these permissive routes whilst the National Cycle Route 177 (NCR177) is temporarily</p>

BHS comment made at OFH2	Applicant's response
	<p>diverted from its current route adjacent to the A2. These routes will also be temporarily resurfaced where required to accommodate all users.</p> <p>Originally the Applicant had sought to create a new bridleway through Ashenbank Wood and Jeskyns, but this proposal was not supported by the Woodland Trust or Forestry England. As the land at Jeskyns is owned by the Crown, the Applicant has no means to acquire compulsorily the necessary land to create a new bridleway.</p> <p>Further details on these matters can be found in a number of DCO Application Documents, notably: ES Chapter 13: Population and Human Health [APP-151], pages 69-74, 125, 182 and 217; and Transport Assessment Appendix A: Public Rights of Way [APP-530], Table 1.6 on page 9 and Table 1.9 on page 15.</p>
<p>The plan showing the bridleway has been named 'permissive pedestrian cycle route, new' in the Transport Assessment, Appendix A, Plate 1.1 [APP-530], suggesting that equestrians are excluded altogether.</p>	<p>The section of route labelled 'permissive pedestrian cycle route' in Plate 1.1 of Transport Assessment Appendix A: Public Rights of Way [APP-530] is correct as this forms an important component of the temporary NCR177 provision. Whilst equestrian users will not be permitted to use this specific route, they will continue to benefit from use of an existing parallel permissive path specifically for equestrian users.</p>

4 Submissions from Essex Area Ramblers

4.1.1 **Post-hearing note:** The table below contains the written responses the Applicant wishes to submit in response to comments made by Essex Area Ramblers (EAR) during OFH2.

EAR comment made at OFH2	Applicant's response
Detailed Design	
<p>EAR requests detailed plans which show the dimensions and surfacing of the new Public Rights of Way.</p> <p>Concerns around the adequacy of detailed design to be submitted – this will need to be adequate in terms of dimensions and surfacing, particularly where there are combined uses.</p>	<p>The exact dimensions and type of surfacing for Walking, Cycling and Horse Riding routes have not been determined yet. These details would be specified during the detailed design phase taking account of site specific conditions, relevant design standards and the requirements of the Design Principles (specifically PEO.03 and PEO.04) [APP-516], with the most appropriate option being used for each route.</p>
<p>EAR will want to be assured that value engineering or cost-cutting does not result in sacrifices.</p>	<p>The Applicant notes this point and confirms their commitment to delivering high quality provision for Walkers, Cyclists and Horse Riders in accordance with Government policy for promoting active travel.</p>
<p>EAR is concerned about the reliability of the traffic forecasts which are based on 2016 data. They suggest there has been a fundamental change in travel patterns following the COVID-19 pandemic and that there is no mention of this in the application documents.</p>	<p>The COVID-19 pandemic and its treatment with regards to the Project's transport model is set out at paragraphs 5.7.38 to 5.7.41 of the Transport Assessment [APP-529].</p> <p>The Project's transport model has been built in line with DfT's Transport Analysis Guidance.</p>

5 Submissions from Thames Crossing Action Group

5.1.1 **Post-hearing note:** The table below contains the written responses the Applicant wishes to submit in response to comments made by Thames Crossing Action Group (TCAG) during OFH2.

Comments made by TCAG at OFH2	Applicant's response
Environmental concerns	
<p>TCAG believes that there is no evidence to suggest that the Project is 'green'. The impacts of the Project are of concern both in construction and once opened. It is estimated that the Project would emit 6.6 million tonnes of carbon.</p>	<p>Minimising the adverse impacts of the Project on the environment is one of the Scheme Objectives (see the Need for the Project [APP-494]). At every step of the Project's lifecycle, consideration has been given and efforts have been made to reduce the environmental impacts, while still fulfilling the needs of the Project. The Applicant has followed the mitigation hierarchy of 'avoid, minimise, restore and compensate' to protect the environment in which the Project would be situated and in keeping with industry best practice. More detail of this is provided overall in ES Chapter 4: EIA Methodology [APP-142], Section 4.6 on pages 14 to 16; and, with respect to carbon specifically, in the Carbon and Energy Management Plan [APP-552].</p> <p>The amount of carbon expected from construction has been significantly reduced by optimising the design of the road, as well as the methods and materials used to construct it. For example, we are considering alternatives to carbon intensive materials such as concrete and steel; and exploring removing diesel from our work sites. The Applicant has sought to secure these commitments via draft DCO [AS-038] Requirement 16 which secures the Carbon and Energy Management Plan [APP-552].</p> <p>The Lower Thames Crossing is also green by design – over 80% of the road will be in a tunnel, cutting or behind an embankment to reduce its visual impact on the landscape. Two new public parks will be created, Chalk Park on the south bank of the River Thames and Tilbury Fields on the north bank, as detailed in ES Chapter 2: Project Description [APP-140] and shown in the General Arrangement Plans [APP-015, APP-016, and APP-017].</p>
<p>The project does not accord with the Climate Change Committee's report, published on 28 June 2023.</p>	<p>National Highways awaits the UK Government's response to the recommendations set out in the Climate Change Committee's progress report to Parliament, published on 28 June 2023 and will continue to support the Department for Transport in decarbonising the transport sector. The Applicant has set out its own pathway to supporting the Department for Transport's decarbonisation of the surface transport sector through the publication of their 2021 plan 'Net</p>

Comments made by TCAG at OFH2	Applicant's response
	<p><i>Zero highways: Our 2030, 2040 and 2050 plan'</i> (National Highways, 2021).</p> <p>Specifically for the Lower Thames Crossing, the Project has set out an industry leading position in terms of driving out carbon in the preliminary design and setting a framework to continue to reduce its carbon impact through the commitments made in the Carbon and Energy Management Plan, which is one of three documents addressing carbon reduction in the DCO Application:</p> <ul style="list-style-type: none"> • ES Chapter 15: Climate [APP-153] • Planning Statement Appendix I: Carbon Strategy and Policy Alignment [APP-504] • Carbon and Energy Management Plan [APP-552]. <p>ES Chapter 15 [APP-153] and Planning Statement Appendix I [APP-504] explain that carbon impacts associated with construction of the Project have been calculated as being no more than 0.058% of the UK's fourth carbon budget and that ground-breaking approaches to procurement and construction have been devised for the Project. It also explains that the Department for Transport's Decarbonising Transport: A Better, Greener Britain (DfT, 2021) is expected to lead to significant reductions in road-user emissions over the lifetime of the Project.</p>
<p>The proposed route would fail against the newly set legal targets for air pollution – PM 2.5 – and the areas that would be impacted by LTC are already suffering from illegally high levels of air pollution and extremely high numbers of air pollution-related illnesses.</p>	<p>The targets for particulate matter where particles are less than 2.5 micrometres in diameter (PM2.5) as set out in the Environment Act 2021 and the Environment Improvement plan, were enacted following the submission of the Development Consent Order (DCO) application, as part of The Environmental Targets (Fine Particulate Matter) (England) Regulations 2023 (ETR) on 30 January 2023. The interim target for PM2.5 is 12.5µg/m³ and a legal target is 10µg/m³.</p> <p>The Environmental Targets (Fine Particulate Matter) (England) Regulations 2023 are clear that the legal target will only be measured and assessed at monitoring stations (such as Defra Automatic Urban Rural Network (AURN) monitoring network). There is only one AURN station that monitors PM2.5 within 200m of the affected road network, in central Grays. The other closest monitors are more than 200m away from the affected road network:</p> <ul style="list-style-type: none"> • At Stanford-Le-Hope adjacent to the A1014. • At Chatham adjacent to the A2. <p>The 12µg/m³ interim PM2.5 target set in the UK Governments Environmental Improvement plan are likely to be determined in the same way as the legal PM2.5 target (i.e. at AURN monitoring stations).</p>

Comments made by TCAG at OFH2	Applicant's response
	<p>The applicant has analysed the latest air quality monitoring data from the AURN Network and it should be noted that for 2022, the interim PM2.5 target was achieved across the entire AURN monitoring network in England (which includes more than 80 monitoring stations).</p> <p>The monitoring station in Grays has been operational for a relatively short time, starting monitoring PM2.5 in 2023, and so there is currently not enough data to determine compliance. It is located in an area that the modelling predicts an improvement in air quality as result of the A122 Lower Thames Crossing.</p> <p>Across the country as a whole, six monitoring stations monitored PM2.5 concentrations which currently are greater than the 2040 legal target of 10µg/m³, but only by a small margin (maximum annual mean 12µg/m³), including the stations at Stanford-Le-Hope and Chatham. None exceed the 2028 improvement target of 12µg/m³.</p> <p>PM2.5 concentrations are expected to decline in the future in response to ongoing actions undertaken by UK government and local authorities to reduce emissions, and so it is likely monitored concentrations would be lower by the legal target compliance date of 2040. It is therefore considered unlikely that the Project would impact on achievement of the PM2.5 targets.</p> <p>Beyond the regulations set out above, there is currently no guidance from Defra on how the targets should be considered in the planning process.</p> <p>The air quality assessment reported in ES Chapter 5: Air Quality [APP-143] showed that the Project would comply with the current legal thresholds for PM2.5. Air quality modelling confirmed that there would be no exceedances of the annual mean PM2.5 AQS objective of 25µg/m³ and the annual mean PM2.5 Limit Value of 20µg/m³ across the study area in both the Do-Minimum and Do-Something scenarios of the construction and operational phases.</p> <p>We understand that there are sensitive populations within local communities such as people with pre-existing respiratory health conditions. Section 7.8 Air Quality of the Health and Equalities Impact Assessment [APP-539] assesses the likely effects of air quality on health and wellbeing as a result of the Project on both general and sensitive populations.</p> <p>The Applicant is undertaking an Air Quality Quantitative Health Impact Assessment which it is proposed to submit at Deadline 2.</p>

Comments made by TCAG at OFH2	Applicant's response
<p>The Project does not meet biodiversity net gain requirements and TCAG is concerned about environmental mitigation and compensation figures used by the Applicant.</p>	<p>The Project has been designed to maximise benefits to biodiversity primarily through the creation of new areas of high quality semi-natural habitat which will be managed appropriate in perpetuity and have been designed to create new and strengthen existing ecological networks, increasing their resilience to future pressures such as climate change. The habitat creation proposed for essential mitigation are appropriate to the adverse effects likely to occur during the Project's construction and operation and are ambitious in terms of the objectives to create high quality habitat. This has been the overarching approach to mitigation design, rather than looking to generate the highest biodiversity metric score possible within the Project's Order Limits. It should also be recognised that mandated biodiversity net gain requirements for Nationally Significant Infrastructure Projects would only apply where the application is made in 2025 or afterwards, and therefore will not apply to the A122 Lower Thames Crossing.</p> <p>The environmental mitigation and compensation figures relating to terrestrial biodiversity, together with any assumptions associated with those, are clearly set out in Environmental Statement Chapter 8: Terrestrial Biodiversity [APP-146] and Environmental Statement Appendix 8.21: Biodiversity Metric Calculations [APP-417].</p>
<p>Means of transport</p>	
<p>The Project has no provision for cross-river active travel and lack of adequate connections would mean that the route is not viable for public transport such as buses.</p>	<p>The Applicant has considered a range of options during the development of the Project to provide improved cross-river provision for walkers and cyclists. The options investigated include using the tunnel, upgrading the existing ferry, relocating the ferry, building a separate bridge or cable car, and providing a shuttle service through the tunnel. These options were not taken forward for a variety of reasons including technical feasibility, operational issues, lack of commercial viability, cost, environmental impacts, and poor safety.</p> <p>Latent demand for walking and cycling across the River Thames at the Project crossing point is low and therefore unlikely to unlock enough trips to make the required infrastructure for a dedicated shuttle service economically viable. Page 48 of Project Design Report Part G: Design Evolution [APP-514] provides further information. In addition, Chapter 5 of the Planning Statement [APP-495] provides an overview of the assessment undertaken on alternative modes of transport.</p> <p>The Project would create opportunities for public transport operators to develop new local and regional</p>

Comments made by TCAG at OFH2	Applicant's response
	<p>bus services, by providing new connectivity between Kent, Thurrock and Essex. Identification and development of these routes is the responsibility of the relevant operators. Local buses will not have to pay the user charge for the Lower Thames Crossing, reducing operating costs for operators as is set out in Section 2.2 of the Road User Charging Statement [APP-517].</p>
<p>Many of the proposed walking, cycling and horse-riding routes are being claimed as new, but they are just realignments of existing routes.</p>	<p>Details of the proposed walking, cycling and horse-riding routes by category (new, improved, realigned) are set out in Transport Assessment Appendix A: Public Rights of Way [APP-530].</p> <p>This is illustrated visually on page 35 of Part E of the Project Design Report [APP-512].</p>
<p>Economic growth, affordability, value for money</p>	
<p>The Applicant has not shared a figure representing the estimated economic benefit of the Project. The cost has gone from £4.1 billion, to £9 billion, with many predicting this will increase to £10 billion.</p>	<p>The Applicant has presented its economic appraisal of the Project within the Combined Modelling and Appraisal Report [APP-518], and in more detail in the Combined Modelling and Appraisal Report Appendix D: Economic Appraisal Package: Economic Appraisal Report [APP-526] and the Combined Modelling and Appraisal Report Appendix D: Economic Appraisal Package: Level 3 Wider Economic Impacts Report [APP-527].</p> <p>The forecast cost of the Project used within the economic appraisal is set out in Table 4.4 of the Combined Modelling and Appraisal Report Appendix D – Economic Appraisal Package: Economic Appraisal Report. This cost (£8,083m) was assured by National Highways in February 2022 (see paragraph 6.2.3 of the same document).</p>
<p>The adjusted BCR has changed from 3.1 to 1.22 and does not take into account the recently announced 2-year delay. The basic BCR is only 0.48 which rates as poor value for money. Works that would be needed as a result of the Project have been removed or not included, and would otherwise generate additional cost, thereby bringing the BCR down further.</p>	<p>The Benefit Cost Ratio (BCR) reflects the value of benefits and costs at the time at which it is produced. Many factors that affect the costs and benefits of the scheme change over time, partly due to a growing maturity in the design of the scheme and changes in the value of benefits. During recent years for example, DfT has changed the value of time savings and the rate of growth of the value of those time savings over time.</p> <p>The BCR of 3.1 dates from the Summary Business Case produced in support of the 2016 route options consultation, and is now seven years old and reflects a scheme at a lower level of maturity.</p> <p>The BCR of 0.48 is only based on the outcome of the Level 1 appraisal, which includes all of the costs and only some of the benefits. The value for money assessment for a scheme under TAG considers the BCR figure that includes the Level 1 and Level 2 benefits. Section 1.4 of Combined Modelling and</p>

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	<p>Appraisal Report Appendix D: Economic Appraisal Package: Economic Appraisal Report [APP-526] provides details of how the published central case BCR of 1.22 is derived.</p> <p>The wider economic impacts costs associated with the Project have been appraised following DfT TAG guidance. If additional transport schemes, outside the scope of the DCO application, are proposed in future their appraisals would include an assessment of both the benefits and costs of such a proposal. It is not necessarily the case that a combined BCR of the Project and any combination of those schemes would be lower than the BCR of the Project alone, as this is dependent on whether the benefits included in the BCR calculation for a particular set of schemes outweigh the costs or not.</p>
Design Capacity	
<p>The Dartford Crossing required a reduction of 25% to bring it back below design capacity in terms of number of vehicles per day. The Project proposes only a 19% reduction, which reduces in later years.</p>	<p>To understand the performance of the Dartford Crossing, in scenarios with and without the proposed A122 Lower Thames Crossing (i.e. the Do Minimum and Do Something scenarios) the journey time benefits and the journey time reliability benefits provide the means to understand the changes in traffic flows arising from the proposed new road, and to assess whether the proposed new road would continue to provide relief to the Dartford Crossing into the future. The benefits arise from both a reduction in the total number of vehicles using the Dartford Crossing and from changes in the journeys and types of traffic using the crossing. This is set out in more detail in Section A.2 of Annex A of the Applicant's Summary of Oral Evidence and Post-Hearing Comments for Issue Specific Hearing 1 (Document Reference 9.10), submitted at Deadline 1.</p>
<p>Thurrock Council's analysis of the Applicant's traffic modelling concluded that the reduction in traffic by the Project would be 4% in the am peak hour and 11% in the pm peak hour. It also estimated a 50% increase in cross-river traffic if the Project goes ahead.</p>	<p>The claim of a 4% reduction is incorrect and no evidence has been published by Thurrock Council to support it.</p> <p>When the Lower Thames Crossing opens for traffic it is forecast to reduce traffic on the Dartford Crossing by an average of 19% in the peak hours, as set out in the Transport Assessment [APP-529].</p> <p>Thurrock Council appear to have assumed that traffic volumes would not increase between 2016 and 2045, in the do minimum scenario. This is clearly wrong as traffic levels are already higher than they were in 2016.</p> <p>When the Project opens to traffic (modelled as 2030 in the DCO application), our traffic modelling shows that if the Lower Thames Crossing is built then traffic levels on the Dartford Crossing are predicted, on average, to fall by 19% in the peak hours. This compares traffic predicted to use the Dartford Crossing in 2030 if the</p>

Comments made by TCAG at OFH2	Applicant's response
	<p>Lower Thames Crossing were not built, compared with traffic in the same year if the Lower Thames Crossing is built. Even after the Lower Thames Crossing has been open for 15 years, traffic levels using the Dartford Crossing are still predicted to be an average of 13% lower in the peak hours than in the do minimum scenario.</p> <p>Following construction of the A122 Lower Thames Crossing there will be increased capacity across the River Thames, and the relief in congestion and new capacity will allow people to make different journeys, which will include some new journeys across the River Thames. Table 5.2 of the Need for the Project [APP-494] sets out the changes in forecast daily traffic flows. It is forecast that the total number of trips across the River Thames on both Dartford Crossing and the A122 Lower Thames Crossing would increase by 32% in 2030, and 44% in 2045, compared to the Do Minimum scenario with just the Dartford Crossing.</p>
<p>Evidence shows that new roads create new traffic, induce demand, and would also add pressure to the existing network.</p>	<p>The creation of new capacity on the road network will lead to changes in the way people travel. Some people will choose to make different journeys because shorter or less congested routes become available, and some people who would not previously have travelled will choose to make new journeys because the faster or shorter journey becomes more affordable. As a result, there will be changes in the lengths of journeys made, and in the total number of journeys made.</p> <p>The traffic forecasts indicate that in the 2030 AM Peak there will be an increase in the total number of cars of 0.18% across the Lower Thames Area, and a 1.03% increase in the PCU/km travelled. More information is set out at in section A.3 of Annex A of the Applicant's Summary of Oral Evidence and Post-Hearing Comments for Issue Specific Hearing 1, submitted at Deadline 1.</p>
<p>The Applicant has not planned for how traffic would migrate between Dartford Crossing and the Project when there are incidents and there would not be adequate connections. It does not improve resilience.</p>	<p>The Project would include junctions with key parts of the strategic road network (SRN), such as the A2/M2, A13/A1089 and M25. It would also provide connections to a number of local roads via the junctions at Orsett Cock in Thurrock and at Gravesend East.</p> <p>The new road would feature advanced safety systems, including variable mandatory speed limits, red-X lane signalling to support incident management, stopped vehicle detection systems, CCTV, and emergency areas for road users to access in an emergency. Incident management plans and protocols would play a key part in minimising the impact of incidents.</p> <p>The number of incidents and collisions at the Dartford Crossing would fall as a result of the reduced traffic</p>

Comments made by TCAG at OFH2	Applicant's response
	<p>flows, which would improve resilience at both crossings. As a result of the average 19% reduction in traffic in the peak hours the impact of incidents on the road network would be reduced and the road network would be able to recover faster.</p>
<p>It is predicted that there would be 2,147 additional accidents over 60 years if the Project goes ahead. This would be a drain on already stretched emergency services and healthcare.</p>	<p>Information on accidents is provided in Chapter 9 of the Transport Assessment [APP-529]. Over the study area as a whole there is predicted to be a decrease in the number of accidents per vehicle kilometre driven, but due to the increase in the total number of vehicle kilometres driven as a result of the Project there is predicted to be an overall increase in the number of accidents.</p> <p>The Applicant has reported that there would be an increase of 2,672 casualties in the first 60 years after opening, of which 2,464 would be classified as slight, 182 as serious and 26 as fatal. These casualties are assessed across a wide area, as area set out in Plate 9.1 of the 7.9 Transport Assessment.</p> <p>The health outcome for affected communities / sensitive populations as a result of changes in road safety during operation of the Project are assessed as neutral, as set out in Section 7.7 of the Health and Equalities Impact Assessment [APP-539].</p>
Road design and alternatives	
<p>The Project would be a 'smart motorway by stealth' and the application documents state that it is being coded as a 3-lane motorway, with the exception of the southbound stretch between the M25 and A13.</p>	<p>The reason for coding the Project as a motorway is provided in paragraph 6.2.3 of Combined Modelling and Appraisal Report Appendix C: Transport Forecasting Package [APP-522]. When a link is coded into the Saturn software information is provided on the distance of the link and the capacity of the link. The capacity is affected by a number of factors, such as the road type, number of lanes, the width of the lanes, the gradient of the road and the mixture of traffic using the road. Given the prohibition of slow moving vehicles from the Project, its mainline links were coded with the capacities and speed flow curves used to describe motorway links rather than the coding for an all purpose trunk road. As the forecast volume of traffic on the mainline of the Project is well below the theoretical capacity of the links, the coding of the links in this way would make no discernable difference to the forecast traffic flows and times along the Project. Nor does coding it in this way affect the clear design, legal and safety features of the Project as an All-Purpose Trunk Road.</p> <p>When calibrating the coding of links in a Saturn highway model that already exist on the ground, the capacity and other characteristics of the road used in the coding of that road in the model is checked against the observed traffic characteristics on that road. During</p>

Comments made by TCAG at OFH2	Applicant's response
	<p>the calibration process, as reported in para 5.5.2 of Combined Modelling and Appraisal Report Appendix B: Transport Model Package [APP-520], the A2 eastbound between the M25 and M2 junction 1 was coded using a motorway capacity, as this matched the observed use of the road. This section of the A2 is adjacent to the Project.</p>
<p>In 2016, the Applicant did not consult on location options and presented a biased consultation in favour of options at Location C. There was a distinct lack of adequate consideration of alternatives.</p>	<p>As required by the National Policy Statement for National Networks (paragraphs 3.3, 4.11, 4.26, 4.2), the early development of the Lower Thames Crossing involved a detailed options appraisal. Between 2009 and 2017 a series of corridors were considered, and narrowed down into defined potential routes through a process of study and consultation. This process is set out in the Planning Statement Chapter 5: Project Evolution and Alternatives [APP-495] (Section 5.4) and in ES Chapter 3: Assessment of Reasonable Alternatives [APP-141] (Sections 3.7, 3.8 and 3.9).</p> <p>The 2016 route options consultation contained information about why Location C was being pursued instead of Location A. This was a matter consultees were able to comment on, and indeed did so, leading to the preparation of a further assessment to support the decision. Further assessment on Location A (route 1) was undertaken following the close of the 2016 consultation.</p> <p>The Secretary of State set out the preferred route at Location C in 2017, and the basis for not selecting Location A (and specifically Route 1) were provided in Section 3.2 of the Post Consultation Scheme Assessment Report Volume 7 (Highways England, 2017).</p>
<p>The Applicant avoided proper consideration of rail alternatives – improvements between Ashford and Reading would negate the need for the Project.</p>	<p>In response to questions from the ExA, it was noted that TCAG agreed that there is a need to do something to alleviate congestion at the Dartford Crossing.</p> <p>The Lower Thames Crossing would not prevent such an improvement to the rail freight network being provided should the DfT or Network Rail consider such infrastructure is required and feasible to reduce road-based transportation of freight. However, it should be noted that improvement to the rail freight network between Ashford and Reading does not currently form part of either the DfT or Network Rail's plans to increase capacity of the rail freight network, nor is the Applicant aware of any published assessment of the benefit, feasibility or cost of providing such infrastructure.</p> <p>Further consideration of rail alternatives is provided in section B.2 of Annex B of the Applicant's Summary of Oral Evidence and Post-Hearing Comments for Issue</p>

Comments made by TCAG at OFH2	Applicant's response
	Specific Hearing 1, (Document Reference 9.10 submitted at Deadline 1).
The accounting officer assessment for the Project is nearly three years old.	<p>The Accounting Officer Assessment was published on 6 January 2023 on the Department for Transport's website: https://www.gov.uk/government/publications/government-major-projects-portfolio-accounting-officer-assessments/lower-thames-crossing-accounting-officer-assessment-december-2022</p> <p>The assessment was completed following a cost and schedule review undertaken in 2022 with the last investment decision point being the 2020 outline business case (OBC). The assessment concluded <i>'There is a strong strategic case for the Lower Thames Crossing. The Dartford Crossing is one of the worst performing parts of the Strategic Road Network (SRN) from the volume of traffic, with congestion and incidents on the route significantly having an effect on customer journeys and economic growth. The LTC will relieve this congestion as well as promote economic growth through new journeys across the Thames helping to facilitate economic growth north and south of the Thames, as well as nationally.</i></p> <p><i>As a Tier 1 scheme, the project will return to the NH investment committee and DfT IPDC at six-monthly intervals (or sooner) if factors affecting the value for money, schedule, costs and/or benefits of the scheme change. LTC is reliant on the successful outcome of the DCO application and government's final funding and investment decisions at full business case'.</i></p>

6 Submissions from Mr Francis Wilson

6.1.1 **Post-hearing note:** The table below contains the written responses the Applicant wishes to submit in response to comments made by Mr Wilson during OFH2.

Comments made by Mr Wilson at OFH2	Applicant's response
Environmental concerns	
<p>The A13-A1089 junction will be a concentrated source of air and noise pollution and is about half a mile to a mile away from Orsett – concerns as an Orsett resident.</p>	<p>The traffic flows through this junction reflects the important and strategic nature of the road network at this location, connecting communities in Thurrock and south Essex, as well as the ports and businesses in the area.</p> <p>In response to air pollution:</p> <p>The air quality assessment is presented within ES Chapter 5: Air Quality [APP-143] and has considered the impact of the A13/A1089/A122 Lower Thames Crossing junction on air quality. There are no exceedances of Air Quality Strategy objectives and Limit Values predicted in the vicinity of the junction, nor at any human health receptor along the Project route. There are no significant air quality effects predicted for human health receptors as a result of the operation of the Project.</p> <p>In response to noise pollution:</p> <p>Noise impacts from the A13 have been fully considered and assessed within ES Chapter 12: Noise and Vibration [APP-150], with road traffic noise change contours presented graphically within ES Figure 12.7: Opening Year Noise Change Contour (DSOY minus DMOY) [APP-315].</p> <p>Consideration of the information presented in Figure 12.7 details that as a result of the mitigation proposed as part of the Project, including low noise surfacing on the Project and A13, earthworks and noise barriers (Section 12.5 of ES Chapter 12: Noise and Vibration [APP-150] and ES Figure 12.6: Operational Road Traffic Noise Mitigation [APP-314]) no significant adverse impacts are reported along the A13 corridor.</p>
<p>The Applicant has not provided a vertical cross-section of the A13-A1089 junction nor an idea of the barriers that will be installed, if any.</p>	<p>The Applicant will be submitting cross sections of the A13 at Deadline 2 as requested by the Examining Authority.</p> <p>Section 12.5 of ES Chapter 12: Noise and Vibration [APP-150] and ES Figure 12.6: Operational Road Traffic Noise Mitigation [APP-314] detail all proposed noise mitigation associated with the Project (including barriers),</p>

Comments made by Mr Wilson at OFH2	Applicant's response
	<p>provided at the A13/A1089/A122 Lower Thames Crossing junction.</p> <p>Engineering Drawings and Sections (Volume A) (A122 LTC Plan and Profiles) [APP-030] shows details of the A13/A1089/A122 Lower Thames Crossing junction – more specifically, the proposed road plan and longitudinal profile including the ground levels, the height of certain structures and embankments, the depth of proposed cuttings and tunnel, and the indicative location and level of drainage outfall features.</p>
Compulsory Acquisition	
<p>A community gas mains pipeline is proposed through Mr Wilson's property – concerns over the cost, disruption and sterilisation to his property. Mr Wilson's view is that the property could be avoided by a different diversionary route.</p>	<p>The relevant Works are Work No G6 as shown on Sheet 33 of the Works Plans [AS-026] which passes through Plot Number 33-273 as shown on Sheet 33 of the Land Plans [AS-010].</p> <p>The design has been developed collaboratively with Cadent, the pipeline owner and operator. Designs have been submitted by Cadent which have been reviewed as per the construction design and management process detailed in ES Chapter 2: Project Description [APP-140] (starting at page 120).</p> <p>Four options have been considered for the pipeline during the development of the Project. These are explained in ES Chapter 3: Assessment of Reasonable Alternatives [APP-141] at paragraphs 3.28.25–3.28.31 (page 64 & 65) with the justification for the option promoted given at para.3.28.31:</p> <p><i>'Option 2 was the preferred option and was presented in the 2020 Supplementary Consultation. Option 2 would route the gas pipeline to the north and was chosen as it would avoid the historic landfill and mineral extraction areas. It would also move the gas pipeline away from the Project, reducing risks to the gas pipeline during operation and those risks involved with constructing the new road and the route as it minimises the number of complex trenchless crossings. The proposed diversion route would however be close to the Scheduled Monument (Iron Age Enclosures) to the north of the A13, however the alignment has been modified at the 2022 Local Refinement Consultation to move the workforce and the pipeline from having a direct interface with the Scheduled Monument and a veteran tree, and the Order Limits have been</i></p>

Comments made by Mr Wilson at OFH2	Applicant's response
	<p><i>locally extended to allow construction vehicles to pass through an existing gap in a row of trees bordering a field.</i></p> <p>The Applicant has liaised and consulted with Cadent and Mr Wilson during the development of the proposals, following which the area of Order Limits required for the works was reduced and the route of the pipeline re-aligned to the west, further away from the property. Having regard to the implications of both existing residential properties and potential future development near high pressure gas pipelines, the Applicant and Cadent have agreed to construct the length of the diverted pipeline (Work No G6) in 'proximity' or 'thick wall' pipe at this location. This pipeline type has characteristics that reduce the amount of land sterilised from development. Any development proposed within the associated easement width would ultimately be a matter to be discussed by the landowner and Cadent.</p>

7 Submissions from Kathryn Homes Ltd, Runwood Homes Ltd and Runwood Properties Ltd.

7.1.1 **Post-hearing note:** The table below contains the written responses the Applicant wishes to submit in response to comments made by Ms Dring on behalf of Kathryn Homes Ltd, Runwood Homes Ltd and Runwood Properties Ltd (referred to below as comments made on behalf of Whitecroft Care Home) during OFH2.

Comments made on behalf of Whitecroft Care Home at OFH2	Applicant's response
<p>Whitecroft Care Home will become isolated and surrounded by significant construction activity for some five plus years. There will be 24-hour night-time and weekend construction activity for extended periods. The highway would be operated, and would be 69 metres from Whitecroft. Concerns are around noise, dust, emissions, vibration, light-intrusion and disturbance for vulnerable residents – closure of the care home is reasonably foreseeable.</p>	<p>The Stanford Road compound would be approximately 0.5ha in size and would support construction works along the A1013 and affecting slip roads between the A13 and A1013. Therefore, it is necessary for the compound to be situated in close proximity to facilitate these works. The location of the compound was previously located approximately 160m to the east of the Whitecroft Care Home. Following engagement with Runwood Homes, at Local Refinements Consultation in May 2022, the compound was moved further to the south, approximately 300m away from property.</p> <p>The compound would be used for storage, equipment and stockpiling. There would also be space for car parking, offices, welfare facilities and workshops. Bunding and/or fencing would be in place to provide noise and visual screening for nearby sensitive receptors. The compound is anticipated and assessed within the environmental impact assessments to be operational for a duration of 24 months, The planning and operation of the compound will carefully consider nearby sensitive receptors, such as Whitecroft Care Home, in order to minimise the risk of environmental incidents or nuisances. Additionally, the environmental impact assessments carried out and the corresponding control measures concerning noise, air quality, and lighting are outlined below.</p> <p>The Brentwood Road Compound is approximately 800m away from the Whitecroft Care Home. Its proximity to the SRN and its position next to the Project alignment, is required to facilitate material deliveries and storage for the majority of works in Section C, between the A13 and Tilbury Loop Railway. Its position allows it to be the main hub for</p>

Comments made on behalf of Whitecroft Care Home at OFH2	Applicant's response
	<p>Section C construction works, as it will facilitate the majority of works between Tilbury Viaduct and the A13 junction.</p> <p>There are no 24-hour activities in the immediate vicinity of the Whitecroft Care Home. Night-time or weekend activities would be limited to the final tie-ins of the new infrastructure to the existing infrastructure and bridge construction which is required under road closures, and this will be communicated in advance to the affected communities. All other works will be performed during normal working hours as set out in the Code of Construction Practice (CoCP) [APP-336].</p> <p>In relation to noise:</p> <p>The assessment presented within ES Chapter 12: Noise and Vibration [APP-150] has been undertaken based upon the methodology contained within Design Manual for Roads and Bridges (DMRB), LA 111 Noise and Vibration. This assessment methodology for noise and vibration does not differentiate, with all defined sensitive receptors having equal sensitivity.</p> <p>The vulnerability of residents and any subsequent health outcomes has been considered within ES Chapter 13: Population and Human Health [APP-151] which identifies The Whitecroft Care Home as being of high sensitivity. The assessment concludes that there would be slight adverse effects on the Care Home which would not be significant. The Health and Equalities Impact Assessment [APP-539] identifies older people and people with pre-existing health conditions such as dementia as a vulnerable population; Chapter 7 of the document provides a topic by topic assessment of the impacts of the Project on vulnerable populations.</p> <p>Within the ES Chapter 12: Noise and Vibration [APP-150] Table 12.33 (page 102) outlines appropriate Best Practical Means (BPM) relative to the activities being undertaken in the vicinity of Whitecroft (CN 85), and the assumed level of noise mitigation defined in BS 5228-1:2009 (+A1:2014).</p> <p>Furthermore, during the construction phase of the Project The Register of Environmental Actions and Commitments (REAC) contained within ES Appendix 2.2: Code of Construction Practice, First Iteration of Environmental</p>

Comments made on behalf of Whitecroft Care Home at OFH2	Applicant's response
	<p>Management Plan [APP-336] presents good practice and essential mitigation commitments secured under Schedule 2 Requirement 4 of the draft Development Consent Order (DCO) [AS-038].</p> <p>Specific commitments with regards to BPM are contained within NV007, which would be implemented to actively control the impacts of the construction of the Project through the effective implementation of BPM. With the implementation of BPM the daytime and night time construction noise effects would not be significant.</p> <p>Assessment and consideration of operational road traffic noise impacts at the Whitecroft Care Home have been undertaken within the scope of ES Chapter 12: Noise and Vibration [APP-150].</p> <p>These assessments were undertaken based upon road traffic noise levels modelled in accordance with The Calculation of Road Traffic Noise 1988 and assessed in accordance with the methodology of the DMRB LA111.</p> <p>The assessments presented in Chapter 12 conclude a Minor Beneficial Impact of the Project below a SOAEL, which would not be considered a Significant Effect. This is as a result of the significant levels of mitigation within the design including Low Noise Surfacing and earthworks as presented in ES Figure 12.6: Operational Road Traffic Noise Mitigation [APP-314].</p> <p>In relation to air quality:</p> <p>The air quality assessment is presented within ES Chapter 5: Air Quality [APP-143] and has included Whitecroft Care Home as a receptor in the modelling assessment. The construction and operational air quality results show that there are no exceedances of Air Quality Strategy objectives predicted at Whitecroft Care Home. Dust and emission management measures will be in place during construction as set out within REAC commitments in ES Appendix 2.2: Code of Construction Practice, First Iteration of Environmental Management Plan [APP-336].</p> <p>In relation to light intrusion:</p> <p>Controls on site lighting are described in Section 6.8 of ES Appendix 2.2: Code of</p>

Comments made on behalf of Whitecroft Care Home at OFH2	Applicant's response
	Construction Practice, First Iteration of Environmental Management Plan [APP-336].
<p>Offsetting the impacts by the provision of an alternative location for the care home is the only appropriate response. The two-year delay may open up opportunities that were not previously available when considering the feasibility of relocation.</p>	<p>The Applicant is confident that the impacts during construction can be mitigated as discussed above. Following completion of construction the care home would benefit from a reduction in noise impacts following the re-alignment of Stanford Road to the north.</p> <p>The Applicant does not agree that the relocation of the care home is appropriate or required. The care home building is outside of the Order Limits and should there be any impact on the business this would be compensated in accordance with the Compensation Code.</p>

8 Submissions from Mr Robin Beard

8.1.1 **Post-hearing note:** The table below contains the written responses the Applicant wishes to submit in response to comments made by Mr Beard during OFH2.

Comments made by Mr Beard at OFH2	Applicant's response
Proposed route and alternatives	
<p>The proposed route and design at junctions, in particular the Orsett junction, is projected to be complicated and expensive, requiring homes to be demolished and pylons to be moved. Suggestion of an alternative to the proposed route across Orsett, which is to divert the route through fields a couple of miles away. Mr Beard's proposed route would cross the flood plain at its narrowest point, with the proposed embankments and viaducts only needing to be half as long.</p>	<p>The Applicant thanks Mr Beard for bringing forward his alternative layout at the A13 junction which will be given full consideration when the details are provided at Deadline 1.</p>
<p>The current proposal is to have traffic doubling back on itself when using the Orsett junction. If the junction is an east-facing junction, it would make sense to build it further to the east where it would be closer to the traffic that would use it, thereby staying further from housing and resulting in many journeys becoming shorter than they would have otherwise been.</p>	<p>The Applicant notes the points raised by Mr Beard, but on weighing up the various advantages and disadvantages, the Applicant's view is that their junction proposal is in the most suitable location to meet the Scheme Objectives.</p> <p>The Applicant's junction would connect to the local road network at the Orsett Cock junction and to the A1089. A junction further to the east would remove these local and strategic connections.</p>

9 Submissions from Mr Ian Black

9.1.1 **Post-hearing note:** The table below contains the written responses the Applicant wishes to submit in response to comments made by Mr Black during OFH2.

Comments made by Mr Black at OFH2	Applicant's response
Design approach	
<p>The Tilbury Viaduct affects Mr Black's home on Beechcroft Avenue in Linford – it is a six-lane motorway viaduct which will be visible for all residents, as it will be approximately 40 or 50 feet high, which the Applicant does not illustrate on its plans. The plans show a complicated engineering diagram – Mr Black would like to see a realistic representation of the viaduct.</p>	<p>With apologies, we have identified that we provided an incorrect reference during our statements at the end of OFH2. Mr Black asked for information on the presentation of the Tilbury Viaduct, and we directed him to the following reference:</p> <ul style="list-style-type: none"> ES Figure 7.19: Photomontages - Winter Year 1 and Summer Year 15 (2 of 4) [APP-245] Viewpoint S-28 <p>We have identified this reference should in fact have been:</p> <ul style="list-style-type: none"> ES Figure 7.19: Photomontages - Winter Year 1 and Summer Year 15 (3 of 4) [APP-246] Viewpoints N-07, N-08 and N-12 <p>In addition, it would help Mr Black to know that the following document contains a plan which shows where the viewpoints are located:</p> <ul style="list-style-type: none"> ES Figure 7.16: Visual Effects Drawing with Representative Viewpoint and Photomontage Locations [APP-234]
Environmental concerns	
<p>Concerns around air quality and noise for the community, as well as loss of the green belt.</p>	<p>In response to air quality:</p> <p>The air quality assessment is presented within ES Chapter 5: Air Quality [APP-143] and has considered the impact of the Project on air quality. There are no exceedances of Air Quality Strategy objectives and Limit Values predicted in the vicinity of the Tilbury Viaduct, nor at any human health receptor along the Project route. There are no significant air quality effects predicted for human health receptors as a result of the operation of the Project.</p> <p>In response to noise:</p> <p>Noise impacts have been fully considered and assessed, and are presented within ES Chapter 12: Noise and Vibration [APP-150], with road traffic noise change contours presented graphically within ES Figure 12.7: Opening Year Noise Change Contour (DSOY minus DMOY) [APP-315].</p>

Comments made by Mr Black at OFH2	Applicant's response
	<p>Section 12.5 of ES Chapter 12: Noise and Vibration [APP-150] and ES Figure 12.6: Operational Road Traffic Noise Mitigation [APP-314] detail all mitigation proposed within the scope of the Project.</p> <p>In response to green belt:</p> <p>An assessment of the Project against the relevant planning policy relating to its location within the Green Belt is provided in the Planning Statement Appendix E: Green Belt [APP-500]. It is acknowledged that the Project constitutes inappropriate development in the Green Belt in policy terms. However, it is demonstrated that the overriding need for the Project and the benefits it will deliver (as set out in the Need for the Project [APP-494]) constitute the very special circumstances necessary to override this policy position.</p>

10 Submissions from Stuart Dixon

10.1.1 **Post-hearing note:** The table below contains the written responses the Applicant wishes to submit in response to comments made by Mr Dixon during OFH2.

Comments made by Mr Dixon at OFH2	Applicant's response
Design approach and alternatives	
<p>No alternatives to digging a tunnel were considered and this is the most harmful option for local and global communities – question whether this is the best solution.</p>	<p>Various crossing alternatives were considered by the Applicant during the Options Stage of the Project. These included a bridge and bored and immersed tube tunnel options. A bored tunnel emerged as the preferred option as it minimises the impact on environmentally sensitive areas at the proposed crossing location including the RAMSAR when compared to the immersed tube tunnel and bridge alternatives.</p> <p>The crossing options considered are discussed in ES Chapter 3: Assessment of Reasonable Alternatives [APP-141] Table 3.2 Coverage of LA 104 reporting requirements, item 7, page 7 and Section 3.8 Route options</p>
<p>Mr Dixon is concerned that local interests have not fully been considered as against commercial interests. Mr Dixon highlights pollution and maritime jobs in riverside towns as areas of concern and questions whether the design solution is fit for purpose in the current political, economic, social, technological and environmental epoch.</p>	<p>Paragraph 4.3 of the National Policy Statement for National Networks (DfT, 2014) sets out that decision makers, when weighing the adverse impacts of proposed development against its benefits, should take into account:</p> <ul style="list-style-type: none"> • <i>'its potential benefits, including the facilitation of economic development, including job creation, housing and environmental improvement, and any long-term or wider benefits;</i> • <i>its potential adverse impacts, including any longer-term and cumulative adverse impacts, as well as any measures to avoid, reduce or compensate for any adverse impacts.'</i> <p>The degree of weight to be afforded the relevant benefits and adverse impacts varies according to the issue being considered.</p> <p>Section 8 of the Planning Statement [APP-495] sets out the Applicant's position in respect of the 'planning balance'. Paragraphs 8.7.33 and 8.7.34 concludes that:</p> <p><i>'This Planning Statement has demonstrated that the Project accords with the relevant national policy statements. In addition, for the purposes of section 104(7) of the Planning Act 2008, this Planning Statement has</i></p>

Comments made by Mr Dixon at OFH2	Applicant's response
	<p><i>demonstrated that the benefits of the Project outweigh its adverse its impacts.</i></p> <p><i>It light of all of the above, it is the Applicant's view that there is a clear, overriding and compelling case in the public interest for the Project. Accordingly, the policy presumption in favour of the Project and the overall planning balance lie strongly in favour of the grant of development consent.'</i></p> <p>The framework for this consideration is set out in the National Policy Statement for National Networks and compliance with this is detailed in Planning Statement Appendix A: National Policy Statement for National Networks (NPSNN) Accordance Table [APP-496].</p>
<p>Concern about option C which has many schools, leisure areas and playing fields in close proximity – have recent statements by health bodies regarding impacts of PM2.5 been taken into account when reassessing options?</p>	<p>Chapter 5 of the Planning Statement [APP-495] sets out the reappraisal of the options undertaken in 2018 and the review undertaken in 2022. Air quality, including PM2.5, was a factor in the considerations, particularly with regard to the decision to develop the Western Southern Link and the decision to develop at Location C.</p>

11 Submissions from Ms Leigh Hughes

11.1.1 **Post-hearing note:** The table below contains the written responses the Applicant wishes to submit in response to comments made by Ms Hughes during OFH2.

Comments made by Ms Hughes at OFH2	Applicant’s response
Environmental concerns	
<p>Thurrock has one of the highest pollution levels in the country and if the Project goes ahead, will be surrounded in a ‘toxic triangle’, with the M25, A13 and LTC.</p>	<p>Air quality across the UK is improving generally. This is also evident in Thurrock. Thurrock’s most recent annual status report (Annual Status Report on Air Quality in Thurrock (Thurrock Council, 2022)) covering air quality in Thurrock in recent years, states that there is a general trend of reduction in nitrogen dioxide (NO₂) concentrations, which was evident even before the COVID-19 pandemic.</p> <p>It states that concentrations of NO₂ across the borough are below or well below objectives, with only one monitoring site in exceedance of the AQS objective for annual mean NO₂ (but showing a positive trend). No exceedances of the AQS objectives for PM₁₀ or PM_{2.5} were registered during 2021.</p> <p>There are currently 18 areas in Thurrock where NO₂ or PM₁₀ concentrations caused by vehicle emissions led to the introduction of Air Quality Management Areas (AQMA) in the past. Because of a long-term reduction in NO₂ concentrations, two AQMAs in Thurrock are being recommended for revocation. The other remaining AQMAs will be periodically reviewed and may be revoked should monitoring data continue to show annual mean concentrations falling below the objectives. It is likely that more AQMAs will have been revoked by the time the Project is operational in 2030.</p> <p>The Project air quality assessment is presented within ES Chapter 5: Air Quality [APP-143] and has considered the impact of the Project on air quality. In regard to the ‘toxic triangle’ comment, the Project is expected to lead to a reduction in traffic flows and congestion on the M25 between junction 2 and 29, and the A2 between M25 junction 2 and the M2/A2/Lower Thames Crossing junction, which would lead to an improvement in air quality. An increase in pollutant levels is predicted at receptors adjacent to the A122 Lower Thames Crossing route, but pollutants</p>

Comments made by Ms Hughes at OFH2	Applicant's response
	<p>are predicted to be well below air quality objectives at receptors along this route, with the Project in operation.</p>
<p>The surrounding area includes grade 1 agricultural land which supplies food for supermarkets and is in decline. Ms Hughes is concerned that contaminated soil would be brought into the area.</p>	<p>The Applicant has carried out an assessment of the impacts of the Project during construction and operation on Geology and Soils in the affected area. Chapter 10 of the Environmental Statement (ES) [APP-148] presents the assessment of the likely significant effects on geology and soil, including the potential impacts of contaminated land on human health and controlled water receptors and potential impacts on agricultural soils.</p> <p>With response to agricultural soils, the principles of avoidance were applied during the selection of the preferred route which considered the presence of best and most versatile land. Additionally, the existing baseline conditions have helped to inform the siting of construction compounds, the construction approach and the development of the Project design.</p> <p>ES Chapter 10 [APP-148], acknowledges its impact on agricultural soils and Table 10.21 reports that the Project would result in the permanent loss of 22.64ha of Grade 1 agricultural soils. To minimise the impact on soils being handled by the Project, commitments have been made to the implementation of good practice stripping, storage and re-use of soils in line with the Defra Construction Code of Practice for the Sustainable Use of Soil on Construction Sites (2009) and the MAFF Good Practice Guide for Soil Handling (2000). The approach to soil handling will be detailed in a Soil Management Plan (SMP) developed prior to construction commencing and based on existing and pre-construction soil survey information. The implementation of the SMP will ensure topsoil and subsoil resources are kept separate and any potentially contaminating materials are not mixed with topsoil or subsoil to ensure these resources are available for re-use. The Applicant is committed to produce a Soil Management Plan (SMP) as part of the Second Iteration of the Environmental Management Plan (EMP2) prior to commencement works. This is stated in the Introduction to the Application [APP-003], see paragraph 14.3.13 (b).</p>

Comments made by Ms Hughes at OFH2	Applicant's response
	<p>With regards to the concerns around the import and use of contaminated soils in the area, the Project is aiming to maximise the reuse of materials excavated within the site. Where excavated materials and soils are to be reused, recycled and/or recovered within the Order Limits this would be subject to the relevant regulatory controls. For example: Directive 2008/98/EC on Waste (Waste Framework Directive), Article 2, environmental permit (as per the Environmental Permitting (England and Wales) Regulations (2016)), exemption and/or a Materials Management Plan (as per the Definition of Waste: Development Industry Code of Practice (CL:AIRE, 2011)).</p> <p>All excavated materials and soils proposed for reuse would be required to meet risk-based acceptability criteria applicable to its intended use to ensure they are suitable for use and do not lead to adverse impact of contamination.</p>
<p>The Wilderness is a long-established woodland and the Project proposes to destroy trees and habitats, and affect the natural spring water course supplying water for irrigation to nearby habitats.</p>	<p>Potential adverse effects to terrestrial habitats, including likely areas of long established woodland affected by the Project are reported in ES Chapter 8: Terrestrial Biodiversity [APP-146], together with measures appropriate and proportionate to either mitigate or compensate for any adverse effects. The design of the overall mitigation strategy for the Project includes providing more high quality semi-natural habitats which would be managed in perpetuity and using these habitat creation areas to create new and strengthen existing ecological networks. This not only provides more habitat to support the range of wildlife recorded within the area, but also helps facilitate the movement of animals and the spread of seeds and spores across the wider landscape. The existing watercourses that flow through and adjacent to the southern extent of The Wilderness will be diverted to maintain continuity of flows within the catchment.</p> <p>Further information on the Wilderness is set out in Section E.3, Annex E of the Post-event submissions, including written submission of oral comments, for ISH1 [Document Reference 9.10] submitted at Deadline 1.</p>
<p>The Mardyke floodplain floods regularly and hundreds of tonnes of concrete being proposed for the viaduct would make this worse.</p>	<p>Our proposals have been designed in accordance with the National Policy Statement for National Networks and the relevant provisions of the National Planning</p>

Comments made by Ms Hughes at OFH2	Applicant's response
	<p>Policy Framework. This includes Government policy on development and flood risk. The Project has been subject to a detailed Flood Risk Assessment (FRA) that has demonstrated that the Project would not increase flood risk, with the exception of some predesignated areas known as Compensatory Flood Storage Areas. In these areas, the land would be lowered to accommodate any flood water displaced by the Project, including in the Mardyke floodplain associated with construction of the viaduct and approach embankments, as detailed in Part 4 of ES Appendix 14.6: Flood Risk Assessment [APP-463]. The FRA and modelling informing it has been reviewed and approved by the Environment Agency.</p>
<p>The Project would have a higher elevation than any existing crossing but there is no provision for wind barriers.</p>	<p>The local ground level at the Mardyke Viaduct site and the Dartford Crossing are both approximately 0-5m Above Ordnance Datum (AOD). However, the bridge deck level for the Mardyke viaduct will be 7m above adjacent ground level, whereas the Dartford Crossing bridge deck level is in excess of 60m above adjacent ground level. Wind speeds experienced at a height of +60m above local ground level will be much higher than those at +7m (regardless of AOD) since the roughness of local terrain acts to significantly reduce wind speeds close to ground level through the boundary layer effect. For this reason, local wind speeds experienced by drivers crossing the Mardyke viaduct will be significantly lower than those experienced by drivers crossing the Dartford crossing for the same weather event and therefore the provision of wind barriers are not considered to be necessary.</p>
<p>Local impacts</p>	
<p>Ms Hughes' property is in close proximity to the proposed green bridge at North Road and there are concerns around 24/7 working, limited access to her property and limited services and utilities.</p>	<p>The majority of the works associated with the construction of the realigned North Road and bridge will be carried out during daytime working. Provision of limited night time road closure and 2 x 48hr weekend closures has been made to facilitate the completion of tie in road works and bridge construction. (Table 1.1 Extended hours for Highways works, provided in ES Appendix 2.1: Construction Supporting Information [APP-335]). The requirement for night time working in this area is needed to reduce traffic impact along North</p>

Comments made by Ms Hughes at OFH2	Applicant's response
	<p>Road. Advance notice for road closures and night time working will be given.</p> <p>Construction working hours and 24-hour construction working locations are detailed on pages 43-52 of the ES Appendix 2.2: Code of Construction Practice, First Iteration of Environmental Management Plan (CoCP) [APP-336] which provides a framework to manage construction and operational activities. Its objectives are to ensure that environmental mitigation commitments are met and that necessary consents and licenses are obtained.</p> <p>It is acknowledged that the impacts on communities from measures required to ensure the safe delivery of the Project should be kept to a minimum as much as is reasonably practicable. Table 2.3 of the outline Traffic Management Plan for Construction (oTMPfC) [APP-547] sets out the minimum requirements and measures the Traffic Management Plan (TMP) would address to mitigate or otherwise minimise impacts, including maintaining access and egress to residents.</p> <p>These measures would be further developed in discussions undertaken with the relevant authorities and would be set out in the TMP which will be developed in accordance with the oTMPfC [APP-547]. The oTMPfC has been produced to provide an overview of the approach that will be followed when undertaking temporary traffic management for the safe construction of the Lower Thames Crossing.</p>
<p>Scheme objectives</p> <p>The proposals do not meet scheme objectives, the project does not provide value for money or sustainable solutions and involves greenwashing and destruction.</p>	<p>The Scheme Objectives were agreed through extensive discussions with the Department for Transport (DfT) and outline what the Project should achieve. The Need for the Project [APP-494] sets out how the identification, selection and design process has responded to the Project Objectives and how a collaborative engagement process has been used to inform the proposed project.</p> <p>The Project is expected to deliver a range of benefits including congestion relief at the Dartford Crossing. The improved connectivity across the River Thames and reduced journey times would help local businesses to boost productivity, supporting sustainable</p>

Comments made by Ms Hughes at OFH2	Applicant's response
	<p>local development and regional economic growth.</p> <p>The Project's Benefit Cost Ratio is positive, therefore demonstrating value for money.</p> <p>For more information about the Scheme Objectives and economic benefits, see the Need for the Project and the Combined Modelling and Appraisal Report Appendix D: Economic Appraisal Package: Economic Appraisal Report [APP-526].</p>
Heritage	
<p>Thurrock has important heritage sites that should be preserved, such as a field where Queen Elizabeth I made a speech.</p>	<p>The scheduled earthworks to the west of the Church of St James in West Tilbury (SM5), thought to be a former rampart and an indication of the site of a camp where, in 1588, Elizabeth I reviewed the preparation of her troops for the arrival of the Spanish Armada, is located immediately outside the Project's Order Limits and would not be physically affected. ES Chapter 6: Cultural Heritage [AS-044] has identified this asset as having high value (paragraph 6.4.217) and within ES Appendix 6.10: Assessment Tables [AS-052] has assessed impacts from construction which are not significant and for operation where no impacts occur (pages 185 to 186).</p>

12 Submissions from Ms Cathy Sisterton

12.1.1 **Post-hearing note:** The table below contains the written responses the Applicant wishes to submit in response to comments made by Ms Sisterton during OFH2.

Comments made by Ms Sisterton at OFH2	Applicant's response
Environmental concerns	
<p>The roads will produce 5 million tonnes of carbon: 2 million during construction and 3 million during the first 60 years of use. There is no amount of carbon offsetting or tree-planting that will be sufficient to render the Project carbon neutral.</p>	<p>The Project has set out an industry leading position in terms of driving out carbon in the preliminary design and setting a framework to continue to reduce its carbon impact through the commitments made in the Carbon and Energy Management Plan, which is one of three documents addressing carbon reduction in the DCO Application:</p> <ul style="list-style-type: none"> • ES Chapter 15: Climate [APP-153] • Planning Statement Appendix I: Carbon Strategy and Policy Alignment [APP-504] • Carbon and Energy Management Plan [APP-552]. <p>ES Chapter 15: Climate [APP-153] and Planning Statement Appendix I [APP-504] explain that carbon impacts associated with construction of the Project have been calculated as being no more than 0.058% of the UK's fourth carbon budget and that ground-breaking approaches to procurement and construction have been devised for the Project. It also explains that the Department for Transport's Decarbonising Transport: A Better, Greener Britain (DfT, 2021) is expected to lead to significant reductions in road-user emissions over the lifetime of the Project.</p>
Public transport and travel options	
<p>The Climate Change Committee have published a report stating that there needs to be a modal shift away from car travel, which the Applicant is not acting upon. Something like the KenEx tram scheme would help decrease dependency on car ownership and assist those that do not have cars in travelling to Kent.</p>	<p>The Applicant has set out its own pathway to supporting the Department for Transport's decarbonisation of the surface transport sector through the publication of the plan '<i>Net Zero highways: Our 2030, 2040 and 2050 plan</i>', (National Highways, 2021).</p> <p>The Applicant does not consider that future light rail schemes, such as KenEx would have the capacity, or be sufficiently attractive to users, to carry a sufficiently high number of trips across the Thames so as to reduce the need for the Project. The Applicant has considered this in the Planning Statement [APP-495].</p>

Comments made by Ms Sisterton at OFH2	Applicant's response
	<p>The Applicant notes that it is for the UK Government to respond to the recommendations set out in the Climate Change Committee's progress report to Parliament, published on 28 June 2023 and National Highways will continue to support the Department for Transport in decarbonising the transport sector.</p>
<p>There are no protected cycle lanes and the only rail crossings are from Central London. The lack of local access points make local bus routes across to Kent through the tunnel very unlikely.</p>	<p>The Project would create opportunities for public transport operators to develop new local and regional bus services, by providing new connectivity between Kent, Thurrock and Essex. Identification and development of these routes is the responsibility of the relevant operators. Local buses will not have to pay the user charge for the Lower Thames Crossing, reducing operating costs for operators as is set out in Section 2.2 of the Road User Charging Statement [APP-517].</p>
<p>Solutions are only being considered by NH, but a multi-agency approach is needed in order to reduce pressure on roads.</p>	<p>The Department for Transport is responsible for planning and investing in transport infrastructure across England, with responsibility for the motorway and trunk road network (the Strategic Road Network), setting the strategic direction for the rail industry and funding investment in rail infrastructure, and producing the overall strategy and planning policy for ports.</p> <p>The Department for Transport sets out the principal purpose of the SRN as being to enable safe, reliable, predictable, rapid, often long distance, journeys of both people (whether as drivers or passengers) and goods in England between:</p> <ul style="list-style-type: none"> • Main centres of population; • Major ports, airports and rail terminals; • Geographically peripheral regions of England; and • Chief cross-border routes to Scotland and Wales. <p>It is the Department for Transport who provide the oversight on infrastructure requirements across the country and it determined, as set out in the Road Investment Strategy 2: 2020-25 (DfT, 2020), that the A122 Lower Thames Crossing is an appropriate and necessary infrastructure investment.</p>
<p>Effects on the northern section of the M25</p>	
<p>It is not just the Dartford Crossing that has delays; traffic is common around the M1</p>	<p>The A122 Lower Thames Crossing is one of a series of projects that are being developed by</p>

Comments made by Ms Sisterton at OFH2	Applicant's response
<p>connection at junction 21 of the M25, the A10 connection at junction 25 of the M25, and the M11 connection at junction 27 of the M25. Road-building will not solve the issues.</p>	<p>National Highways, as set out in the Road Investment Strategy 2: 2020-25 (DfT, 2020). Recognising that there is a critical need to improve the national networks to address road congestion and to provide a transport network that is capable of stimulating and supporting economic growth, National Highways prepares Route Strategy documents that consider the current and predicted future performance based on analysis and engagement.</p> <p>The Route Strategy Initial Overview Report for London Orbital and M23 (National Highways, 2023) covers these locations. One of the route objectives in this region is to improve regional connectivity, including through effective integration with sustainable transport modes to minimise the impact of short-distance journeys from key growth areas and strategic development sites. The finalised Route strategy reports and strategic plan will be published by 2025.</p>

13 Submissions from Ms Jackie Thacker

13.1.1 **Post-hearing note:** The table below contains the written responses the Applicant wishes to submit in response to comments made by Ms Thacker during OFH2.

Comments made by Ms Thacker at OFH2	Applicant's response
Environmental effects	
<p>Concerns around health impacts caused by pollution – construction could last over five years.</p>	<p>Air quality effects from construction vehicle exhaust emissions and as a result of the anticipated redistribution of traffic during the construction phase have been considered in accordance with DMRB LA 105 Air Quality (Highways England, 2019) and are described in ES Chapter 5: Air Quality [APP-143]. The air quality assessment covered the duration of the construction period, with each year between 2025 and 2030 individually modelled to ascertain whether there were any significant effects.</p> <p>The assessment concludes that the temporary change in exhaust emissions of nitrogen dioxide (NO₂) and particulate matter (PM₁₀ and PM_{2.5}) at human receptors would not lead to a significant effect on local air quality.</p> <p>Construction phase air quality impacts also have the potential to arise, if unmitigated, as a result of emissions of construction dust and emissions from non-road mobile machinery. However, with the implementation of the mitigation measures outlined in the Register of Environmental Actions and Commitments within ES Appendix 2.2: Code of Construction Practice, First Iteration of Environmental Management Plan [APP-336], there are anticipated to be no significant air quality effects during construction, which is consistent with the overall conclusions of the project-wide air quality effects during the construction phase reported in ES Chapter 5: Air Quality [APP-143].</p>
Compounds in Orsett	
<p>The biggest proposed compound is to the north of Stifford Clays Road, where Ms Thacker lives. This was initially going to be a minor temporary compound, but it has since been confirmed that it will be permanent.</p>	<p>Stifford Clays Road Compound East would be located north of Stifford Clays Road, east of the A122. It would be approximately 6.7ha in size, with space for car parking, offices, welfare facilities and storage. Around half of the site would be set aside for earthworks stockpiling. Fencing would be put in place to</p>

Comments made by Ms Thacker at OFH2	Applicant's response
	<p>provide noise and visual screening to nearby sensitive receptors.</p> <p>The compound would support the construction works for the A13/A1089/A122 Lower Thames Crossing junction slip roads and highways works north of the A13 towards the Mardyke, as well as the construction of the eastern underpass bridge below the A13. The construction compound would be in place temporarily, throughout the construction period, and it will not be a permanent fixture. Construction compound facilities greater than 6m in height would be located as westerly as reasonably practicable, to maximise distance from residential properties on Stifford Clays Road and Fen Lane. This commitment is LV019 in the Register of Environmental Actions and Commitments within ES Appendix 2.2: Code of Construction Practice, First Iteration of Environmental Management Plan [APP-336].</p> <p>Access would be via Stifford Clays Road, until a temporary haul road for construction traffic is in place. The works to construct the temporary haul road are expected to complete within the first six months of the construction programme.</p>
<p>Ms Thacker suggested mitigation to be put in place by the compound, e.g. by planting trees to screen the area now, rather than wait until the construction of the road begins with fencing.</p>	<p>Best Practicable Means would be in place to reduce noise impacts during construction such as installing and maintaining hoarding around the construction areas, which is commitment NV007 within the Register of Environmental Actions and Commitments (REAC) within ES Appendix 2.2: Code of Construction Practice, First Iteration of Environmental Management Plan [APP-336].</p>
<p>The area in Orsett already gets a lot of dust due to wind.</p>	<p>Dust monitoring and inspection would be undertaken to ensure that the mitigation measures remain effective during the construction works. As described in Register of Environmental Actions and Commitments (REAC) items AQ005, AQ006 and AQ008, the level of monitoring will range from on and offsite inspections of dust, to where necessary, monitoring using particulate analysers. REAC commitment AQ006 describes how the monitoring strategy would be determined by the contractor, and that any monitoring locations would be agreed with the Secretary of State in conjunction with the relevant local authorities. REAC commitment AQ008 describes how site action levels would</p>

Comments made by Ms Thacker at OFH2	Applicant's response
	<p>be developed, together with the actions that would be undertaken should that action level be triggered. These REAC commitments are set out in Chapter 7 of the ES Appendix 2.2: Code of Construction Practice, First Iteration of Environmental Management Plan [APP-336].</p>
Design approach	
<p>The height of the road is going to cause noise and pollution in the Orsett area and to the east of the lower Thames which will be damaging to health and the environment it is impacting on (wildlife, homes, walking, riding, cycling).</p>	<p>In relation to noise:</p> <p>The general design ethos of the Project is to keep the road as low in the environment as possible through the use of major earthworks, these are detailed on the ES Figure 2.4: Environmental Masterplan Section 11 [APP-165].</p> <p>Noise impacts in the Orsett area have been fully considered and assessed where they fall within the study area, within ES Chapter 12: Noise and Vibration [APP-150], with road traffic noise change contours presented graphically within ES Figure 12.7: Opening Year Noise Change Contour (DSOY minus DMOY) [APP-315].</p> <p>Mitigation measures proposed as part of the Project are detailed within Section 12.5 of ES Chapter 12: Noise and Vibration [APP-150] and ES Figure 12.6: Operational Road Traffic Noise Mitigation [APP-314].</p> <p>In relation to air pollution:</p> <p>The air quality assessment is presented within ES Chapter 5: Air Quality [APP-143] and has considered the air quality impact of the operation of Lower Thames Crossing in the areas expected to be affected by the Scheme; this includes Orsett and those areas east of Lower Thames Crossing such as Linford and East Tilbury.</p> <p>There are no exceedances of Air Quality Strategy objectives and Limit Values predicted in Orsett, Linford or East Tilbury, nor at any human health receptor along the Project route. There are no significant air quality effects predicted for human health receptors as a result of the operation of the Project.</p> <p>In relation to health and the environment (wildlife, homes, walking, riding, cycling):</p> <p>Impacts on private properties and housing, walkers, cyclists and horse riders (WCH) are assessed in the ES Chapter 13: Population</p>

Comments made by Ms Thacker at OFH2	Applicant's response
	and Human Health [APP-151] and the Health and Equalities Impact Assessment [APP-539]. Impacts on wildlife are assessed in ES Chapter 8: Terrestrial Biodiversity [APP-146].
Ms Thacker requests that the Applicant provides a construction model showing the whole route so that the general public would be able to see what the Project will mean to them.	A video 'fly-through' animation showing the likely construction phase impacts (including the location and size of construction compounds) was provided at the Community Impacts Consultation.
Alternatives	
Public transport, in particular more affordable, regular rail transport should be considered instead of more roads.	<p>Consideration of the role other transport modes, including rail, might play in addressing congestion at the Dartford Crossing is set out in Section 5.3 of the Planning Statement [APP-495].</p> <p>Further consideration of rail alternatives is provided in Section B.2 of Annex B of the Applicant's Summary of Oral Evidence and Post-Hearing Comments for Issue Specific Hearing 1, included as Document Reference 9.10 at Deadline 1.</p> <p>By providing a new connection between the A2, the A13, and the M25, the Project would create new routing opportunities for local and regional road based public transport services by relevant organisations.</p>
There should be facilities for travellers cycling etc. to cross between north and south of the river.	<p>The Applicant has considered a range of options during the development of the Project to provide improved cross-river provision for walkers and cyclists. The options investigated include using the tunnel, upgrading the existing ferry, relocating the ferry, building a separate bridge or cable car, and providing a shuttle service through the tunnel. These options were not taken forward for a variety of reasons including technical feasibility, operational issues, lack of commercial viability, cost, environmental impacts, and poor safety.</p> <p>Latent demand for walking and cycling across the River Thames at the Project crossing point is low and therefore unlikely to unlock enough trips to make the required infrastructure for a dedicated shuttle service economically viable. Page 48 of the Project Design Report Part G: Design Evolution [APP-514] provides further information. In addition, Chapter 5 of the Planning Statement [APP-495] provides an overview of the</p>

Comments made by Ms Thacker at OFH2	Applicant's response
	<p>assessment undertaken on alternative modes of transport.</p> <p>The Project would create opportunities for public transport operators to develop new local and regional bus services, by providing new connectivity between Kent, Thurrock and Essex. Identification and development of these routes is the responsibility of the relevant operators. Local buses will not have to pay the user charge for the Lower Thames Crossing, reducing operating costs for operators as is set out in Section 2.2 of the Road User Charging Statement [APP-517].</p>
Cost	
<p>The Tilbury Link Road and the Blue Bell Hill project were part of the LTC and should be included as part of the Project.</p>	<p>A road connecting the A122 Lower Thames Crossing and the Tilbury area were considered after the Preferred Route Announcement in 2017, and later included as a RIS3 pipeline scheme in the Road Investment Strategy 2: 2020-25 (DfT, 2020) as the Tilbury Link Road. As set out in Section 6.5 of the Interrelationship with other Nationally Significant Infrastructure Projects and Major Development Schemes [APP-550], a decision was taken to not include the TLR as part of the application for development, as it was not considered necessary to help meet the Scheme Objectives. This decision was taken following finalisation of the Project's transport model in 2017, and rationalisation of the proposed design of the A13 junction.</p> <p>Possible improvements to the connection between the M2 and the M20 at Blue Bell Hill were considered in 2016 as schemes named 'C Variant', which could be combined with any of the Location C routes under development at that time. The assessments, reported in Volume 3 of the Post Consultation Scheme Assessment Report (Highways England, 2017) found that C Variant did not help to transfer traffic from the existing Dartford Crossing on to the new route at Location C, and therefore did not meet the scheme objectives. The Preferred Route Announcement by the Secretary of State in 2017 did not include any of the C Variant options.</p>

Comments made by Ms Thacker at OFH2	Applicant's response
Compulsory Acquisition	
Ms Thacker is opposed to moving as a result of compulsory acquisition, and the disturbance this would cause.	Ms Thacker's property is not within the Order Limits and would therefore not be acquired by compulsory acquisition.

14 Applicant comments in light of Interested Party Submissions

- 14.1.1 TH thanked the Interested Parties for their submissions and noted the ExA's direction in the Agenda for OFH2, that the Applicant should mainly respond to the submissions made in writing at Deadline 1 (18 July 2023) and where appropriate, the Applicant would respond to points raised in OFH2.
- 14.1.2 TH noted that all responses would therefore be put in writing [**post-meeting note:** these are set out in the tables above] but, for the record, TH made the following comments at the hearing itself:
- a. In response to the British Horse Society's submission relating to Jeskyns, the Applicant's position is that the Project is not severing an existing bridleway south of the A2. Rather, the Applicant is proposing a temporary closure of national cycle route 177 and because of that, a temporary diversion has been proposed through Jeskyns using temporary possession powers. This proposal involves a temporary upgrade of the route so that it is suitable for cyclists. Once national cycle route 177 is diverted, it does not go through Jeskyns. A permanent bridleway through the woodland was explored but subsequently opposed by Forestry England (the landowner). The land is Crown land, so the Applicant has no ability to acquire it compulsorily and this would have to be by agreement.

[**Post-hearing note:** it was said at the hearing that horse riders would be able to use the temporary cycle way through Jeskyns. With apologies, this was not correct – however horse riders will be able to use existing permissive paths in the close vicinity.]
 - b. The Applicant noted that there had been a number of statements made at OFH2 relating to government policy, environmental targets and traffic and economic numbers, which the Applicant respectfully does not agree with. In particular, the submission relating to a 4% reduction at Dartford is not a number recognised by the Applicant.
 - c. With the ExA's agreement, the Applicant offered the following signposting to Interested Parties in response to their submissions at OFH2:
 - i. In response to the British Horse Society's submission, information about the interface between existing rights of way and proposed rights of way can be found in the Population and Human Health Assessment, ES Figure 13.4 [[APP-320](#)].
 - ii. In response to Mr Reeve's submission, information on detailed design can be found in the Design Principles document [[APP-516](#)] commitments PEO.04 and PEO.09.

- iii. In response to submissions made in relation to the phrase ‘pathfinder project’, the Applicant published a document ‘Net Zero Highways’ which details the Applicant’s plan in terms of meeting the pathway to net zero by 2050. The Project is identified in this document as a key project to test low-carbon innovation and approaches.
- iv. In response to Mr Black’s submission, the Applicant has provided the visual effects of the Tilbury viaduct at viewpoint S28 in the relevant photomontage in the Environmental Statement [[APP-245](#)].

[Post hearing note: With apologies, the reference to S28 was incorrectly provided and photomontages N-07, N-08 and N-12 within document [[APP-246](#)] are the correct photomontages that should be referenced and not S-28 in document [[APP-245](#)]. This can also be found as part of our response to OFH2 Action 5 in the Deadline 1 Cover Letter and Submissions [**Document Reference 9.1**].]

15 Next Steps and Closing

15.1.1 The Applicant did not make any submissions under this Agenda Item.

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 [AS-038].
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: <ul style="list-style-type: none"> • 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 [AS-038].
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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