

Lower Thames Crossing

9.54 Comments on LIRs

Appendix G – Medway Council

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Appendix G – Medway Council

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1 Applicant's Responses to Medway Council's Local Impact Report

Table 1.1 The Applicant's responses to Medway Council's Local Impact Report (LIR) – [REP1-258]

LIR Reference	Local Impact Report Extract / Applicant's Response
Executive Summary Paragraph 4	The Lower Thames Crossing would divert traffic routing to/from the Channel Tunnel Terminal and the Port of Dover away from the Dartford Crossing. This would exacerbate the limited capacity – particularly via M2 junctions 1, 2 and 3 – and generate more traffic locally once travel across the River Thames becomes more attractive.
Applicant's Response	<p>Once the Project opens for traffic, there will be changes in how traffic flows across the region. Many parts of the network would experience significant benefits on both journey times and journey reliability, whilst other locations would experience adverse impacts. Overall, the benefits on the road network would outweigh the adverse impacts, and this is reflected in the positive economic benefit of the Project. While the Applicant acknowledges that there will be negative highway impacts at certain locations in Medway, the Combined Modelling and Appraisal Report - Appendix D - Economic Appraisal Package: Economic Appraisal Report [APP-526] identifies at Table A.34 that Medway will receive net positive transport economic efficiency benefits, and ranks as the 3rd highest recipient of these benefits. Transport economic efficiency benefits are made up in large part by vehicle journey time savings.</p> <p>Chapter 7 of the Transport Assessment [APP-529] presents locations which are forecast to see either beneficial or adverse impacts as a result of the Project. M2 junctions 1, 2 and 3 are identified as monitoring locations in the Wider Network Impacts Management and Monitoring Plan [APP-545]. If the monitoring identifies issues or opportunities related to the road network because of traffic growth or new third-party developments, then highway authorities would be able to use this as evidence to support Project development and case making through existing funding mechanisms and processes.</p>
Executive Summary Paragraph 5	Some of the assessments to support the application are based on traffic modelling outputs. However, the traffic modelling does not reflect the spatial distribution of relevant planned development, particularly at Kingsnorth and the Isle of Grain. Furthermore, the traffic modelling assumes significantly fewer homes being built in future compared to what the local planning authority is required to plan for, therefore the traffic modelling does not reflect Medway's development needs. There is also a lack of certainty for local highway schemes that have been included in the traffic modelling.
Applicant's Response	The Lower Thames Area Model (LTAM) forecast demand has been developed in accordance with the Department for Transport's (DfT's) Transport Analysis Guidance (TAG) Unit M4 – Forecasting and Uncertainty. The core scenario includes developments which were under construction or had planning applications or permissions as of 30 September 2021. The LTAM demand is constrained to TEMPro 7.2 forecasts to ensure that overall growth is in line with Government projections. The demand development process is described in detail in Chapter 4 of the Combined Modelling and Appraisal Report Appendix C: Transport Forecasting Package [APP-522], and the full list of developments included is provided in Annex A in the Combined Modelling and Appraisal Report Appendix C: Transport Forecasting Package Annexes [APP-523]. A High Growth scenario was also developed

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	<p>to understand the implications if travel demand exceeds Government projections. The High Growth Scenario is detailed in Section 8.6 of the Combined Modelling and Appraisal Report Appendix C: Transport Forecasting Package [APP-522].</p> <p>The Applicant provided Medway Council with further information on the assumptions within the core scenario in the form of a technical note (August 2021). Further discussions were held between the Applicant and Medway Council to discuss potential new pieces of work in relation to the development of Medway's local plan, although Medway Council did not accept the Applicant's offer to use the LTAM to assess the impacts of their emerging local plan.</p>
Executive Summary Paragraph 7	<p>Increased traffic flows, particularly on the A228 through Cuxton and Halling, would cause negative impacts on air quality, which would in turn cause negative impacts on ecological sites. Medway Council accepts the compensatory measures proposed to counteract effects on biodiversity that cannot be avoided or mitigated.</p>
Applicant's Response	<p>The air quality modelling predicted exceedances of air quality objectives on the A228 and M2, however it should be noted that the assessment predicted exceedances on the A228 without the Project. In terms of the M2, exceedances were predicted at four receptors, and for three of these receptors the concentrations were only marginally above the objective with the Project and would be likely to drop below the objective within a year of the Project opening. The Applicant has discussed the assessment results with Medway Council, who do not consider based on their own recent monitoring data that there is currently a need for an Air Quality Management Area (AQMA) along the A228 or on the M2. The Project is unlikely to lead to the designation of a new AQMA on the A228, as if the model predictions are correct then there would need to be an AQMA on the A228 both now and in the Project opening year (without the Project). The Applicant has however acknowledged that the assessment is likely to represent the worst-case scenario compared to air quality monitoring undertaken by Medway Council, as in order to calibrate the model, the Applicant has factored monitored concentrations back to the base year of 2016, when concentrations were higher than they are currently. The key point however is the absence of a scenario where the Project would create an AQMA on the A228, because based on the Project modelling predictions, there should be an AQMA on the A228 now and in the future without the Project, so the change in concentrations when the Project opens would not trigger the need for an AQMA.</p> <p>The air quality assessment presented in Environmental Statement (ES) Chapter 5: Air Quality [APP-143] concludes that there are no significant air quality effects on human health receptors and therefore no air quality mitigation is required in relation to these effects. The assessment identified significant air quality impacts on some designated habitats, therefore the proposed mitigation and compensation is presented in ES Appendix 5.6: Project Air Quality Action Plan [APP-350].</p>
Page 2 Paragraph 1.3.1	<p>Medway's development plan comprises saved policies from the following documents:</p> <ul style="list-style-type: none"> • Medway Local Plan 2003 • Kent Waste Local Plan 1998 • Kent Minerals Local Plan 1997: Chalk and Clay • Kent Minerals Local Plan 1997: Oil and Gas

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	<ul style="list-style-type: none"> • Kent Minerals Local Plan 1993: Construction Aggregates Written Statement • Kent Minerals Subject Plan 1986: Brickearth Written Statement <p>1.3.2 The Medway Local Plan 2003 contains two policies of relevance to the Project, i.e. Policy S12 (Kingsnorth) and Policy S13 (Isle of Grain). Kingsnorth and Grain are among the largest sites for economic growth in the Thames Estuary and the wider region.</p> <p>1.3.3 Policy S12 designated a 219ha site at Kingsnorth for industrial, storage or distribution and Sui Generis uses (B1c, B2, B8 prior to 1 September 2020). The policy provides for the expansion or relocation of businesses in the urban area.</p> <p>1.3.4 Policy S13 designated a 630ha site on the Isle of Grain for port activities and industrial, storage or distribution and Sui Generis uses (B1c, B2, B8 prior to 1 September 2020). The site benefits from a railhead and deepwater berths.</p>
Applicant's Response	<p>The adopted development plan policies are noted. Policies S12 and S13 relate to allocated strategic employment sites. The Project would provide improved cross river connectivity and reduced congestion and delays, significantly aiding the growth potential for local economies on both sides of the River Thames. Further details are provided in the Need for the Project [APP-494].</p>
Page 16 Paragraph 3.2.1	<p>Table A.1 of the Uncertainty Log has been reproduced (for developments within Medway) at Appendix A, with Medway Council officers' comments appended as the last column. In total, eight planning applications amounting to 1,585 homes, along with 16 other planning applications amounting to 231,388 sqm of non-residential floorspace, should not have been included in the core scenario or should have assumed a lower quantity of development.</p>
Applicant's Response	<p>This matter is addressed by the Statement of Common Ground (SoCG) between National Highways and Medway Council [REP1-107] item 2.1.7 as follows:</p> <p><i>The Project's transport model was built following the guidance set out in the DfT Transport Analysis Guidance (TAG). Growth within the transport model is capped in line with DfT traffic forecasts (Trip End Model Presentational Program (TEMPro 7.2) and adjusted locally to account for developments close to the Project that are under construction, have a planning application and planning permission (as of 30 September 2021). Low and high growth scenarios have also been undertaken and reported within the Transport Forecasting Package (Appendix C of the Combined Modelling and Appraisal Report) [APP-522].</i></p> <p>Further detail about the specific planning applications is provided in the Applicant's response to paragraph 3.2.2 below.</p>
Page 16 Paragraph 3.2.2	<p>Furthermore, 10 planning applications have been identified that are missing from the Uncertainty Log. These planning applications, shown at Appendix B, meet the minimum size criteria as of 30 September 2021. In total, one planning application for 200 homes, along with eight planning applications amounting to 645,914 sqm non-residential floorspace, should have been included in the core scenario. Note that almost all of the missing non-residential floorspace is associated with planning applications for development located on the Hoo Peninsula.</p>

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<p>Applicant's Response</p>	<p>As stated in paragraph 4.1.13 of the Combined Modelling and Appraisal Report Appendix C: Transport Forecasting Package [APP-522] the proposed MedwayOne development, which is a large non-residential development on the Hoo Peninsula, was excluded on the basis that the development proposal did not include necessary highway interventions that would maintain the integrity of the road network and, as stated in paragraph 4.1.14 of the same document, at the time of the LTAM modelling the Applicant was working with the promoters of these developments to agree appropriate mitigation for the road network. Currently the developers have accepted an initial cap on the number of vehicles from their development that can use the west facing slips at M2 junction 1, although this is subject to a monitor and manage strategy. The issue of the available capacity at this junction is still an open matter for discussion between the developers and the Applicant.</p> <p>It should be noted that when a development is included in the transport model it is necessary that adequate provision is also available or created for that traffic on the highway network. If not some of the traffic associated with the development gets 'stuck' close to the development and is not able to make its entire planned journey. It also results in a high level of congestion at specific points near the development that could cause other traffic in the model to re-route. The DfT Transport Appraisal Guidance says that developments with a planning application should be included in the modelling. However sometimes planning applications are submitted before the necessary highway interventions have been deemed acceptable by the relevant Council and the Applicant. For this reason, two developments, MedwayOne and Highsted Park, were excluded from the LTAM for the Development Consent Order (DCO) application.</p> <p>With respect to the other developments, the Applicant would comment as follows:</p> <ul style="list-style-type: none"> • National Grid Land (MC/09/1628 and MC/14/3872) – these applications pre-date the base year of the Applicant's transport model. The 2014 application is for the discharge of conditions. The 2009 application was consented in 2010 and so the Applicant would have relied upon the Council confirming that the development was not operational, as part of its model development in 2015/2016. • Land at Thamesport (MC/19/0299) – the submitted Transport Statement sets out that the site would generate 17 two-way HGV movements an hour, plus 47 employee trips a day and so would not alter the Applicant's transport modelling outputs. • Flanders Farm (MC/19/3128) – the submitted Transport Assessment confirms that the development would only generate 30 two-way trips on average in the peak hours and so would not significantly alter the Applicant's transport modelling outputs. • Combined Cycle Gas Turbine Power Station (MC/09/0961) – this application pre-dates the base year of the Applicant's transport model and given the nature of the development (generation of an additional 1000MW of power) it is not considered that it would generate many additional trips and so would not significantly alter the Applicant's transport modelling outputs. • Allhallows Holiday Park (MC/19/1820 and MC/19/2202) – it is not considered that either of these applications, given their scale and nature (upgraded facilities and 84 additional hard standing bases) would generate traffic within the modelled peak periods to alter the Applicant's transport modelling outputs.

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	<ul style="list-style-type: none"> • MBS House (MC/20/0816) – this development is in the Applicant's Uncertainty Log (SECamb Multi Use Centre) • Veolia (MC/20/2055) – the submitted Transport Statement sets out that there would be a net increase of four two-way trips in the AM peak and five two-way trips in the PM peak and so would not alter the Applicant's transport modelling outputs. • Dockside Outlet Centre (MC/21/0577) – the development is for a leisure use and is not permitted to operate during the AM peak. Given the scale and nature of the development, and that it is an alteration to an existing retail unit it is considered that the development would not alter the Applicant's transport modelling outputs (the Applicant notes the application is not accompanied by a Transport Assessment or Transport Statement). • Stoke Road Business Centre (MC/19/0888) – this is a reserved matters application, which relates to outline application MC/17/4424. This outline application does not form part of the Applicant's Uncertainty Log, but it is not considered that the inclusion of this site (forecast to generate 90 two-way trips in each peak period) would significantly alter the Applicant's transport modelling outputs.
<p>Page 17 Paragraph 3.2.3</p>	<p>The Uncertainty Log also shows five highway schemes that have been included in the core scenario. Table A.2 of the Uncertainty Log has been reproduced (for developments within Medway) at Appendix C, with Medway Council officers' comments appended as the last column. The five highway schemes should not have been included in the core scenario due to a lack of certainty.</p>
<p>Applicant's Response</p>	<p>Within Appendix C of Medway Council's submission, five schemes are listed:</p> <ol style="list-style-type: none"> a. A289 Four Elms roundabout to Medway Tunnel b. B2097 Rochester Road c. Hempstead Valley – various improvements d. Hoath Way roundabout e. M2 junction 4 <p>As Medway Council state, the transport interventions on the Hoo Peninsula which were planned to be funded from the Housing Infrastructure Fund (HIF) will not now go ahead as that funding was withdrawn in summer 2023. The HIF schemes had not been included in the LTAM as they did not carry a sufficient level of certainty.</p> <p>Improvements were coded into the LTAM at three roundabouts on the Hoo Peninsula:</p> <ol style="list-style-type: none"> i. Four Elms – (A289 Hasted Road/A228 Four Elms Hill) ii. Sans Pareil – (A289 Wulfere Way/A228 Frindsbury Hill) iii. Anthony's Way – (A289 Berwick Way/A289 Vanguard Way tunnel) <p>This was undertaken using the drawings available on the Medway Council website, A289 Four Elms to Medway Tunnel Highway Project Acquisition of Land and CPO.pdf, submitted to Medway Cabinet meeting in January 2017.</p>

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	<p>These improvements to the junctions were required to enable the development that was included in the LTAM on the Hoo Peninsula to travel out of the immediate area so, in the absence of the HIF scheme, these improvements were added, together with some signalisation of the Four Elms roundabout to ensure that in the LTAM the traffic from the developments left the Hoo Peninsula and would appear in the traffic demand at the M2/A289 junction. The LTAM traffic forecasts are intended to provide a fair representation of conditions on the highway network in future years.</p> <p>The other four highway schemes listed by the Council have been coded into the LTAM as the developments that they serve are also in the LTAM as they have planning permission.</p>
<p>Page 17 Paragraph 3.2.4</p>	<p>The core scenario is therefore based on a surplus of 1,385 homes and a deficit of 414,526 sqm non-residential floorspace in Medway's development pipeline. Meanwhile, there is a lack of certainty for the five highway schemes that have been included in the core scenario.</p>
<p>Applicant's Response</p>	<p>The LTAM forecast demand has been developed in accordance with DfT's TAG Unit M4 – Forecasting and Uncertainty. The core scenario includes developments which were under construction or had planning applications or permissions as of 30 September 2021. The LTAM demand is constrained to TEMPro 7.2 forecasts to ensure that overall growth is in line with Government projections. The demand development process is described in detail in Chapter 4 of the Combined Modelling and Appraisal Report Appendix C: Transport Forecasting Package [APP-522], and the full list of developments included is provided in Annex A in the Combined Modelling and Appraisal Report Appendix C: Transport Forecasting Package Annexes [APP-523]. A High Growth scenario was also developed to understand the implications if travel demand exceeds Government projections. The High Growth Scenario is detailed in Section 8.6 of the Combined Modelling and Appraisal Report Appendix C: Transport Forecasting Package [APP-522].</p> <p>A detailed response is provided in the response to page 16, paragraph 3.2.2 and page 17, paragraph 3.2.3 above to Medway Council's comments on the inclusion of the five highway schemes.</p>
<p>Page 18 Paragraph 3.2.16</p>	<p>The Applicant has devised a high growth scenario, but at the time of writing is it unclear to what extent this aligns with Medway's development needs.</p>
<p>Applicant's Response</p>	<p>The high growth scenario reported in Combined Modelling and Appraisal Report Appendix C: Transport Forecasting Package [APP-522] and the Transport Assessment [APP-529] is produced according to DfT's Transport Appraisal Guidance and applies a general uplift to all traffic in the LTAM rather than a specific higher level of traffic demand in one location, for example on the Hoo Peninsula.</p>
<p>Page 18 Paragraph 3.2.17</p>	<p>In conclusion, the core scenario does not reflect relevant planned development or Medway's development needs.</p>

LIR Reference	Local Impact Report Extract / Applicant's Response
Applicant's Response	Please see response to paragraph 3.2.2 and 3.2.3 above.
Page 19 Paragraph 4.1.2	The Project would divert traffic routing to/from the Channel Tunnel Terminal and the Port of Dover away from the Dartford Crossing. This would exacerbate the limited capacity – particularly via M2 junctions 1, 2 and 3 – and generate more traffic locally once travel across the River Thames becomes more attractive. This is acknowledged in paragraph 7.5.8 of the Transport Assessment.
Applicant's Response	See the Applicant's response given in Executive summary, Paragraph 4 above.
Page 26 Paragraph 4.3.1	Journey time reductions for origins in either Rainham or Rochester to destinations in Essex (and vice-versa) would be positive operational impacts. Table 1.7, Appendix B of the Transport Assessment shows journey time reductions ranging from 16 to 27 minutes in the AM peak in 2030. Journey time reductions are lower in the inter-peak and the PM peak in 2030. Journey time reductions are higher in 2045. As noted in 2.2, this represents just 2% of all outward commuting flows on Census day 2011. It is questionable as to whether an increase in this commuting flow is desirable and likely to occur given recent changes in commuting patterns.
Applicant's Response	The significant reduction in travel times from Medway to Essex provides the opportunity for people to change where they wish to travel to, i.e. to change the destination of their trip. The variable demand modelling forecasts that some drivers will choose to do so, though it is a matter of individual choice for each driver as to which trip they wish to make and when. A variety of journey times are shown within Chapter 7 of the Transport Assessment [APP-529] and from paragraph 8.2.10 of the Combined Modelling and Appraisal Report - Appendix C - Transport Forecasting Package [APP-522].
Page 26 Paragraph 4.3.2	It is difficult to identify local impacts in the Transport Assessment outputs for change in flows (Plates 7.16 to 7.18) and V/C (Plates 7.19 to 7.24), even once maps for the Do Minimum and the Do Something scenarios are arranged side-by-side. Furthermore, as noted at paragraph 7.6.1 of the Transport Assessment, a change in flow may not affect journey times. Similarly, the outputs for scale of impacts show both adverse and beneficial impacts in Medway by time period; the maps in Plates 7.28 to 7.30 and 7.34 to 7.36 are presented at a small scale and are difficult to interpret.
Applicant's Response	Medway Council were provided with detailed information on the flows, travel times and volume/capacity on all links in the LTAM in a series of GIS shapefiles. These were the shapefiles used to produce the Plates shown in the Transport Assessment [APP-529]. The data was provided to highway authorities so that they could examine the changes both in their area and elsewhere in detail and produce additional maps if they wished.
Page 26 Paragraph 4.3.3	An assessment on behalf of Medway Council (Appendix E) identified negative operational impacts on M2 junctions 2, 3 and 4, the A289 corridor, the A228 through Cuxton and Halling and in Chatham and Strood town centres.

LIR Reference	Local Impact Report Extract / Applicant's Response
Applicant's Response	The Applicant's assessment of areas which would experience negative operational impacts is provided in Chapter 7 of the Transport Assessment [APP-529], and this also highlights these areas.
Page 26 Paragraph 4.3.4	The table of positive operational impacts shows junctions with an improved performance in the LTAM Core with Project scenarios. It could be that the additional traffic associated with the Project causes some upstream junctions to become more congested, which holds back traffic from downstream junctions that appear to show an improved performance. Furthermore, there is a higher number of vehicles waiting to enter the network in the LTAM Core with Project scenarios, which obscures the full impact of additional delay during the peak periods.
Applicant's Response	The Applicant's assessment of areas which would experience negative operational impacts is provided in Chapter 7 of the Transport Assessment [APP-529], and this also highlights these areas.
Page 25 Paragraph 1	The Transport Assessment identified a moderate increase in pedestrian severance at Elaine Avenue in Strood due to an increase in traffic flow. This is shown as a negative local impact because the applicant is only committing to a feasibility assessment to identify opportunities to reduce severance.
Applicant's Response	<p>A detailed analysis of potential impacts arising from traffic-related severance is presented in the Health and Equalities Impact Assessment (HEqIA) [APP-539]. Table 7.9 of the HEqIA lists locations where there may be a moderate increase or decrease in traffic-related severance during the operational phase of the Project; this is followed by a closer review of these locations in Table 7.10, which takes into account factors such as land-use and local demographics. Paragraph 7.3.31 of the HEqIA notes that <i>'further actions may be required in certain locations to enhance the road crossing provision for local residents and thereby ensure that effects do not impact on people's ability to cross roads and access community services and infrastructure. A commitment has been made as part of the Section 106 Agreements Heads of Terms (Application Document 7.3) for further investigation at identified locations to discuss the need for, and provision of, pedestrian crossing infrastructure'</i>. This commitment is included within Section 106 Agreements - Heads of Terms [APP-505].</p> <p>Paragraph 7.5.3 of Section 106 Agreements – Heads of Terms [APP-505] states that <i>'National Highways will pay a sum to the relevant local highway authorities to implement the identified improvements from the feasibility assessment. Local highway authorities are afforded powers under section 62 the Highways Act 1980 which enables them to undertake agreed improvement works to the local highway. All works can be accommodated within the existing highway extent'</i>. Locations specified include Elaine Avenue (Strood), Brennan Drive (Tilbury) and Valley Drive (Gravesend). The Applicant is continuing to work with Medway Council in relation to assessing the feasibility of solutions in areas where severance has been identified.</p>
Page 26-27 Paragraph 4.3.7 - 4.3.8	M2 junction 1 is an immediate concern, having emerged as a constraint to development following representations received from National Highways in Medway Council's determination of a planning application for MedwayOne, a 325,000 sqm development of employment floorspace on the former Kingsnorth Power Station site, which was allocated for development in the Medway Local Plan 2003.

LIR Reference	Local Impact Report Extract / Applicant's Response
	<p>The National Highways representation noted concerns about both congestion and safety at M2 Junction 1, specifically the northbound off-slip and the southbound on-slip links. National Highways considered that the junction has limited spare capacity, i.e. 60 movements during either the AM or the PM peaks. The junction will need to be improved to accommodate further development once this spare capacity has been exceeded.</p>
<p>Applicant's Response</p>	<p>Please see paragraphs A.4.4. to A.4.7 of the Applicant's Deadline 1 submission, Post-event submissions, including written submission of oral comments, for ISH1 [REP1-183], which addresses comments relating to M2 junction 1.</p> <p>M2 junction 1 is included as one of the monitoring locations set out in the Wider Network Impacts Management and Monitoring Plan (WNIMMP) [APP-545]. The Applicant is proposing to monitor the impacts of the Project on traffic on the local and strategic road networks. If the monitoring identifies opportunities to further optimise the road network as a result of traffic growth or new third-party developments, then this can be used as evidence to support scheme development and case making through existing funding mechanisms and processes and inform decisions regarding investment decisions on the strategic road network.</p> <p>The Applicant will continue to work with the Council and developers in order to agree the evidence base to support the Local Plan and/or applications and to identify any required network interventions. Paragraph 4.4.7 of Medway Council's Local Impact Report sets out part of this wider work.</p>
<p>Page 27 Paragraph 4.3.11</p>	<p>An assessment on behalf of Medway Council (Appendix E) highlighted the increase in traffic flows on the M2, with approximately 1,350 Passenger Car Units (PCUs) westbound and 800 PCUs eastbound in the AM peak in 2030. This would seemingly affect the capacity and safety of traffic to merge and diverge. Meanwhile, the increase in traffic flows on the A289 between Wainscott and the M2 would be up to 400 PCUs westbound and 100 PCUs eastbound in the AM peak in 2030 (see Appendix E). This is likely to be significantly higher with the additions of MedwayOne and Grain Business Park, thereby exceeding the trip cap of 60 movements.</p>
<p>Applicant's Response</p>	<p>The Applicant acknowledges Medway Council's traffic study submitted as an Appendix E to Medway Council's Local Impact Report and wishes to reserve the right to provide further comment on this appendix at a later date in the examination.</p> <p>Additionally, the Applicant notes that safety does not form part of Appendix E (Medway LTC Support – Lower Thames Crossing), produced by Medway Council's traffic consultants, Systra.</p> <p>Please see paragraphs A.4.4. to A.4.7 of the Applicant's Deadline 1 submission – Post-event submissions, including written submission of oral comments, for ISH1 [REP1-183].</p> <p>Various junctions along the M2, including junctions 1 to 4, are listed as monitoring locations in the WNIMMP [APP-545]. The Applicant is proposing to monitor the impacts of the Project on traffic on the local and strategic road networks. If the monitoring identifies opportunities to further optimise the road network as a result of traffic growth or new third-party developments, then local authorities would be able to use this as evidence to support scheme development and case making through existing funding mechanisms and processes.</p>

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	The Applicant will continue to work with the Council and developers in order to agree the evidence base to support the Local Plan and/or applications and to identify any required network interventions. Paragraph 4.4.7 of Medway Council's Local Impact Report sets out part of this wider work.
Page 27 Paragraph 4.3.14	Three other highway schemes have been included in the core scenario at M2 junction 4 or adjacent junctions; they are associated with the Gibraltar Farm development which was granted on appeal. These schemes cannot be implemented due to a ransom strip constraint, and therefore the traffic impacts are likely to have been understated.
Applicant's Response	As the Gibraltar Farm development has received planning permission, both the development and the proposed highway interventions were included in the LTAM forecasts. The demand development process is described in detail in Chapter 4 of the Combined Modelling and Appraisal Report Appendix C: Transport Forecasting Package [APP-522], and the full list of developments included is provided in Annex A in the Combined Modelling and Appraisal Report Appendix C: Transport Forecasting Package Annexes [APP-523]. The purchase of any land required by the developer to deliver their plans is a matter for that developer.
Page 27 Paragraph 4.3.15	As noted at 3.2, the Uncertainty Log shows five highway schemes that have been included in the core scenario (see Appendix C). The five highway schemes should not have been included in the core scenario and therefore M2 junctions 3 and 4, and junctions in the vicinity, are unlikely to perform as reported in the applicant's assessment.
Applicant's Response	Please see the response to paragraph 3.2.3 above.
Page 27 Paragraph 4.3.16	Journey time reductions for route No.5 (A289 – Four Elms Roundabout to M2 junction 1) are questionable for both the construction and operational phases, given the potential for the Hoo Peninsula as a significant supplier location, and the omissions of relevant planned development.
Applicant's Response	The journey times reported in Chapters 7 and 8 of the Transport Assessment [APP-529] are taken directly from the LTAM forecasts which were prepared in accordance with DfT's Transport Appraisal Guidance. The assumptions on the location of suppliers and staff are described in Chapter 8 of the Transport Assessment. Please see response to paragraph 3.2.2 above for a response to the planned development included in the traffic modelling.
Page 27 Paragraph 4.3.17	As noted at 3.2, the Uncertainty Log shows five highway schemes that have been included in the core scenario (see Appendix C). The five highway schemes should not have been included in the core scenario and therefore this corridor is unlikely to perform as reported in the applicant's assessment.
Applicant's Response	Please see the response to paragraph 3.2.3 above.

LIR Reference	Local Impact Report Extract / Applicant's Response
<p>Page 29 Paragraph 4.4.1</p>	<p>The core scenario does not reflect the spatial distribution of relevant planned development and Medway's development needs. Therefore, Medway Council is not seeking to secure highway schemes for mitigation through the DCO.</p>
<p>Applicant's Response</p>	<p>Section 6.3 of the Combined Modelling and Appraisal Report [APP-518] describes the process for the creation of the forecast year matrices used in the LTAM. Details of specific developments are only included in the core scenario if they have the required degree of certainty of delivery. Medway Council is still developing its Local Plan and the specific location of the developments to deliver its housing plans are unknown.</p>
<p>Page 29 Paragraph 4.4.4</p>	<p>Paragraph 5.3.4 and Plate 5.1 of the WNIMMP must add the Four Elms Roundabout (A289 / A228) as a location to be included in the monitoring scheme.</p>
<p>Applicant's Response</p>	<p>A mechanism allowing for review of the proposed monitoring locations is provided through Requirement 14 in Schedule 2 of the draft DCO [REP1-042], which requires the preparation of an operational traffic monitoring plan, which must be approved by the Secretary of State following consultation with the relevant highways authorities (including Medway Council). Relevant highways authorities will be able to propose locations for inclusion, which will be considered by the Applicant during the development of the operational traffic monitoring plan. The final decision on inclusion will be made by the Secretary of State through the approval process, as set out in Part 2 of Schedule 2 of the draft DCO [REP1-042].</p>
<p>Page 29 Paragraphs 4.4.5, 4.4.6</p>	<p>Following the Written Ministerial Statement on 9 March 2023, the monitoring scheme is unlikely to provide certainty in local plan-making, specifically funding sources in an accompanying Infrastructure Delivery Plan (IDP). Medway Council has commissioned a new traffic model and an assessment to inform local plan-making, including a 'with Project scenario'. Medway Council is engaging with National Highways (Spatial Planning) in producing the assessment. The assessment will include analysis to determine proportionate developer contributions from sites to be allocated for development, which is likely to include contributions due as a result of traffic flows generated by the Project; the IDP will need to specify National Highways as a funding source. A commitment from National Highways would provide more certainty to support local plan-making.</p>
<p>Applicant's Response</p>	<p>The Applicant is not proposing to provide funding for future investments to optimise the highway network, and would not agree to being identified as a funding source in any future IDP. The Applicant has an obligation under its licence to support local authorities as they develop their local plans and will continue to work with Medway Council. However, as set out in Transport Assessment Appendix F: Wider Network Impacts Management and Monitoring Policy Compliance [APP-535], the Applicant considers that it is not appropriate to apply the process for obtaining a Development Consent Order under the Planning Act 2008 to substitute the existing process which allows the Government to operate a transparent funding process, which can fairly consider requests for intervention and investment locally on a par with the way in which other projects which may be unrelated to Project are considered. This allows the Secretary of State to make decisions based on the merits in the context of government</p>

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	policy and government spending priorities. The existing system is fit for purpose and should not be set aside by this or any other DCO application.
<p>Page 29 Paragraph 4.4.7</p>	<p>For M2 junction 1, Medway Council will be pursuing existing investment processes. In doing so, Medway Council will require collaboration with the Project team, National Highways, Kent County Council and Gravesham Council on the following sequential tasks:</p> <ul style="list-style-type: none"> • produce an updated merge and diverge assessment; • establish a revised trip cap; • assess how many more development completions could be tolerated; • produce an initial feasibility assessment for an improvement scheme; • develop an improvement scheme, along with an assessment of timing, feasibility and funding; and • determine how proportionate developer contributions could be collected.
<p>Applicant's Response</p>	Please see the Applicant's response to Page 26-27, Paragraph 4.3.7 – 4.3.8 above.
<p>Page 30 Paragraph 4.4.8</p>	The Section 106 Agreements – Heads of Teams (APP-505) concedes that National Highways does not have the appropriate land interests to enter into a Section 106 agreement with Medway Council to address pedestrian severance at Elaine Avenue, Strood. A separate side agreement will be entered into with Medway Council to ensure the provision of these improvements. However, given Medway Council's position on the core scenario, an updated assessment of traffic-related severance on pedestrians is required based on Medway Council's 'with Project scenario'.
<p>Applicant's Response</p>	The Applicant notes Medway's comments concerning the side agreement. As referenced in the Applicant's response to Page 25, Paragraph 1 above, an assessment of traffic-related severance has been undertaken, the findings of which are set out in the Health and Equalities Impact Assessment [APP-539] and the Applicant is continuing to work with Medway Council in relation to assessing the feasibility of solutions in areas where severance has been identified.
<p>Page 33 Paragraph 5.3.1</p>	The noise and vibration assessment is based on outputs from the core scenario, which does not reflect the spatial distribution of relevant planned development and Medway's development needs.
<p>Applicant's Response</p>	As Medway Council notes, the noise and vibration assessment is based on the outputs from the Applicant's transport model. The LTAM forecast demand has been developed in accordance with DfT's TAG Unit M4 – Forecasting and Uncertainty. The core scenario includes developments which were under construction or had planning applications or permissions as of 30 September 2021. The LTAM demand is constrained to TEMPro 7.2 forecasts to ensure that overall growth is in line with Government projections. The demand development process is described in detail in Chapter 4 of the Combined Modelling and Appraisal

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	Report Appendix C: Transport Forecasting Package [APP-522] , and the full list of developments included is provided in Annex A in the Combined Modelling and Appraisal Report Appendix C: Transport Forecasting Package Annexes [APP-523] .
Page 33 Paragraph 5.3.2	<p>Paragraph 12.6.183 of Chapter 12 of the Environmental Statement discusses the feasibility of mitigation measures, including low noise surfacing, barrier options, speed restrictions and heavy vehicle restrictions. None of these mitigation measures would be effective due to:</p> <ul style="list-style-type: none"> • the existing speed limit; • the nature of the properties; • heavy vehicles producing more noise at lower speeds; and • the need to avoid compromising existing businesses.
Applicant's Response	The Applicant acknowledges this comment and notes that this is stated in ES Chapter 12: Noise and Vibration [APP-150] .
Page 33 Paragraph 5.4.1	Noise insulation mitigation may be appropriate. Paragraphs 12.6.200 to 12.6.202 indicate that whilst a Noise Insulation Regulations assessment found that no dwellings would qualify for a scheme, a final assessment will be undertaken within the first year of the Project opening.
Applicant's Response	The Applicant acknowledges this comment and notes that this is stated within ES Chapter 12: Noise and Vibration [APP-150] .
Page 33 Paragraph 5.4.2	However, the assessment of noise impacts associated with construction traffic has predicted that there would be significant noise impacts in Year 4 at receptors on Bush Road and at Cuxton Community Church in Cuxton and Halling ward. Therefore, an appropriate noise insulation assessment for Cuxton and Halling ward must be conducted as soon as possible before construction starts.
Applicant's Response	<p>The qualification for noise insulation under the Noise Insulation Regulations is applicable to dwellings and other buildings used for residential purpose located within 300m of a new or altered highway as specified within Regulation 7 of The Noise Insulation Regulations 1975 (as amended 1988). The receptors identified in Cuxton and Halling ward are located more than 300m away from any new or altered highway and as such would not qualify for noise insulation.</p> <p>The impacts and significant effects reported with ES Chapter 12: Noise and Vibration [APP-150] on the wider road network identified in Cuxton and Halling wards are temporary in nature, only occurring for the duration of the works in that area. As detailed within ES Chapter 12: Noise and Vibration [APP-150] significant impacts associated with construction traffic have been identified within the ES but these predominantly occur on local minor roads around the Project, where the existing flows are low; as detailed on ES Figure 12.2: Construction Traffic Noise – Affected Links [APP 310]. The roads presenting the potential for significant impacts tend to be lower speed roads, with impacts occurring at properties directly adjacent, which when coupled with</p>

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	<p>the temporary short-term nature of the impacts, means that provision of physical noise mitigation such as low noise surfacing and acoustic screening are not considered to be sustainable or proportionate measures.</p> <p>Specific control of construction traffic noise would therefore be implemented through the ability to actively monitor and manage the flows around the network, allowing route changes and other control measures to be implemented to alter flow patterns of construction traffic where problems are identified. This would be managed through measures in the outline Traffic Management Plan for Construction [REP1-175].</p>
<p>Page 34 Paragraph 6.1.4</p>	<p>During construction, the Project could temporarily affect air quality because of dust arising from earth movement and excavations, as well as due to emissions from construction traffic and machinery.</p>
<p>Applicant's Response</p>	<p>The Register of Environmental Actions and Commitments (REAC) included in ES Appendix 2.2: Code of Construction Practice, First Iteration of Environmental Management Plan [REP1-157] outlines the construction dust and emissions mitigation measures that will be implemented by the Contractors to ensure that the impacts are not significant. These are detailed in REAC commitments AQ001 to AQ005.</p>
<p>Page 34 Paragraph 6.1.6</p>	<p>During operation, traffic is forecast to increase on certain roads, causing air quality to get worse at receptors already exceeding the air quality objective for NO₂. Air quality is generally expected to improve in the future as vehicle emissions improve and the use of electric vehicles becomes more widespread</p>
<p>Applicant's Response</p>	<p>The air quality assessment presented in ES Chapter 5: Air Quality [APP-143] concluded that there are no significant effects on human health receptors. Furthermore, the Project does not delay compliance with the Air Quality Directive. No mitigation is therefore required in relation to these effects.</p> <p>The air quality assessment of effects on designated habitats is presented within ES Chapter 8: Terrestrial Biodiversity [APP-146]. Where significant effects have been identified, the mitigation and compensation are described in ES Appendix 5.6: Project Air Quality Action Plan [APP-350].</p> <p>The Emission Factor Toolkit (v11) which has been used to derive the speed band vehicle emission factors used in the air quality assessment incorporates future vehicle fleet changes including the more widespread use of electric vehicles based on DfT fleet projections.</p>
<p>Page 36 Paragraph 6.3.1</p>	<p>The air quality assessment predicts future baseline Do Minimum scenario exceedances of the NO₂ annual mean objective (40 µg/m³), however this contradicts Medway Council's monitoring data.</p>
<p>Applicant's Response</p>	<p>The air quality modelling predicted exceedances of air quality objectives on the A228 which are not reflected in Medway Council's monitoring data (Medway Council began monitoring on the A228 in 2019). The monitoring data used to inform the assessment is higher because it has been year adjusted to the 2016 base year which has higher pollutant concentrations than in 2019</p>

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	<p>(adjustment process is described in ES Appendix 5.1: Air Quality Methodology [APP-345]). Model results for the opening year were presented based on predictions derived from Defra air quality modelling tools and the Long Term Trend (LTT) forecast gap analysis methodology (as described in paragraphs 5.3.93 to 5.3.97 of ES Chapter 5: Air Quality [APP-143]). The long-term trend gap analysis factors used to account for uncertainty in future trends in annual mean NO₂ involved uplifting the concentrations predicted using the Defra air quality modelling methodology. As described in paragraph 5.6.135 of ES Chapter 5: Air Quality [APP-143], this approach is likely to have led to an overprediction of concentrations in the opening year, particularly due to the length of time between the base year (2016) and opening year (2030). The Applicant is aware that the latest Medway Council monitoring indicates that there are unlikely to be any exceedances of the annual mean NO₂ Air Quality Strategy Objective now which also suggests that there are unlikely to be exceedances with or without the Project.</p>
<p>Page 36 Paragraph 6.3.2</p>	<p>The air quality assessment baseline year of 2016 does not reflect more recent observed improvements in air quality, particularly in 2020 and 2021 due to the pandemic, although it is unclear whether this will be sustained. A baseline year of 2019 is used in air quality assessments to support planning applications in Medway.</p>
<p>Applicant's Response</p>	<p>The air quality assessment baseline year of 2016 has been used for consistency with the base year of the traffic model which is also 2016. The adjustment process is described in ES Appendix 5.1: Air Quality Methodology [APP-345]. As described in the response to Page 36, Paragraph 6.3.1 above, use of a 2016 base year is likely to have led to an overprediction of concentrations in the Project opening year due to the adoption of long-term trend gap analysis factors.</p>
<p>Page 36 Paragraph 6.3.5</p>	<p>The air quality assessment has identified a receptor on Rochester Road/Sundridge Hill (LTC456) which changes from compliance without the Project to exceedance with the Project. The Project is highly likely to reverse more recent observed improvements in air quality, with some monitoring sites closer to or exceeding the annual mean objective</p>
<p>Applicant's Response</p>	<p>Air pollutant concentrations are likely to have been overpredicted on the A228 in the air quality assessment including at receptor LTC456, as described in paragraph 5.6.135 of ES Chapter 5: Air Quality [APP-143]. However, the results of the air quality modelling have been used to determine significance and the Project has been assessed as being not significant on human receptors.</p>
<p>Page 36 Paragraph 6.3.6</p>	<p>It is important to note that the air quality assessment is based on a residual uncertainty (Root Mean Square Error) of 5.8 µg/m³. It will be necessary to reconcile monitoring data used in the air quality assessment with Medway Council's monitoring data.</p>
<p>Applicant's Response</p>	<p>As described in paragraphs 5.3.151 to 5.3.158 of ES Chapter 5: Air Quality [APP-143], uncertainties associated with the air quality assessment have been addressed as far as practicable in the assessment and are not considered to adversely affect the adequacy of the assessment. For example, the air quality dispersion model annual mean nitrogen dioxide (NO₂) predictions have been compared and verified against 241 roadside air quality monitoring sites, including Medway Council monitoring sites as described in ES Appendix 5.1: Air Quality Methodology [APP-345]. Following this verification process an overall Root Mean</p>

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	Square Error value of 5.8µg/m ³ was derived for the Project air quality model, which is well within the Defra Local Air Quality Management Technical Guidance (TG22) (Defra, 2022) recommended Root Mean Square Error value of 10µg/m ³ . In addition the application of the gap factoring as described in paragraphs 5.3.93 to 5.3.97 of ES Chapter 5: Air Quality [APP-143] significantly uplifts the modelled results.
Page 36 Paragraph 6.3.7	Moreover, the air quality assessment is based on outputs from the core scenario, which does not reflect the spatial distribution of relevant planned development and Medway's development needs.
Applicant's Response	As Medway Council notes, the air quality assessment is based on the outputs from the Project traffic model. The LTAM forecast demand has been developed in accordance with DfT's TAG Unit M4 – Forecasting and Uncertainty. The core scenario includes developments which were under construction or had planning applications or permissions as of 30 September 2021. The LTAM demand is constrained to TEMPro 7.2 forecasts to ensure that overall growth is in line with Government projections. The demand development process is described in detail in Chapter 4 of the Combined Modelling and Appraisal Report Appendix C: Transport Forecasting Package [APP-522], and the full list of developments included is provided in Annex A in the Combined Modelling and Appraisal Report Appendix C: Transport Forecasting Package Annexes [APP-523].
Page 36 Paragraph 6.3.8	Following engagement with the applicant, feasible and effective mitigation has not been identified.
Applicant's Response	Mitigation measures have been investigated for the A228 and A2 London Road, as explained in paragraph 5.5.13 of ES Chapter 5: Air Quality [APP-143] where exceedances of the annual mean air quality objective are predicted in the Project opening year, and the Project is expected to lead to a perceptible worsening in air quality. Numerous measures have been identified and investigated including installation of vertical barriers, implementation of an Ultra Low Emission Zone, and speed restrictions. All the measures are expected to either be ineffective or undeliverable. However, it should be noted that this work does not alter the conclusion that for air quality impacts on human health the Project is not expected to have a significant effect. The Applicant's approach to mitigation and compensation for the impacts of Nitrogen Deposition is presented in the ES Appendix 5.6: Project Air Quality Plan [APP-350].
Page 36 Paragraph 6.4.1	Off-site mitigation to deliver air quality improvements within Medway's air quality management areas may be appropriate, along with a financial payment to support air quality monitoring, modelling and associated plans. This could be triggered by exceedances of the air quality objectives during operational phase monitoring.
Applicant's Response	The air quality assessment has concluded that there are no significant effects on human health receptors. Furthermore, the Project does not delay compliance with the Air Quality Directive. No mitigation is therefore required in relation to these effects. Operational phase air quality monitoring is not required as there are no significant air quality effects, and no requirements for

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	mitigation. The Applicant would be required to work with any local authority as part of the Environment Act 2021 as an air quality partner if future exceedances of Air Quality Objectives were identified as a result of roads managed by the Applicant.
Page 39 Paragraph 7.3.1	There are a number of ecological sites that would be significantly affected by changes in air quality, such as Great Wood ancient woodland at Ranscombe Farm Nature Reserve. However, the applicant is following guidance and advice from the Department for Environment, Food and Rural Affairs and Natural England to compensate for nitrogen deposition.
Applicant's Response	Natural England supports the principle of landscape scale approach for nitrogen deposition compensation planting. The Applicant's approach to mitigation and compensation for the impacts of Nitrogen Deposition is presented in the ES Appendix 5.6: Project Air Quality Plan [APP-350].
Page 39 Paragraph 7.3.2	It is noted that a landscape scale compensation approach, rather than a series of scattered sites, is more likely to deliver multiple benefits. Medway Council accept National Highways' reasoning for site selection as per the Nitrogen Deposition Site Selection Technical Note that was shared with Medway Council on the 22 July 2022.
Applicant's Response	The Applicant has taken a landscape scale approach to nitrogen deposition compensation, to enable predominantly wooded enhanced ecological connectivity. Natural England supports the principle of landscape scale approach for nitrogen deposition compensation planting. The Applicant's approach to mitigation and compensation for the impacts of Nitrogen Deposition is presented in the ES Appendix 5.6: Project Air Quality Plan [APP-350].
Page 39 Paragraph 7.3.3	Shorne Woods Country Park and Jeskyns Community Woodland are popular destinations for residents in Medway. The outline Landscape and Ecology Management Plan (APP-490) identifies an area of ancient woodland compensation to the east of Brewers Wood. Medway Council welcomes the management requirement to ensure public access.
Applicant's Response	The Applicant welcomes the comments made in the Local Impact Report from Medway Council.
Page 39 Paragraph 7.3.4	The Environment Statement – Non-Technical Summary (APP-486) states that discharges to the River Thames would be controlled by an Environment Agency discharge permit to ensure that water quality and volume is within a level which would not damage the Thames Estuary and Marshes Ramsar site. During the operation of the tunnel, road drainage would be treated before discharge and would be released during high tide conditions to maximise available dilution and mixing and prevent erosion
Applicant's Response	To the south of the River Thames, surface water discharges from the Project are limited to rainfall runoff from the southern tunnel entrance construction compound. Water would be discharged to the Thames via a ditch that flows along the boundary of the Thames Estuary and Marshes Ramsar and, prior to discharge, commitment RDWE033 (Code of Construction Practice [REP1-157]) would ensure attenuation and treatment to the standard specified within a discharge consent granted by the Environment Agency. The water quality standards for the discharge into the ditch would be set following consultation with Natural England and other consultees, with the standards not environmentally worse than those recorded during the pre-construction

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	<p>water quality surveys. The runoff collection and management system would be operated until full reinstatement of the compound area is complete.</p> <p>During operation of the Project, to the south of the River Thames there are no proposed discharges to the River Thames. Road drainage discharges would be received by the proposed infiltration drainage features included within the drainage design, which provide for robust treatment of runoff, to safeguard groundwater quality.</p>
<p>Page 40 Paragraph 8.1.2</p>	<p>The socio-economic impacts are framed in the context of 'dynamic agglomeration' which would occur as a result of the Project. In other words, the Project is likely to result in cluster growth and greater diversification of the local economies as businesses relocate and land use changes. For example, areas such as Medway would be more attractive to businesses that are displaced from the land market closer to London.</p>
<p>Applicant's Response</p>	<p>The Applicant submitted a Wider Economic Impacts Report as part of the Combined Modelling and Appraisal Report Appendix D: Economic Appraisal Package: Level 3 Wider Economic Impacts Report [APP-527] with the DCO application, which assesses the wider impact of the Project on skills and employment within the regional and local economy, drawing on public datasets, engagement and policy to identify a comprehensive and robust baseline position against which to assess the Project's impacts and benefits.</p>
<p>Page 40 Paragraph 8.1.3</p>	<p>Furthermore, other businesses that do not relocate would benefit from improved interactions and accessibility to workers. Similarly, workers would be more likely to secure employment opportunities either side of the River Thames.</p>
<p>Applicant's Response</p>	<p>Please see answer to paragraph 8.1.2 above for the Applicant's response.</p>
<p>Page 40 Paragraph 8.1.4</p>	<p>Another important aspect of the appraisal is the potential for socially vulnerable groups that may be disproportionately affected, such as households without access to a car.</p>
<p>Applicant's Response</p>	<p>The HEqIA [APP-539] considers how the Project potentially affects a range of sensitive, or vulnerable populations, including low-income households (who often do not have access to private transport). A comprehensive baseline for the assessment is provided in Appendix C of the HEqIA [APP-542], which sets out data relating to socially vulnerable groups by ward, including car or van availability.</p> <p>Section 7.2 of the HEqIA [APP-539] assesses the impacts of the Project in relation to accessibility in relation to both car and public transport users. Table 7.4 provides a summary of the assessment for both general and sensitive populations during operation and notes that populations who are more dependent on public transport use may have less choice around mode of transport and route; however the majority of bus routes using the local road network experience beneficial impacts in terms of</p>

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	reductions in journey times. No disproportionate effects have been identified and the health outcomes for both the general and sensitive populations in relation to changes in accessibility are assessed as positive and significant.
Page 42 Paragraph 8.3.1	The Economic Appraisal Package is based on outputs from the core scenario, which does not reflect the spatial distribution of relevant planned development and Medway's development needs.
Applicant's Response	<p>The LTAM forecast demand has been developed in accordance with DfT's TAG Unit M4 – Forecasting and Uncertainty. The core scenario includes developments which were under construction or had planning applications or permissions as of 30 September 2021. The LTAM demand is constrained to TEMPro 7.2 forecasts to ensure that overall growth is in line with Government projections. The demand development process is described in detail in Chapter 4 of the Combined Modelling and Appraisal Report Appendix C: Transport Forecasting Package [APP-522], and the full list of developments included is provided in Annex A in the Combined Modelling and Appraisal Report Appendix C: Transport Forecasting Package Annexes [APP-523].</p> <p>Also see the Applicant's responses to paragraphs 3.2.2 and 3.2.3 above.</p>
Page 42 Paragraph 8.3.2	As noted above, journey time reductions for the A289 – Four Elms Roundabout to M2 junction 1 are questionable for both the construction and operational phases, given the potential for the Hoo Peninsula as a significant supplier location, and the omissions of relevant planned development. Meanwhile, highway schemes should not have been included in the core scenario and therefore the network is unlikely to perform as reported in the applicant's assessment.
Applicant's Response	<p>Please see the response to paragraph 3.2.2 regarding the inclusion of planned development, and the response to paragraph 3.2.3 for a response to Medway's comment concerning the omission of highway schemes from the core scenario.</p> <p>The Applicant considers that the journey time reductions for the construction phase as presented in the Transport Assessment [APP-529] reflect the forecast traffic conditions given the range of assumptions made within Chapter 8. Journey times in the operational phase would not be affected by a potential supplier location.</p>
Page 43 Paragraph 9.1.3	Where possible, material would be sourced and reused on-site. However, not all materials can be reused on-site, and the Project has the potential to generate large volumes of waste during construction, which would need to be managed off-site
Applicant's Response	<p>This matter is addressed by SoCG [REP1-107] item 2.1.14 as follows:</p> <p><i>A review of the recycling, recovery and disposal capacity of the Project's study area (Kent and Essex County Councils and East London Waste Authority) has been carried out and is presented in ES Chapter 11: Material Assets and Waste [APP-149]. The Contractor would undertake a similar exercise to ascertain the provision of capacity of reuse, recycling and recovery facilities within the study area for the waste generated by the Project.</i></p>

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Page 45 Paragraph 9.3.2	Table 11.3 of Chapter 11 of the Environmental Statement has identified reserves and associated landbanks in Medway. However, Table 11.3 should reflect the latest Local Aggregates Assessment. In addition, the sales of recycled and secondary aggregates appear to relate to capacity rather than actual sales and should be amended.
Applicant's Response	<p>At the time of writing ES Chapter 11: Material Assets and Waste [APP-149] used information and data from 'Medway Authority Monitoring Report 2020 – Volume 3 – Local Aggregates Assessment 2020' which was the latest published local aggregates assessment. Since the submission of the DCO application in October 2022, Medway's Local Assessment for 2021 has been released.</p> <p>Medway Council's comment on Table 11.3 in ES Chapter 11: Material Assets and Waste [APP-149] is noted and the Applicant is in agreement that the data presents production capacity rather than actual sales. The Applicant notes that Medway's Local Aggregates Assessment has been updated.</p>
Page 45 Paragraph 9.3.3	Figure 11.1 Active Landfill and Waste Transfer and Treatment (APP-308) and Appendix 11.3 List of Third-party Offsite Waste Infrastructure Receptors (APP-437) includes two active landfills in Rochester that do not appear to be active landfills, although they may be recovery to land development sites. As noted in the Statement of Common Ground, the applicant acknowledged that this was a production error which has been included in the Project errata list. It did not impact assessments.
Applicant's Response	The Applicant has acknowledged that this was a production error, and an updated version of the document correcting this – ES Appendix 11.3: List of Third-party Offsite Waste Infrastructure Receptors [REP1-166] – was submitted at Deadline 1, and did not impact assessments.
Page 45 Paragraph 9.3.4	The Excavated Material Assessment (APP-435) identifies sites potentially suitable for receiving excavation waste. The shortlist includes three sites south of the Thames, including Cliffe Pools, which has planning permission for ecological and landscape enhancement of Alpha Lake and Chalk Lake through importation of suitable material. Omya Lake is also being promoted by Brett through local plan-making for excavation waste disposal or recovery. The importation of suitable material at Cliffe Pools has been identified as a positive impact during construction, however the site has a low score in the Applicant's assessment.
Applicant's Response	<p>The Excavated Materials Assessment [APP-435] provides the methodology and flexibility for potential receiver sites to be used in future following further assessment during detailed design. It was developed to validate available offsite capacity at third-party potential receiver sites and to determine which of these would be capable of receiving excavated materials from the Project.</p> <p>The Excavated Materials Assessment represents the available sites at a point in time. The Contractors would assess any new receiver sites (and/or existing sites) that are proposed, using the methodology presented in the Excavated Materials Assessment (see commitment reference number MW012 in the Register of Environmental Actions and Commitments, included in ES Appendix 2.2: Code of Construction Practice, First Iteration of Environmental Management Plan [REP1-157]). Sites would be considered acceptable where they perform no worse than those sites on the detailed assessment list (at the time of submission of the DCO application).</p>

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	Table 4.1 in the Excavated Materials Assessment [APP-435] confirms that Cliffe Pools (all locations) was taken forward to the detailed assessment and was deemed a suitable site.
Page 45 Paragraph 9.4.1	Paragraph 3.4.9 of the Outline Materials Handling Plan (APP-338), along with the Register of Environmental Actions and Commitments (MW002) (APP-336), should refer to sourcing aggregates from proximate wharves, e.g. North Sea Terminal at Cliffe. This would ensure maximum use of the river for material transportation to reduce impacts of vehicle movements.
Applicant's Response	<p>The Applicant recognises the opportunity that the use of the river for material transportation presents for reducing impacts of vehicle movements on the road network.</p> <p>The outline Materials Handling Plan [APP-338] sets out a commitment on the use of port facilities to import bulk aggregates. However, this is limited to the North Portal construction area. The southern tunnel portal entrance compound would only see a small percentage of the overall required bulk aggregates imported for works at the tunnel contract, with a larger portion required at the northern tunnel entrance compound. It is therefore not considered value for money, which is a key consideration, to construct new or upgrade river infrastructure in the south because only a small proportion of the works would make use of this. Importing materials to the construction compounds south of the River Thames via existing ports is not favourable, due to the reliance of the local road network and no direct access to construction compounds. The construction of direct access between the river to construction compounds is constrained by the Thames Estuary and Marshes Ramsar. This would result in unacceptable biodiversity impacts.</p> <p>Expanding the commitment to the south of the river would cause a greater impact on the road network as it would mean materials would have to be transported through the local road network (LRN) in Gravesham to be taken to compounds further away from the river. The northern tunnel entrance compound is the only compound which is in proximity to the river and has an adequate riparian facility adjacent to it (Port of Tilbury), allowing for a river commitment to be made. The southern tunnel entrance compound, approximately 1.5km from the river, would require a large quantity of Heavy Goods Vehicle (HGV) movements on the LRN to connect it to the river. As mentioned above, the Ramsar site adjacent to the works prevents direct access from the river. In addition, several roads have had HGV bans placed on them within the DCO application to remove the risk of HGVs associated with the Project following unsuitable routes; see the outline Traffic Management Plan for Construction [REP1-174] for a full list of locations where HGV bans have been committed to.</p>
Page 45 Paragraph 9.4.2	In addition to an Excavated Materials Assessment to verify that sufficient capacity is available in the study area to accept excavated materials for recovery activities (paragraph 2.6.17 of the Outline Site Waste Management Plan [APP-338], there is also a need for feasibility assessment of off-site recycling, as well as recovery and disposal capacity. The Register of Environmental Actions and Commitments (MW012) [REP1-157] should be updated accordingly.
Applicant's Response	The Applicant does not consider the offsite recycling feasibility study suggested by Medway Council necessary. The Design Manual for Roads and Bridges (DMRB) LA 110: Material assets and waste (Highways England, 2019) does not require consideration of the reuse/recycling facilities in the study area. However, Table 11.7 in ES Chapter 11: Material Assets and

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	<p>Waste [APP-149] provides information of the annual permitted tonnage of recycling/recovery sites in the study area and ES Figure 11.1: Active Landfill and Waste Transfer and Treatment [REP1-152] illustrates these sites. It shows that there are over 65 million tonnes of permitted annual capacity within the study area for recycling, treatment and recovery.</p> <p>Commitment MW012 in the REAC [REP1-157] relates to the Excavated Materials Assessment [APP-435]. Unlike the recovery and disposal sites that have been identified in the Excavated Materials Assessment, the offsite recycling facilities are not necessarily the final destination.</p>
<p>Page 46 Table 2 Traffic and Transport</p>	<ul style="list-style-type: none"> • Paragraph 5.3.4 and Plate 5.1 of the WNIMMP must add the Four Elms Roundabout (A289 / A228) as a location to be included in the monitoring scheme. • Medway Council has commissioned a new traffic model and an assessment to inform local plan making, including a 'with Project scenario'. Medway Council is engaging with National Highways (Spatial Planning) in producing the assessment. The assessment will include analysis to determine proportionate developer contributions from sites to be allocated for development, which is likely to include contributions due as a result of traffic flows generated by the Project; the IDP will need to specify National Highways as a funding source. A commitment from National Highways would provide more certainty to support local plan-making. • For M2 junction 1, Medway Council will be pursuing existing investment processes. In doing so, Medway Council will require collaboration with the Project team. • An updated assessment of traffic-related severance on pedestrians is required based on Medway Council's 'with Project scenario'.
<p>Applicant's Response</p>	<ul style="list-style-type: none"> • Please see the Applicant's Response to Page 29, Paragraph 4.4.4 above. • Please see the Applicant's response to Page 29, Paragraphs 4.4.5 & 4.4.6 above. • Please see the Applicant's response to Page 29, Paragraph 4.4.7 above. • Please see the Applicant's response to Page 30 Paragraph 4.4.8 above.
<p>Page 46 Table 2 Noise and Vibration</p>	<p>An appropriate noise insulation assessment for Cuxton and Halling ward must be conducted as soon as possible before construction starts.</p>
<p>Applicant's Response</p>	<p>This is repeated from page 33 paragraph 5.4.2, please see response above.</p>

LIR Reference	Local Impact Report Extract / Applicant's Response
Page 46 Table 2 Air Quality	Off-site mitigation to deliver air quality improvements within Medway's air quality management areas may be appropriate, along with a financial payment to support air quality monitoring, modelling and associated plans. This could be triggered by exceedances of the air quality objectives during operational phase monitoring.
Applicant's Response	Please see the Applicant's response to Page 36 Paragraph 6.4.1 above.
Page 46 Table 2 Material Assets and Waste	<ul style="list-style-type: none"> • Paragraph 3.4.9 of the Outline Materials Handling Plan (APP-338), along with the Register of Environmental Actions and Commitments (MW002) (APP-336), should refer to sourcing aggregates from proximate wharves, e.g. North Sea Terminal at Cliffe. • There is a need for a feasibility assessment of offsite recycling, as well as recovery and disposal capacity. The Register of Environmental Actions and Commitments (MW012) (APP-336) should be updated accordingly.
Applicant's Response	<ul style="list-style-type: none"> • Please see the Applicant's response to Page 45 Paragraph 9.4.1 above. • Please see the Applicant's response to Page 45 Paragraph 9.4.2 above

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