



By email:
ltc.consultation@traverse.ltd

Sessions House
County Hall
Maidstone
ME14 1XQ

6th October 2021

Dear Sir/Madam,

Lower Thames Crossing Community Impacts Consultation 2021

Response from Kent County Council

This is Kent County Council's (KCC) officer response to the community impacts consultation by National Highways on the latest proposals for a new Lower Thames Crossing.

Our response to the 2018 statutory consultation, 2020 supplementary consultation and 2020 design refinement consultation have all outlined in detail our overall support for the scheme, but also our concerns regarding the impact on the environment and existing highway network.

Within our response to the design refinement consultation in 2020 we raised concerns regarding the lack of engagement from National Highways around the latest proposals. However, we are pleased that since then we have seen an increase in engagement and information sharing from National Highways, in particular in regards to the proposed new parking facility and Non-Motorised User (NMU) routes. We would ask National Highways to continue to meaningfully engage with the County Council on all relevant matters up to and beyond resubmission of the Development Consent Order (DCO) application.

In respect to the latest design changes and proposed impacts and mitigations presented within this latest consultation, KCC supports the majority of National Highways proposals to build and operate the Lower Thames Crossing (LTC). However, there remains five key areas where we have concerns;

- 1. The impact of the scheme on the local and strategic highway network**

Kent County Council has long made the case for appropriate mitigation and we welcome the opportunity to work with National Highways to fully identify and mitigate the direct impacts the LTC will have on other areas of the local highway network once operational. However, we remain concerned by the lack of commitment from National Highways to mitigate the impacts of



construction on both the local (LRN) and strategic (SRN) road networks, and also the operational impacts of the LTC on the remaining SRN. The traffic modelling identifies increased traffic flows on the SRN to the east of the LTC, including M2 Junctions 1, 2 and 3, the A2 Junction with the A227, and M25 Junctions 2 and 3. Whilst we welcome the inclusion of A2 Brenley Corner and A2 Dover Access as pipeline schemes for RIS3, we are concerned there is currently no commitment from National Highways to improve the junctions identified above which will be adversely impacted as a result of the LTC.

Furthermore, KCC asks for an allocated legacy fund to be established for communities located near the A2 and in the vicinity of the LTC (for example, Cobham, Sole Street, Northfleet and Swanscombe). The aim of this fund would be to secure local traffic improvements and to mitigate the significant and prolonged period of disruption these communities have suffered over many years as a result of the A2 itself and the likely future disruption from LTC construction. Affected land property and landowners should also be compensated for the disruption as well as those already suffering from blight before the scheme has begun.

2. The impact on existing road assets

The impact on KCC's existing road assets continues to be an area of concern for the County Council. Measures to address the deterioration of KCC's local road network as a result of the LTC construction have been discussed with National Highways, but little progress has been made. If local roads deteriorate during the construction phase, rather than being made more resilient beforehand, KCC's response is likely to only be a reactive and localised one. This approach is likely to lead to considerable local angst and will not aid National Highways in the delivery of the scheme. Therefore, we would continue to request that National Highways works with KCC to deliver a package of works ahead of the start of construction to ensure the network is of sufficient standard to uphold the impact of constructing the LTC.

3. The impact on construction workforce

KCC welcomes the work that has been undertaken so far around skills and employability, including the production of a Skills and Employability Strategy. However, given the scale of construction required to deliver the Lower Thames Crossing, we are concerned about the increasing pressure this puts on local labour forces and other construction projects in the area. We would expect National Highways to do more to identify specific skills gaps and invest in training and a construction skills centre to ensure local workers have the skills required to deliver the project and leave a lasting legacy to the area. The skills shortage not only applies to construction but also in terms of the environmental assessment of the scheme e.g. ecologists, archaeologists, to



name just a few, and opportunities should be taken to upskill the local workforce in these important professions that are vital to enable schemes to be able to go ahead.

4. The impact on Shorne Woods Country Park

Overall we welcome the reduction in the utility corridors and the work that has been undertaken with statutory undertakers to reduce the impact of the necessary diversions. However, the consultation provides very little update on the 60 metre easement through Shorne Woods Country Park. Kent County Council has remained strongly opposed to the 60 metre easement which is required for the diversion of a high pressure gas pipeline. We fully expected National Highways to work with the relevant utility provider to reduce the land take to the absolute minimum and provide appropriate compensatory planting and other mitigation to KCC's flagship Country Park. The progress of this work is difficult to identify within the consultation material. It should also be noted that domestic gas use will eventually be phased out to meet net zero carbon targets, starting in 2025 with the ban on gas boilers in new homes. Therefore, before the LTC is even open the importance of gas will have already started to diminish, and yet the loss of ancient woodland to maintain this supply of fuel of diminishing importance, would have already happened.

5. Lack of environmental information

In our response to the design refinement consultation we raised concerns about the complete lack of environmental information being presented. Whilst the Landscape and Ecology Management Plan and Register of Environmental Actions and Commitments have been included within this consultation, there remains a lack of additional survey information.

Please find attached our response to the consultation questionnaire which sets out our comments in further detail.

Yours sincerely

Simon Jones

Corporate Director for Growth, Environment & Transport
Kent County Council



Kent County Council's Response to the Lower Thames Crossing Community Impacts Consultation Questionnaire

1. The project's impacts and mitigation

Q1a. Do you support or oppose how we plan to build the Lower Thames Crossing?

Strongly support

Support

Neutral

Oppose

Strongly oppose

Don't know

Q1b. Please let us know the reasons for your response to Q1a and any other comments you have on how we plan to build the Lower Thames Crossing, including the impacts of building the project. If your comment relates to a particular document, specific ward or location, please refer to it in your response.

Engagement with Kent County Council (KCC)

Previously KCC has welcomed engagement with National Highways on the development of construction proposals. However, continuous engagement with KCC's Streetworks team is imperative to ensuring the construction of the Lower Thames Crossing (LTC) does not prohibit other projects or roadworks within the area. Careful consideration and planning will be key to ensuring the correct traffic management can be implemented and all necessary licences are in place prior to the commencement of any works.

Construction Methods

Furthermore, KCC supports National Highways' commitment to use sustainable construction methods, such as the use of lower carbon concrete, reuse of material on-site and renewable energy for construction. The County Council would encourage National Highways to prioritise sustainable methods as much as feasibly possible throughout the construction of the LTC.

Wider Highway Network

However, KCC is concerned about the impacts of construction on the wider highway network. For example, increased demand on the A20/M20 and the local road network by drivers diverting to avoid roadworks. These diversions may not necessarily be official diversion routes, but still have the potential to cause gridlock on the wider Kent network.

There is also the need to consider how HGVs can be prevented from using inappropriate local roads for diverting away from roadworks. A six year construction period could have significant impacts on the whole of the highway network in Kent if not properly mitigated. This will need careful consideration and planning between Highways England, KCC, and the wider Kent Corridor Group.



Asset Management

The County Council welcomes discussions around measures to address the deterioration of KCC's local road network as a result of the LTC construction, but KCC is not content with the suggestion for a condition survey to be undertaken before and after construction of the LTC. This survey would assess any deterioration of the KCC network as a result of the scheme, and funding then provided to repair the network to its previous condition. However, if construction traffic uses the local road network from the start of the project in its current condition, the asset will fail due to this traffic, therefore preparatory works are needed to strengthen roads before the LTC scheme begins.

It is National Highways' responsibility to proactively address the lack of resilience on the local road network that it intends to use for its project by providing strengthening to those parts of the KCC network before construction starts. KCC has identified the necessary works required and it would take a total of two to three years to deliver the package of improvements, therefore it is imperative work on this is agreed and started as soon as possible.

Cultural Heritage

KCC would support the overall process for considering cultural heritage but have concerns about the potential for significant below-ground archaeological remains to be discovered during the outstanding evaluation field work, which is behind the DCO application process. The County Council is concerned that potentially significant archaeological remains may be discovered and impacted and it is currently unclear whether there will be sufficient flexibility in the process of design and build, as well as the resources available, to provide for combinations of meaningful preservation in situ (as required by the REAC CH006, 007 and 008 and in the Design Principles) and/or recording in advance of loss. KCC also has concerns about the lack of detailed recognition and explanation of the impact of the LTC on the historic landscape and the wider setting of heritage assets such as Cobham Hall and Thong village Conservation Area.

Healthcare

Given the size of the workforce set to be working on LTC further consideration needs to be considered on the impact this could have on local health care.

Air Quality

Detailed consideration needs to be given to the impact of construction related air pollution on schools and other sensitive locations within or close to the catchment area. It is imperative appropriate mitigation is implemented to ensure school children and other vulnerable people do not suffer as a result of construction.

Detailed comments on the Construction Update document are outlined below:

Construction Update

Table 2.5 – Construction waste eliminated through project design changes (p.g.66)

KCC welcomes the entrance to the southern tunnel portal being moved 350m further south, saving 620,000 cubic metres of excavated material. However, there is still around 2.5 million



cubic metres of material that needs to be disposed of in the creation of Chalk Park and in existing landfill/development sites. Clarification is needed as to how much spoil is to be stockpiled on site to be moved at a later date or whether any excess material will be moved during the construction period.

Management of excavated material and earthworks (p.g.32, 64 and 87)

Reusing the excavated material for earthworks and obtaining most of the fill material from within the Order Limits is welcomed as it will help to reduce the impact on the local highway network. However, clarification is required as to the target percentage of re-using excavated material onsite.

Temporary Lighting (p.g.32)

Lighting on or that which will affect the public highway should be designed to KCC standards.

South Tunnel Entrance (p.g.124)

The cutting of the southern tunnel entrance will create 2.4 million cubic metres of excavated material, 75% of this is intended to be reused onsite for the creation of Chalk Park, but clarification is needed as to where the remaining 25% of excavated material will be moved to.

National Highways should also note that any hoarding, skips, scaffold etc that will impact KCC maintained land will require a licence.

Utilities and utility works (p.g.40)

Clarification is needed as to whether the utility works will be undertaken by the companies who own the asset or whether these will be diverted by the Lower Thames Crossing project. If these are being undertaken by the Lower Thames Crossing, clarity is needed as to whether a third party will be used for diversions. Further detail is also needed on the roads that will be affected for the diversionary works leading up to the main project, and the proposed approach to managing these impacts during construction.

Thong Lane green bridges and Brewers Road green bridge (p.g.90 and 91)

KCC will need an understanding of what these will contain and who will be responsible for maintaining these assets once constructed. Currently, bridges are maintained by National Highways and KCC maintain the surface over the bridge, but clarification is required as to whether KCC will be expected to maintain the green parts of the bridge and whether maintenance funding will be made available.

When the Brewers Road bridge is demolished until the new bridge is constructed (an anticipated 19-month period) clear diversion signs and publicity should be in place to notify users of Shorne Woods Country Park. Furthermore, disrupted access to the country park and reduced pedestrian access due to temporary footpath closures should be compensated. Consideration also needs to be given to how National Highways will work with KCC's Country Park team to publicise and attract visitors back to the park once the road/footpaths have reopened.



Haul roads (p.g.75)

It is unclear within the consultation update document, how access will be made by deliveries and HGVs when works are being carried out on Thong Lane. Clarification is needed on whether this would be via a haul route or via the Half Pence Lane end of the road which has a width restriction covered by a Traffic Regulation Order.

Access routes and haul routes (p.g. 62)

The selection of routes to construction compounds using the principle of reducing the impact on the local road network, maximising use of haul roads on land within the Order Limits, providing direct links between compounds and using the SRN wherever possible (as an alternative to using local roads) is also welcomed.

Construction of compounds on highway land (or land affecting the highway) needs to be designed and constructed in line with Kent Design Guide. The reinstatement of haul roads back to their original form is noted.

Working hours (p.g.68)

The construction update claims that working hours (excluding tunnelling and supporting activities) are proposed to be 7am to 7pm on weekdays and 7am to 4pm Saturdays, plus up to one hour before and after for start-up and close down procedures. This should reduce the impact of the construction on the local highway network during the network peak periods and should be made a condition/requirement for contractors. However, page 193 states the impact on the local road network from staff would be between 0700-0800 in the morning and 1800-1900 in the evening. This could risk having a significant impact on the network during peak periods so National Highways is must carefully manage the travel of staff to and from construction compounds.

Any access on to the local highway network must be designed in line with Kent Design Guide.

Building the Lower Thames Crossing and the impacts on the local road network (p.g. 194)

As previously stated, all delays to buses should be minimised and avoided where at all possible. Achieving modal switch from private car to public transport is key to reducing congestion on a network, especially where physical mitigation opportunities are limited. Times of congestion on the network (caused by such things as long-term development construction) is a good opportunity to achieve this shift. Research shows the attractiveness of public transport services is mainly based on reliability and journey times and even the slightest increase in journey time can dissuade users. Under the construction phases presented, both the road network and the public transport network are disadvantaged (although it is noted that this mainly affects services on the A226). Incentives should therefore be provided to users to increase the attractiveness of public transport for both employees and existing local residents to reduce the overall number of vehicles on the network during construction.



Q1c. Do you support or oppose how we propose to mitigate the impacts of building the Lower Thames Crossing?

Strongly support

Support

Neutral

Oppose

Strongly oppose

Don't know

Q1d. Please let us know the reasons for your response to Q1c and any other comments you have on how we propose to mitigate the impacts of building the Lower Thames Crossing. If your comment relates to a particular document, specific ward or location, please refer to it in your response.

KCC welcomes the work that has been completed so far to identify potential impacts of construction and propose suitable mitigation measures, in particular those identified within the Ward Summaries document. However, it is recognised there will be a number of impacts, especially in terms of traffic and air quality, that will occur within areas that are not covered within the document, for example Medway and urban Gravesend. It is imperative the project considers the impacts and mitigation measures for all affected areas. KCC would encourage National Highways to mitigate the impacts of construction on local communities as much as possible, and ensure appointed contractors go above and beyond to ensuring local residents are not significantly adversely impacted.

Furthermore, there remains a lack of information regarding the proposed measures to mitigate a deterioration in air quality along the M20 during years 2026 and 2027 of the construction period, which can be seen in Figure 7-4 and Figure 7-6 of the Construction Update. Any significant displacement of traffic will need to be carefully managed with adverse impacts appropriately mitigated.

Cobham Services

Chapter 3 of the Construction Update highlights how the Cobham Services are currently well-used, but the scheme will not provide a direct replacement when they are demolished (the previously proposed service area on the north side of the river is also no longer part of the proposed scheme). Kent has a significant problem with a lack of official lorry parking facilities and the loss of another will only increase the deficit of spaces within the area. We would welcome more proactive engagement with roadside facility providers and planning authorities rather than the broad commitment to work with the industry and stakeholders if the DCO is granted. The need to secure more overnight lorry parking should be a priority for National Highways and the DfT more widely. The scheme also does not make any provision for charging of electric vehicles, which by opening will be the only type of new vehicle on sale and this does nothing to contribute towards achieving net zero carbon. We consider this a weakness of the proposed scheme.



Biodiversity

The Register of Environmental Actions and Commitments (REAC) is not detailed and whilst the County Council is satisfied with the principle of what is proposed, KCC would advise that there will be a need for detailed documents demonstrating how all the measures within the REAC will be implemented. The County Council understands that the ecological surveys and details of mitigation will be submitted as part of the DCO which is expected to provide the detailed information. As detailed within the REAC, lighting, noise and vibration could have negative impacts on the surrounding habitats/species, and as mitigation has been proposed (such as erecting noise barriers outside of the sensitive period) National Highways must be satisfied that the avoidance measures can be implemented. The County Council highlights that as part of the application it must be demonstrated that any noise barriers etc can achieve the mitigation proposed.

TB006 - Employment of suitably qualified and experienced Environmental Clerks of Works (ECoW) throughout the construction phase of the project to supervise implementation of environmental mitigation and protection commitments.

KCC requests that an ECoW is also employed to oversee the whole project, in addition to an ECoW for each construction team/project area. Due to the size of the proposal there will be several different works areas being carried out at the same time across the same site.

TB027 Construction of replacement air raid bunker – The report states: An air raid bunker within Shorne Woods containing a hibernation bat roost would be lost as a result of the Project.

The County Council understood from previous meetings with Highways England that the plans had changed and the bunker was to be retained. Due to the risk of disturbance during construction it was agreed that a replacement roost would be created but not as a result of the removal of the bunker.

HR007 - Habitat enhancement in functionally linked land

The report has detailed that three fields will consist of either a standing ripe crop ready to be harvested, winter stubbles or grass ley from 1 October to 1 March each year during the construction. KCC are supportive of this but as it is directly next to a firing range, there is a need to ensure that is located in an appropriate area which birds associated with the designated sites will use. The County Council had received additional information assessing if the location was in an appropriate area in relation to construction compounds, but not the shooting range.

Cultural Heritage

KCC supports the work done to date to seek to identify heritage assets and set out alternatives for further evaluation and mitigation of impacts. However, the County Council has concerns about the potential for significant below-ground archaeological remains to be discovered during the outstanding evaluation field work, which is behind the DCO application process. KCC is concerned that potentially significant archaeological remains may be impacted and it is unclear whether there will be sufficient flexibility in the process of design and build, as well as the resources, to provide for combinations of meaningful preservation in



situ and/or recording in advance of loss to mitigate impacts. The County Council also has concerns about the lack of detailed recognition and explanation of the impact of the LTC on the historic landscape and the wider setting of heritage assets such as Cobham Hall and Thong village Conservation Area. KCC would request consideration of compensation off-site for impacts to the historic environment where mitigation is not possible or sufficient within the Order Limits. It is perhaps also worth noting, that with regards to below-ground archaeological remains and historic landscape features, some of the proposed mitigation, such as landscaping, creation of ponds and woodlands etc. will have archaeological impacts.

Shorne Woods Country Park – Car Park Facility

KCC welcomes the proposal to utilise part of the A2 construction compound as an additional car parking facility for Shorne Woods Country Park once construction of the LTC is complete. It is hoped this will help to leave a legacy for the country park and wider area whilst also meeting the demands for additional parking capacity at the park. The County Council would also ask National Highways to install electric charging points at the new facility to support the transition to electric and ultra-low emission vehicles.

Q1e. Do you support or oppose how we plan to operate the Lower Thames Crossing?

Strongly support

Support

Neutral

Oppose

Strongly oppose

Don't know

Q1f. Please let us know the reasons for your response to Q1e and any other comments you have on how we plan to operate the Lower Thames Crossing, including the impacts of operating the project. If your comment relates to a particular document, specific ward or location, please refer to it in your response.

Wider Network Impacts

The traffic modelling shows that the wider highway network to the east of the new LTC, both local and strategic, will be put under increased pressure as a result of the new Crossing. Unless these roads and junctions receive capacity upgrades to relieve existing congestion and background growth, the induced and transferred traffic resulting from the LTC will constrain economic growth in the county. As a result, National Highways must develop the necessary wider network improvements within the next Road Investment Strategies (RIS).

However, other essential wider network improvements, including the A229 connection from the M2 at Junction 3 and the M20 at Junction 6, originally part of the DfT's Option C 'variant' for the LTC, have no commitment for development in RIS2 or RIS3, nor are any mitigation measures being proposed as part of the LTC scheme. This is wholly unacceptable and must be reconsidered by the DfT and National Highways. KCC is currently working up a bid for some local road improvements to the A229 to be delivered through the Major Road Network (MRN) and Large Local Major (LLM) scheme programmes, therefore it is essential that National Highways assist KCC in making the case to Government for this funding. However,



funding available through these local road programmes (MRN and LLM) still require an element of match funding and it is only reasonable that if the LTC is to generate a significant increase in traffic flows on the A229, which is demonstrated by the traffic modelling, then National Highways should contribute towards the cost of these improvement works.

Traffic Modelling

As per our response to the statutory consultation in 2018 and the supplementary consultation in 2020, the model uses an AM peak of 0700 – 0800 and a PM peak hour of 1700 – 1800 based on the analysis of DART charge data. Although this allows the impact on the Dartford Crossing to be reviewed and the Strategic Road Network (SRN) within the wider area, it does not correspond with the peak hours on the Local Road Network.

The model does not have enough validation points on the Local Road Network, which makes it unsuitable to reasonably assess impacts on local roads, especially Dartford and Gravesend urban areas. Significant increases in traffic flows on local roads can also be identified from the Operations Update, but some of these roads are narrow country lanes with traffic calming measures and the SATURN model does not take these characteristics into account when assessing the impacts.

KCC still believes further validation with traffic counts on the Local Road Network should be undertaken. A micro-simulation model should be developed that is detailed enough to assess the impacts of the LTC on the local road network and the key junctions along the A2/M2, including M2 Junction 3 (for the A229).

Structures

National Highways are required to provide a list of proposed highway structures KCC will be required to adopt. Any highway structures expected to be in the ownership of KCC are those as defined in accordance with CG300.

Clarification is also required on who is the anticipated owner and who is the anticipated technical approval authority of the many local structures supporting the highways. Kent County Council would like to be the Technical Approval Authority (TAA) when we are expected to adopt a structure. NB: Retaining structures to be adopted by Kent County Council will not be accepted if they are in the form of 'Crib Walls' or 'Gabion Baskets'.

If the structures are to be adopted by KCC then further information is needed on the anticipated funding stream for ongoing maintenance and inspection.

It is assumed National Highways will be the TAA for the Thong Lane Green Bridge spanning 80 meters. KCC Structures team would like to be consulted with due to its potential impact on our highway above.

Further clarification is also required for the proposed retaining structure along Rochester Road (A226), including the sequence which the retaining wall along Rochester Road (A226) directly above the southern section of the Lower Thames tunnel will be placed and whether the excavation will occur first then, the structure will be placed or vice versa? If this structure is to be adopted by KCC, KCC requests TAA responsibility for the structure.



KCC would like to see sight of National Highways' anticipated settlement/ heave allowance at the locations Lower Higham Road and Rochester Road. At both locations KCC highways run over the proposed Lower Thames Tunnel. KCC request information regarding the settlement of the proposed tunnel at these locations, so it can be verified that the settlement is within acceptable allowances.

It is unclear as to whether any structural changes will be occurring to KCC's existing structures due to the proposed works at:

- KCC structure number 1902 & 1898 - bridges taking the A2 exit east bound into Strood A2.
- Proposed slipway extension works on Hester Road slipway to M2 (southbound) KCC structure number 8182 (environmental barrier)

KCC structures 1904 & 2202 & 2203 will be taking increased loads due to the route being "construction route on public road" - strengthening works maybe required if the haulage is anticipated to be above the usual 44 ton allowance for local highways.

Interactive Map

There are several structures noted on the interactive map provided by National Highways that appear to be on KCC highway network – this is not an exhaustive list. KCC requests more information on these structures and on structures KCC are required to adopt.

- Retaining wall along the proposed slipway extension works on Hester Road slipway to M2 (southbound)
- Hasted Road A2, southbound slip to M2 – Structure noted on north side.
- Structure noted south of "Park Pale Bridge" on entrance road to balancing pond
- Structure noted north of "Park Pale Bridge", running parallel to M2
- Structure noted north side of Brewers Road environmental bridge, running parallel to M2
- Structures noted on north and south abutments of "southern Thong Lane green bridge".
- Section of Thong Lane parallel to A2, West of Halfpence Lane / Brewers Road / Thong Lane roundabout. There is a structure noted parallel to the A2, and close to national rail line.
- Structure shown to the southern side of proposed roundabout at location of "ESSO MFG COBHAM LONDON ROAD".
- Structure shown west of proposed roundabout as noted above.
- Hever Court Road northern roundabout. Structure shown on north side of roundabout
- Gas diversion proposed parallel to Church Road. KCC notes as per CG300, that if the diversion comes within 3.66m of the highway and 1.4m deep, KCC will require HE to complete temporary works technical approval prior to works commencing.

Drainage

Information was shared with the Environment Agency in June 2021 which indicates the location of the three attenuation basins for control and management of excess water from



the highway system. No information is contained on these basins within the operations update. The basins can be seen illustratively in Figure 3-11 of the Operations Update but do not appear to be shown within any maps.

KCC as the Lead Local Flood Authority (LLFA) would provide the following comments:

1. The County Council as Lead Local Flood Authority would normally review proposals for drainage measures as proposed to receive surface water from the highway to ensure that the design is adequate for the flows which they receive with the site infiltration rate.
2. KCC understand that the Environment Agency has provided comment with respect to groundwater on the sequence of cascaded basins serving the southern portal but no comments will have been provided in relation to surface water flood risk as it is outside the remit of the Environment Agency.
3. KCC would request that the LLFA is provided an opportunity to review the sizing of the basins, with information to evidence infiltration rates and any assumed pump rates, as well an assessment impacts of climate change and risks associated with potential exceedance events. Our review would usually include confirmation that the basin arrangements and design elements comply with our guidance as stated within Kent's Drainage and Planning Policy as well as Kent Design.
4. KCC would expect that discussions have been held with Southern Valley Golf Course where the basins are to be located. There may be other members of the public who may wish to provide comments on these features but the information does not appear to have been published.

The County Council would seek confirmation of the basin design to ensure flood risk is not created downstream due to any potential exceedance event and to ensure that adequate provision has been made for climate change for the life time of the proposal.

Cultural Heritage

KCC has concerns about the visual and noise impact of the new road on heritage assets such as Thong village Conservation Area once operational. The County Council would request consideration of compensation off-site for impacts to the historic environment where mitigation is not possible or sufficient within the Order Limits.

Detailed comments on the Operations Update document are outlined below:

Operations Update

Other features (p.g.20)

KCC will need an understanding of what the proposed green bridges will contain and who will be responsible for maintaining these assets once constructed. Currently, bridges are maintained by National Highways and KCC maintain the surface over the bridge, but clarification is required as to whether KCC will be expected to maintain the green parts of the bridge and whether maintenance funding will be made available.



Changes to the design (p.g.54)

Any private apparatus or moiling under the highway will need Section 50 licences. As an example, Lower Higham Road was stated on page 54 as requiring a pipe to be installed under the road for drainage purposes.

Forecasts with the Lower Thames Crossing

The LTAM has used flows from March 2016, which are now 5 years old. It is recognised that traffic flows may still be affected by the Covid-19 pandemic and therefore the existing flows are still acceptable at this time. However, any further delays to the project are likely to require new traffic data to be obtained and used.

London Resort (p.g.117)

The LTC proposes to assess the London Resort application and present the outcomes in the DCO. This is required and welcomed.

Figure 4-2 Change in flows with the project: AM peak (7am to 8am), 2029

Figure 4-2 shows the change in flows post construction: AM peak (7am to 8am) 2029 and shows there to be an increase of between 51-250 vehicles travelling east-bound (EB) on Bob Dunn way and 251-500 vehicles travelling west-bound (WB) on Bob Dunn Way. This link is known to be significantly congested during the peak hours (which is likely due to the congestion at junction 1a in the east and the bottleneck at Cray Mill Lane bridge in the west) and local residents already struggle to merge on to Bob Dunn Way from the north. It is assumed that the impact of the increase in EB trips is offset by fewer vehicles on the A282 north-bound (NB) approach to the tunnel, allowing Bob Dunn Way – A282 NB trips to merge more easily onto the A282. However, clarification is required. It is also assumed that the model takes into account the blocking back effect of the lane reduction at Cray Mill Lane Bridge and that this link has been assessed appropriately. However, clarification and further information on this link such as whether there will be an increase in queueing, is requested. These points also relate to figure 4-6 which presents the PM peak hour, and figure 11.2

The County Council also has concerns about the impact on Wrotham Road and Coldharbour Road which are already congested, with the latter showing an increase of between 50 and 250 vehicles (page 451).

Traffic impacts on the wider road network

On page 163, it states that some of the junctions and links do not have capacity to cater for an increase in traffic generated by the LTC and has created a list of areas considered for intervention, subject to further investigation. The document also states that the final intervention at each location will be subject to full assessment of both the business case and consent, with any necessary consents needing to be obtained separately from the DCO application. Whilst KCC welcomes the further assessments regarding mitigation, it is disappointing that the mitigation would need to be implemented separately to the DCO as there is no guarantee this would come forward. Any mitigation required as a result of the LTC is required to be implemented.



It is unclear why the traffic data is only shown for the opening year (2029) and not the design year (2044) as would be expected. This should be included in the final report.

National Highways should also note that Prospect Grove is one way east bound and currently has a width restriction. HGVs will need to use Ordnance Road and Canal Road to reach Norfolk Road.

It is proposed that temporary road widening on the A226 may be required during construction. It is unclear exactly where this would be but the impacts and benefits of retaining it afterwards should be considered.

Each section states *“Once the road is open, traffic impacts on the affected road network would be monitored, including local roads. Where appropriate, we would work with the relevant highway authority to seek funding from the Department for Transport for further interventions”*.

Whilst post monitoring is welcomed, as stated above, any mitigation immediately required on the local road network should form part of the LTC scheme and should be implemented prior to the opening of the tunnel. Taking a proactive instead of reactive approach to mitigation on the wider road network will reduce the risk of any gridlock as soon as the LTC opens. It is reassuring to read the commitment to monitor traffic flows on the local road network after the LTC is operational and to seek funding for further interventions where this is appropriate. However, the criteria for what would be deemed ‘appropriate’ would be helpful to have.

Q1g. Do you support or oppose our proposed mitigation for the operational impacts of the Lower Thames Crossing?

Strongly support

Support

Neutral

Oppose

Strongly oppose

Don't know

Q1h. Please let us know the reasons for your response to Q1h and any other comments you have on our proposed mitigation for the operational impacts of the Lower Thames Crossing. If your comment relates to a particular document, specific ward or location, please refer to it in your response.

Wider Road Impacts

The need for a wider programme of network improvements has long been a significant concern for the County Council and many members of the public. Whilst further work on this has been undertaken since the Statutory Consultation, including providing the County Council with further information regarding the traffic modelling, KCC remains concerned about the lack of commitment from National Highways to mitigate the impacts of the LTC on the wider road network, including the Strategic Road Network (SRN) of which National Highways is responsible for.



Since the Design Refinement consultation, the County Council has been working with National Highways on potential mitigation measures for the local road network. However, little information and detail has been provided on National Highways' commitment to mitigate the impacts of the LTC on the wider SRN.

The You Said, We Did document (page 24) touches on the "DfT's Road Investment Strategy (RIS) 2: 2020-2025 acknowledging the potential impacts of the Lower Thames Crossing on the road networks in Kent, Thurrock and Essex. Including a commitment for National Highways to work with local highway authorities to consider what that means for the shape of the SRN and local roads in those areas". Whilst KCC welcomes the opportunity to work with National Highways on mitigating the wider network impacts on the local road network, the County Council remains concerned about the lack of commitment from National Highways to mitigate the impacts of the LTC on the wider SRN. For example, KCC welcomes the inclusion of A2 Brenley Corner and A2 Dover Access as pipeline schemes for RIS3 (2025-2030) but is concerned about the lack of schemes for other parts of the SRN such as M2 Junction 1, 2 and 3, M20 Junction 6, A2 Junction with the A227, and M25 Junctions 2 and 3 which will all experience increasing pressure as a result of the LTC as demonstrated in the traffic modelling from the Lower Thames Area Model (LTAM).

KCC would encourage National Highways to look at the scheme, and its impacts, in a more holistic way and ensure as much mitigation as possible is delivered up front to prevent any possible gridlock or displacing of congestion elsewhere on the network in Kent once the LTC opens.

Air Quality

In the Ward Impact Summary document the mitigation for the predicted exceedances of traffic related pollutants is to provide no mitigation or monitoring because of the likely increased use of electric vehicles. Whilst KCC appreciates that this is a likely scenario, the County Council also acknowledges that the scheme will be operational in a decade's time, and therefore cannot be sure that this is the case. KCC would expect to see some commitment to monitor dependent on the uptake of electric vehicles in the intervening years.

Cultural Heritage

KCC has concerns about the visual and noise impact of the new road on heritage assets such as Thong village Conservation Area and the wider setting of Cobham Hall once operational. The County Council considers that there should be greater recognition of the impacts but we are uncertain what additional mitigation can be put in place given the constraints of the scheme. It is perhaps also worth noting, that with regards to below-ground archaeological remains and historic landscape features, some of the proposed mitigation, such as landscaping, creation of ponds and woodlands etc.) will have archaeological impacts. KCC would request consideration of compensation off-site for impacts to the historic environment where mitigation is not possible or sufficient within the Order Limits.



2. Changes since the design refinement consultation

South of the river in Kent

Q2a. Do you support or oppose the proposed changes south of the river?

Strongly support

Support

Neutral

Oppose

Strongly oppose

Don't know

Q2b. Please let us know the reasons for your response to Q2a and any other comments you have on the proposed changes south of the river.

A2/M2 Corridor

Utilities

Kent County Council supports the design changes to the utilities diversion routes, notably the Southern Gas Networks pipeline. Although it is still disappointing that the section between Brewers Road and the Inn on the Lake will impact on Shorne Woods Country Park, it is a significant improvement to divert the remainder of that section into the existing carriageway. This will not only avoid direct impacts on the Country Park but will likely improve access for future maintenance.

However, it is not yet clear what the full extent of the easement required for the gas pipeline will ultimately be. The Council continues to ask that this is reduced as far as possible. It should also be noted that domestic gas use will eventually be phased out to meet net zero carbon targets, starting in 2025 with the ban on gas boilers in new homes. Therefore, before the LTC is even open the importance of gas will have already started to diminish, and yet the loss of ancient woodland to maintain this supply of fuel of diminishing importance, would have already happened.,

There also needs a pragmatic approach to be taken to permitting re-planting in the vicinity of the new pipeline. For example, where protective measures might be used (such as root barrier systems) trees should be able to be re-established in that area to mitigate losses.

National Highways should also adhere to the aspirations of KCC's Plan Bee strategy when planting for mitigation and compensation, and ensure the species chosen are most appropriate for the area and of maximum benefit to pollinators. The full Plan Bee action plan can be viewed here:

https://www.kent.gov.uk/data/assets/pdf_file/0018/103905/Kents-Plan-Bee.pdf

It has also been identified that following the utility design changes there is now scope for additional woodland planning at the following locations:

- Additional planting between Park Pale Road and the A2



- On the semi-circle of land at Park Pale and the land immediately to the east of this, just north of the existing access to the haulage depot.
- Additional replacement woodland planting between HS1 and the widened A2.

The Council asks that opportunities for further planting are considered in the continuing design refinements.

The Council in its Heritage Conservation function will need to see more detail of the utilities routes to agree appropriate evaluation and mitigation options where there is any impact on archaeological potential.

The removal of the overhead power cables as a result of the relocation of the Shorne Woods switching station is supported because it enables a greater area to be managed as woodland. This will also reduce the visual impact on this area and improve the setting of the Area of Outstanding Natural Beauty (AONB) compared with the previous proposals.

Access to Harlex Haulage

A revised access to the Haulage Depot is being proposed, which includes the provision of an additional access to the north of the originally proposed one (which is to be retained) resulting in further encroachment into a currently undeveloped part of the AONB that is of high landscape character. Any access should be kept as close to the A2 route as possible to minimise encroachment into this undeveloped part of the AONB.

Public Rights of Way

KCC's Public Rights of Way (PRoW) and Access Service welcome the further engagement that has taken place since the design refinement consultation in 2020 regarding the design and layout of PRoW in and around the site, the programming of works and proposals for temporary closure of PRoW and alternative temporary provision, and wider walking, cycling and riding links in the area to provide long term benefit.

However, the amount of detail within the community impacts consultation made it difficult to determine the latest design changes. In respect of Public Rights of Way and access more generally, most of the information was derived from the interactive map as "Figure 3.15 Proposed footpaths, bridleways and cycle routes in Shorne, Cobham and Luddesdown wards" was a little ambiguous. It would be helpful if the information was presented in the form of two plans:

- one map/ plan that shows the existing PRoW, and identifies those sections to be extinguished or diverted and
- a plan showing the new layout, the status of the routes and the links to the existing network- including highways.

Overall KCC's PRoW and Access Service supports the latest proposals. The figure of eight maintains connectivity and provides a number of reasonably direct and convenient options for those wanting to move east- west. The green bridge provides a high amenity means of crossing the route (similar to that delivered at Scotney Castle as part of the Lamberhurst Bypass).



The increased provision for equestrians and cyclists is also welcomed. Further engagement would be appreciated to ensure that the DCO removes any ambiguity as to the status of routes. They should all be public bridleways where riding, cycling and pedestrian use is to be facilitated, or footpaths where existing pedestrian links are to be maintained without provision for equestrians and cyclists.

To the north of the A2, a clearly defined and improved traffic free link should be delivered to link with the cycle/ equestrian link through cyclopark. This provision is currently a little ambiguous simply as the cyclopark element relied on the retention of access over what was formerly the A2 rather than specific new provision and new rights.

Furthermore, the off road cycling and riding provision to the south of the A2 is welcomed and will serve to link a number of valuable sites providing further recreational opportunities. The County Council would also support the realignment of footpath NS161 for safety reasons.

In summary, KCC's PRoW and Access Service are supportive of the new layout and latest design changes but feel that further work is required to clarify the layout and status of the future provision (principally status).

South of Gravesend (A2/Cyclopark)

The County Council supports the removal of works adversely impacting on the Cyclopark due to the realignment of the electrical connection to the Northfleet East substation. The initial view on constructability is also promising as the need for footpath closures should be avoidable.

However, in our Heritage Conservation role, KCC will need to see an explanation of the archaeological potential, impact assessment and mitigation options for this work.

South of the River Thames/southern tunnel entrance

KCC generally supports the change to the design of the temporary drainage from the Southern Tunnel Entrance Compound as this reduces the impact on the Ramsar site. However, given this work is to be carried out behind housing, care should be taken in design and construction to minimise negative impacts on the adjacent residential properties. There could also be impacts on archaeological assets from this element of the scheme for which no evidence of assessment has been submitted in this consultation. The Council would like to see an explanation of what archaeological impacts this might cause and what options for evaluation and mitigation are proposed as this route would cross the high archaeological potential former wetland interface zone.

Similarly, the changes to farming in the arable fields north of Lower Higham Road are supported where they might benefit birds during construction and provided there is no detriment to the existing landowners/farmers. If there is an impact on yield then the issue of compensation should be discussed with the relevant parties. Again, it is not clear if there is any archaeological impact from the change in farming and so we would like to see an explanation for any potential impacts and what options for evaluation and mitigation are proposed, and to confirm that future impacts from this land use will be less than continued arable cultivation.



The change in farming practices in these fields is also a commitment in the REAC: HR007 - habitat enhancement in functionally linked land. The REAC provides further details on the proposals and explains that the three fields will consist of either a standing ripe crop ready to be harvested, winter stubbles or grass ley from 1 October to 1 March each year during the construction. The County Council is supportive of this but as it is directly next to a firing range there is a need to ensure that is located in an appropriate area which birds associated with the designated sites will use. Previously, KCC has received additional information assessing if it's located in an appropriate area in relation to construction compounds but not the shooting range.

Finally, please also note that the ground strengthening works at the Southern Tunnel entrance will also require assessment and evaluation from an archaeological perspective.

General Comments

Flooding and Surface Water

The County Council is the Lead Local Flood Authority (LLFA) for the county. In that role, KCC is aware that information was shared with the Environment Agency in June 2021 that indicates the location of the three attenuation basins for control and management of excess water from the highway system. However, no information is contained on these basins within the operations update. The basins can be seen illustratively in Figure 3-11 but do not appear to be shown within any maps. KCC, as LLFA, would normally review proposals for drainage measures as proposed to receive surface water from the highway to ensure that the design is adequate for the flows which they receive with the site infiltration rate.

The County Council understands that the Environment Agency has provided comment with respect to groundwater on the sequence of cascaded basins serving the southern portal but no comments will have been provided in relation to surface water flood risk as it is outside the remit of the Environment Agency.

We would request that the LLFA is provided an opportunity to review the sizing of the basins, with information to evidence infiltration rates and any assumed pump rates, as well as an assessment impacts of climate change and risks associated with potential exceedance events. This review would usually include confirmation that the basin arrangements and design elements comply with our guidance as stated within Kent's Drainage and Planning Policy as well as Kent Design.

KCC would expect that discussions have been held with Southern Valley Golf Course where the basins are to be located. There may be other members of the public who may wish to provide comments on these features but the information does not appear to have been published.

KCC requests that confirmation of the basin design is provided to ensure flood risk is not created downstream due to any potential exceedance event and to ensure that adequate provision has been made for climate change for the life time of the proposal.



Non-Motorised Users

It is reassuring that the LTC scheme continues to look at improvements for walkers, cyclists and equestrians, in particular addressing historic severance. It is, however, disappointing to see that there is still no cross-river provision for non-motorised users, meaning that cyclists would need to continue to the Dartford Crossing for safe transport to the northern side of the river or use the Gravesend to Tilbury ferry. Whilst the County Council appreciates that there is no dedicated staging area, particularly with the removal of the junction at Tilbury, but would anticipate that a service from the Cyclopark or similar would be utilised.

The *You Said, We Did* document states that demand for such a service is low but there is no evidence base provided for this assertion. Further, the recent publication of the Transport Decarbonisation Plan highlights the need for all road schemes to also provide for pedestrian and cycle movements, and this may change the requirements of the LTC scheme.

Construction Traffic

KCC is supportive of the design changes that have led to a further reduction to 10,350 HGV movements per month across the project (down from 13,300 in the supplementary consultation). This includes where the project can reuse more of the excavated material within the site confines.

Highway Structures and Licences

The Council asks that National Highways provide a list of proposed highway structures that KCC will be required to adopt. Further, once the eventual asset ownership is confirmed, KCC will need confirmation of who will be the technical approval authority. For structures that will belong to KCC, KCC would expect to be the approval authority. This could have design implications. For example, KCC will not accept retaining structures in the form of 'crib walls' or 'gabion baskets'. It should also be noted that any highway structures that are expected to be in KCC's ownership will need to be as defined in accordance with CG300.

Heritage Conservation

As stated in relation to specific design changes above, the Council supports the reduction in area and the approach to design changes but we would like to see more detailed explanation of how and where the changes will reduce the impact on the historic environment. In our Heritage Conservation role, the Council has repeatedly expressed concern that archaeological field evaluation is behind the design and DCO planning process which limits the ability to make informed planning decisions.



North of the river in Thurrock, Havering and Essex

Q2c. Do you support or oppose the proposed changes north of the river?

Strongly support

Support

Neutral

Oppose

Strongly oppose

Don't know

Q2d. Please let us know the reasons for your response to Q2c and any other comments you have on the proposed changes north of the river.

For the details regarding the proposed design changes north of the river, KCC defers to the view of those Local Authorities directly affected.

However, the additional capacity at the A13 junction is welcomed but the lack of an all-movements junction is still disappointing.

Order Limits

Q2e. Do you support or oppose the changes to the proposed area of land that would be needed to build the Lower Thames Crossing?

Strongly support

Support

Neutral

Oppose

Strongly oppose

Don't know

Q2f. Please let us know the reasons for your response to Q2e and any other comments you have on the proposed changes to land that would be needed to build the Lower Thames Crossing. This includes feedback on the impact the project would have on any land that you may own or have a legal interest in or right to use.

Any reduction to the originally proposed 60m strip impacting on Shorne Woods Country Park for the location of a gas pipeline is welcomed. However, it is not immediately clear from the plans how significant a reduction has been achieved at this stage. KCC would reiterate the comments made in response to the 2020 Design Refinement Consultation and the Authority remains strongly opposed to the loss of woodland within the Site of Special Scientific Interest (SSSI). As the project progresses, further refinement to this element of the scheme must be made to ensure that as small an easement as possible is taken in combination with mitigating planting and retention of as many trees as possible.

KCC supports the elimination of works within the Cyclopark due to the realignment of the electricity cable.



The Council supports the reduction in land required to divert utilities, particularly where further dialogue with utilities companies has enabled Ancient Woodland and special category land to be removed from the scheme. This should continue to be the objective as the scheme is further developed. KCC remains opposed to the loss of land from Shorne Woods Country Park. Although the reduction in land take is welcomed, the project must continue to reduce any detrimental impact on the Country Park. To be clear, we support the reduction in vegetation/woodland clearance required for utilities but do not support the clearance itself.

Clearly the impact of the works on the county park will have an impact on visitors and therefore a reduction in income for the County Council (from car parking and visitor spend in the shop and café) and therefore should be compensated. Work to establish the financial value of this loss is being undertaken by KCC.

Although the scheme has made a general reduction in area within the order limits, there are areas of additional land taken (temporarily or permanently) in Kent. The Council is concerned about potential impacts from a Heritage Conservation perspective in the additional areas that have been included north of the A226. This has been identified in response to question 2b and includes the changes to drainage and field farming practices and their impacts on archaeological resources.

Q2g. Do you support or oppose the changes proposed regarding special category land and private recreational facilities?

Strongly support

Support

Neutral

Oppose

Strongly oppose

Don't know

Q2h. Please let us know the reasons for your response to Q2g and any other comments you have on the changes proposed regarding special category land and private recreational facilities.

Special Category Land

As per the response to the Design Refinement Consultation, KCC welcomes the replacement woodland to the east of Brewers Wood. The County Council continues to expect the further engagement of the KCC Country Parks Team on the design of the features within that replacement land, as well as a commuted sum for the additional management costs for a ten-year period.

As already stated, the County Council is strongly supportive of the design changes that mean there are no long-term impacts to the Cyclopark. Furthermore, KCC is supportive of the proposed upgrades to existing footpaths so that access to these areas is improved.



Private Recreational Facilities

The impact on private recreational facilities would be best discussed at a local level with Gravesham Borough Council (and equivalent authorities north of the river) and the operators of those sites, which we note the Lower Thames Crossing project is undertaking.

Q2i. Do you support or oppose our proposals for the inclusion of a new open space site, Tilbury Fields?

Strongly support

Support

Neutral

Oppose

Strongly oppose

Don't know

Q2j. Please let us know the reasons for your response to Q2i and any other comments you have on our proposals for the inclusion of a new open space site, Tilbury Fields.

On broader matters, KCC would ask that the views of Thurrock Council and other directly affected stakeholders are considered. However, in the Council's Heritage Conservation role, the potential visual impact on heritage assets, such as the Napoleonic forts looking from Kent, is concerning. A minimal low-profile landscaping scheme that has been designed specifically to conserve and enhance any heritage assets that would be impacted would be a preferable design for this location. There could also be concerning impacts on the setting of heritage assets in Kent that would result from changes to the setting of heritage assets in Essex, including the related Napoleonic forts north and south of the river with their specifically designed crossfire. To assess this thoroughly, KCC request that 'before and after' views from Kent are provided.

Q2k. Of the two options presented for the height of the landform at Tilbury Fields, do you prefer the lower landform option or higher landform option?

Lower landform option (up to 16.5 metres)

Higher landform option (up to 22.5 metres)

Neither

No preference

Don't know

Q2l. Please let us know the reasons for your response to Q2k and any other comments you have on the options for the height of the landform at Tilbury Fields.

From a Heritage Conservation perspective, the Council would prefer to see no major increase in landform to minimise the visual impact on the presently relatively low topography, which provides the setting for heritage assets such as the Napoleonic forts. Other solutions should be investigated for the disposals of the arisings that have a reduced impact on heritage assets.



Q2m. Do you support or oppose our proposals for the inclusion of a new open space site, Chalk Park?

Strongly support

Support

Neutral

Oppose

Strongly oppose

Don't know

Q2n. Please let us know the reasons for your response to Q2m and any other comments you have on our proposals for the inclusion of a new open space site, Chalk Park.

Chalk Park will provide a buffer zone between the edge of urban Gravesend and the new Lower Thames Crossing. It will also reduce the need to remove spoil from the site (and thereby reduce traffic movements during construction) and it has the potential to provide a positive legacy both in terms of biodiversity and access to nature. For these reasons KCC generally supports the creation of the new park.

However, further details about these proposals are required before the Council can be conclusive in its views. For example, what is the long-term management plan? Who will be the asset owner and operator? What protections/designations will the land have to ensure its longevity as a legacy benefit of the Crossing?

There is a need to ensure that Chalk Park is established as intended before it is passed on to the company/organisation that will be managing it. The area will be used for recreation and so if the habitats are not established before this public use it may slow down or stop the establishment of the habitats. A further consideration is that the area of Chalk Park results in current arable fields being reduced in size or isolated from the wider area and therefore no longer being viable agricultural fields. Therefore, there is a need to ensure that those fields can continue to be farmed following completion of the works.

Furthermore, KCC has concerns that the design of Chalk Park has not been based on a detailed assessment of the historic landscape and the emerging archaeological evidence for the site and immediate surrounding area. The lack of detail about potential setting impacts from the creation of Chalk Park on heritage assets such as Chalk and Cobham churches is concerning. More detail is needed on how archaeological and historical information is informing the design of Chalk Park, including the location of public rights of way.

For the scheme overall, the current proposals indicate that a significant amount of the excavation waste can be contained on site, therefore avoiding a large number of HGV movements. Notwithstanding the views from a heritage perspective on Chalk Park and Tilbury Fields, this principle is in accordance with the policies of the Kent Minerals and Waste Local Plan 2013 – 30 (Partially Reviewed), specifically Policy CSW 1: Waste Hierarchy.



3. You said, we did

Q3a. Do you support or oppose how issues and suggestions about the Lower Thames Crossing have been addressed following earlier rounds of public consultation?

Strongly support

Support

Neutral

Oppose

Strongly oppose

Don't know

Q3b. Please let us know the reasons for your response to Q3a and any other comments you have on how issues and suggestions about the Lower Thames Crossing have been addressed, following earlier rounds of public consultation. If your comment relates to a particular consultation, please refer to it in your response.

KCC welcomes the inclusion of a 'You Said, We Did' document within this consultation. Given the number of consultations held on the Lower Thames Crossing proposals, respondents would value the opportunity to hear how their previous feedback has been considered and potentially resulted in any subsequent design changes. Many of the concerns raised in all consultations to date centre on the impact to specific individuals/specific locations. The Ward Summaries now presented with this consultation will go a long way to assuring people of the permanent impacts in their immediate vicinity, as well as the temporary impacts during construction. This is a very positive step forward in consultation and presentation in this way should be recorded as a lesson learnt for other major infrastructure projects to learn from.

KCC's response to this question focuses on the County Council's own responses to each consultation and how feedback has or has not been considered/actioned.

Statutory Consultation (10th October – 20th December 2018)

KCC's response to the Statutory Consultation remained in support of the Secretary of State's preferred route alignment – Option C, a bored tunnel, to the east of Gravesend, with the Western Southern Link (WSL) linking the new crossing with the A2. The County Council was pleased to see previous feedback had been considered and resulted in subsequent design changes to the remove of the A226 junction, extend the tunnel portal 600m further south and widen the A2 between M2 Junction 1 and the LTC junction.

However, KCC believed further mitigation was essential and requested for the length of the tunnel to be increased in order to reduce the impact on local communities, along with covering the section of the route in cutting and implementing measures to ensure that the widening of the A2 does not impact on Shorne Woods Country Park. The County Council's response to the Statutory Consultation also raised concerns regarding the arrangement of the junction with the A2 and asked that the design is reviewed to explore options for maintaining direct access for local residents to the A2 east-bound.



The You Said, We Did document (page 101) outlines how after statutory consultation, the design of the M2/A2 junction was amended, and the southern tunnel entrance moved 350 metres south to help mitigate the impacts on the Thames Estuary, Marshes Ramsar and Special Protection Area (SPA) site. The extension of the tunnel was very much welcomed by KCC but the You Said, We Did document does not address whether consideration was given to also covering the sections of the route in cutting. The You Said, We Did document (page 31) also references how the proposed footprint of the upgraded section of the M2/A2 was reduced by removing the hard shoulder along the eastbound connector road and reducing the width of lane four and the central reservation.

KCC has long stressed the need for a programme of wider network improvements to be delivered alongside the LTC. Further work has been undertaken since the statutory consultation, and the County Council welcomes National Highways providing local authorities with a cordon of the LTAM model to undertake further assessment. There has also been positive engagement between National Highways and KCC in regards to the development of local road mitigation measures. However, KCC is concerned by the lack of commitment from National Highways to mitigate the adverse impacts on the wider Strategic Road Network (SRN) of which National Highways is responsible for.

The You Said, We Did document (page 24) touches on the “DfT’s Road Investment Strategy (RIS) 2: 2020-2025 acknowledging the potential impacts of the Lower Thames Crossing on the road networks in Kent, Thurrock and Essex. Including a commitment for National Highways to work with local highway authorities to consider what that means for the shape of the strategic road network and local roads in those areas”. Whilst KCC welcomes the inclusion of A2 Brenley Corner and A2 Dover Access as pipeline schemes for RIS3 (2025-2030), the County Council remains concerned about the lack of schemes for other parts of the SRN which the LTAM shows will experience a significant increase in traffic flows as a result of the LTC, such as M2 Junction 1, 2 and 3, M20 Junction 6, A2 Junction with the A227, and M25 Junctions 2 and 3.

Supplementary Consultation (29th January – 25th March 2020)

KCC’s response to the Supplementary Consultation welcomed further extension of the tunnel portal 350m south, the wider green bridge at Thong Lane, and a direct connection for local residents from Gravesend East onto the A2/M2 east-bound.

However, the County Council raised significant concerns about the proposed utilities diversions and strongly objected to these proposals due to the environmental impact on Shorne Woods Country Park and the surrounding areas of ancient woodlands and Site of Special Scientific Interest (SSSI) which contain species of international importance.

The You Said, We Did document (page 237) addressed concerns about the proposals to divert gas mains, including concerns about the impact of such diversions on Shorne Woods Country Park. The document positively states that National Highways have been able to refine the proposals for utilities near the M2/A2, reducing the amount of land needed and the impacts on Shorne and Ashenbank Woods Site of Special Scientific Interest. However, little detail is provided within the document as to the extent to which the impacts have been reduced and what land take is still required to deliver the necessary works.



KCC's response to the Supplementary Consultation also highlighted concerns regarding the removal of a rest and service area. Inappropriate lorry parking is already a significant issue in Kent and the complete omission of any rest and service facilities will only further exacerbate the issue.

The You Said, We Did document (page 123) states that National Highways deemed the project could operate safely without a rest and service area and the proposed facility had significant impacts on the environment and local communities. However, it is disappointing that alternative locations were not considered as part of the scheme as such a facility could help to support the transition of ultra-low emission vehicles whilst also mitigate any future issues of inappropriate lorry parking as a result of HGVs using the crossing. KCC would fully encourage National Highways to work with rest and service area operators, the haulage industry and road user groups to consider further the need for roadside facilities and the most appropriate location for them.

Furthermore, KCC reiterated the need for a phased programme of wider network improvements, delivered alongside the LTC. The County Council also fully encouraged National Highways to maximise the opportunities presented by the scheme to not only reduce congestion but to also encourage the transition to ultra-low emission vehicles.

Walking, Cycling and Horse Riding Proposals

Within the You Said We Did document (page 213) it is suggested that walking and cycling proposals associated with LTC are in line with design standards which state that it is suitable to have shared routes for walkers however this depends on where the cycle path/walkway is with the governments vision for walking and cycling in the UK (Gear Change; a bold vision for cycling and walking, 2020) suggesting shared use routes in streets with high pedestrian or cyclist flows should not be used, further understanding could be required on this.

Road Safety

Despite concerns being raised as highlighted within the You Said, We Did document (page 173) about the safety of the road due to the absence of a hard shoulder the response did not provide confident assurances to rebuke these concerns. This needs to be redressed given Kent is significantly above the national average for killed and seriously injured casualties on England's roads.

Design Refinement Consultation (14th July – 12th August 2020)

KCC's response to the Design Refinement Consultation outlined four main areas of concern; the impact on the local and strategic highway network, the proposed 60 metre easement through Shorne Woods Country Park which is required for the diversion of a high pressure gas pipeline, the lack of detailed environmental information on the proposed impacts, and the lack of engagement around the latest proposals and anticipated impacts.

Chapter 4 of the You Said, We Did document focuses on the Design Refinement Consultation. Page 259 references requests to engage further with consultees about aspects of the project. KCC has welcomed the additional engagement with the County Council since the Supplementary Consultation on a variety of matters including environmental information and Non-Motorised User (NMU) proposals.



Page 259 also covers the need for the project to be accompanied by upgrades to the strategic road network in the region. The document refers to the Wider Network Impacts Management and Monitoring Plan being a tool to which National Highways will monitor the impacts of the scheme on the wider highway network. However, this approach presents significant risk that parts of the network will be gridlocked as soon as the LTC opens. The County Council is concerned by such a reactive approach and would encourage National Highways to utilise the outputs from the traffic modelling to determine what mitigation schemes will be required prior to the LTC opening.

Furthermore, KCC welcomes the aims to reduce impacts to the historic environment e.g. reduction in project area order limits and avoidance of impacts such as the need to demolish Homes for Heroes in Thong village. However, the process of archaeological field evaluation, which the County Council has been asking to be undertaken urgently, is still running behind this consultation and DCO planning application process and therefore there remains uncertainty about the detailed understanding of the location of significant below-ground heritage assets with archaeological interest that might be impacted by the proposals.



4. Other comments

We welcome any other comments you would like to make about the Lower Thames Crossing.

The County Council's response to question 4 includes detailed comments on the technical documents included within the consultation materials, and also general comments on the scheme.

Technical Documents

Framework Construction Travel Plan

1.1.7 The proposed establishment of a Travel Plan Liaison Group is welcomed.

3.1.1 The provision of shuttle buses for staff from Gravesend station is welcomed and further details should be provided in the DCO to ensure it is secured. This provision should be reviewed once staff are appointed to see whether an extension to other stations / locations would encourage further modal shift.

Table 5.2 suggests there would be 634 workers at the south side requiring accommodation (for which a total of 400 spaces are available on the northern side of the tunnel), yet paragraph 5.5.5 states that workers south of the river would not have access to the accommodation. Please clarify.

Plates 5.5 to 5.10 show the workforce distribution. Please confirm how the origin of the workforce has been calculated. What consideration has been given to the fact that there will be a requirement for a significant workforce required by London Resort at the same time, depleting the pool of available resource, if that is granted permission.

Paragraph 5.5.19 states some of the workforce required to work north of the river, will originate in Kent. Clarification is needed as to whether these are daily commuting trips. If so, a shuttle bus should be provided where possible to take the workforce across the Dartford bridge, reducing the impact at peak times.

7.2.11 Please note that the National Planning Policy Framework (NPPF) was recently updated.

8.1.6 and A.8.2 The Travel Plan targets should also make reference to the anticipated trips set out within the DCO documents, as this is what the development was assessed against.

During the detailed design stage the proposed number of spaces at the compounds should correspond with the anticipated trip generation of the site, to avoid potential overspill into neighbouring areas and also to ensure there isn't an over provision. Monitoring surveys should capture any staff parking on street outside of compounds.

Table 10.1 Point 12 should be implemented prior to the development of the car park management strategy (point 8) in order to help shape it. Point 14 relates to the implementation of travel surveys 'within three months prior to construction commencement', but no staff will be on site at this time.



11.5.3 Funding of the remedial measures is welcomed, however, the scale of funding has not been stated. This should be provided to ensure that adequate funding is available, should it be warranted. The discussion between National Highways and the contractor regarding funding of remedial measures over and above the allocated pot, should take place prior to the submission of the final Travel Plans to ensure this is agreed and therefore does not cause issues further down the line.

Outline Landscape and Ecology Management Plan

The management plan has detailed the below and KCC would highlight the need to ensure that all the mitigation, enhancement and compensation areas are managed appropriately for the life time of the development. Where National Highways will not be carrying out the management beyond the initial establishment stages it needs to be clear within the final management plan how National Highways will be satisfied that the proposed management will continue to be carried out. KCC advises that there will be need to be monitoring measures in place to ensure that habitats establish/enhanced as intended and measures in place for enforcement to be carried out if it's identified that the management is not being carried out as established. Furthermore, the County Council does not want a situation where the mitigation/compensation/enhancements do not establish as intended.

Paragraph 3.1 National Highways maintains the responsibility to ensure that the landscape and ecological mitigation as described in the outline Landscape and Ecology Management Plan (LEMP) can be successfully delivered, managed and maintained and that the necessary monitoring is undertaken. Establishment of the mitigation will be a contractual requirement, but ongoing (long-term) management, maintenance and monitoring, beyond initial establishment periods, may be delivered by National Highways Operational and Maintenance Teams or through agreement with third parties and landowners (to be confirmed). These details will be discussed with all stakeholders in the development of the detailed LEMP in accordance with DCO Requirement 5

Table 3.2.1 provides details of how long it takes for habitats to be established (for example AW compensation planting minimum of 25 years)

4.3 AW compensation Park Pale.

KCC highlights that some of the habitat identified for AW compensation was identified within the ARCH habitat survey as *other neutral grassland*. Other neutral grassland is grassland which was not considered at the time of the survey to meet the criteria as a habitat of principle importance but could be restored to better quality habitat with appropriate management. As highlighted in previous meetings with KCC, the County Council is not supportive of woodland being planted on neutral grasslands. However this is not reflected within the management plan which suggests that the glades will only be created within the areas where the utilities are located. KCC would advise that the management plan will need to be clearer about where the replacement woodland planting will be located.

Green Bridges

KCC is concerned with the terminology *lightweight* green bridges for those bridges going over the A2 – the proposal will result in a significant loss of vegetation and increase in lanes/lighting. There is a need for bridges that can provide the ecological connectivity



across the road and will be retained as intended for the lifetime of the development. By having a *lightweight* green bridge there is the risk that the habitats will not establish as intended and then result in vast amounts of dead vegetation being present on the bridges. KCC would highlight that the green bridges should be similar to the one on the A21 where users crossing the bridge do not realise that they are on a bridge due to how well it has established.

4.6 / 4.11 North of Claylane wood/Chalk Park

The intention is to create a wildflower meadow within part of this site which will benefit biodiversity, however there is a need for the management plan to acknowledge that it may take a number of years for the meadow to establish on nutrient rich soils. Therefore the detailed management plan will have to address this point to ensure its clear that monitoring and remediation works are included (this point is also relevant for the whole management plan).

Overview of management requirements:

KCC advise that the information needs to be consistent throughout the document. For example in section 7.2 Species rich grassland it states in section 7.2.6 that target species numbers will be met by year 5 but in section 7.2.10 it details that target species numbers to be met by year 3. This information is contradictory.

The County Council would advise that plans need to be updated to include details of what mechanisms will be implemented if the monitoring demonstrates that the targets are not being met. The management plan needs to satisfy stakeholders that the aims and objectives of the management plan will be met for the life time of the development.

KCC highlight in the detailed management plans the details of how the habitats will be established must be specific for each section – taking in to consideration constraints associated with that area – for example soil types. The management specification must not be generic.

KCC expect details to be provided within the detailed management plan when the habitat creation/enhancement will commence for each section. Whilst it specific dates are not expected, it could instead include triggers based on the construction plan. The planting associated with the proposal must be carried out as soon as it is achievable to give it the longest period time to establish on site before National Highways pass it on to the management contractors.

For example:

- The habitat required for species mitigation will have to be established prior to any species mitigation being implemented and Ancient Woodland (AW) compensation planting will have to be carried out at the time of the construction works due the soil translocation.
- Some areas will be available for advance planting (such as the woodland belt to the east of Gravesend)
- Areas (such as the chalk park) will be created following the extraction and spreading of the chalk from tunnel.



KCC would question why there is a need for woodlands with non-native species as the County Council's preference would be a mix of native species.

Whilst recognising potential archaeological impacts KCC welcome many of the proposals that will restore aspects of the historic landscape including:

- Restoration of hedgerows and historic field patterns
- To plant orchards – consideration of below-ground impacts will need to be considered
- To retain an open aspect around the village of Thong, as far as reasonably practicable, by the use of species-rich chalk grassland and wildflower meadow planting. The creation of a diverse grassland sward would provide resource for pollinating insects and the range of bird, amphibian, reptile and bat species which prey on them. This area, together with Chalk Park North, also links the marshes along the banks of the Thames with the woodlands along the A2/M2 corridor which reach further east and south into the wider landscape. The provision of wildlife ponds will further enhance this management area.
- To manage the open grassland areas so that they reference the historic layout and runways of the former RAF Gravesend.
- Access road to southern portal follows historic field boundary

The application documents could be more explicit about how an understanding of the evolution of the historic environment has been used to develop the Outline Landscape and Ecology Management Plan. This could be included and reflected in the final LEMP.

Outline Site Waste Management Plan

The document represents a very thorough approach in identifying opportunities for waste minimisation, reuse and recovery while minimising disposal. Thus, the plan is fully aligned with the principle of the application of the waste hierarchy and the Circular Economy. Tables 2.6-2.8 fully detail the anticipated waste arisings and their management route over the entire life of the project. This approach is commended.

Outline Traffic Management Plan for Construction

Table A.2 Roads South Traffic Management Measures – Further details will be required for each phase with details of traffic management requirements will be needed as well as a detailed programme of what is each measure requires.

Access to CA2 is via the A2 for HGVs and Thong Lane for emergency vehicles and staff. To confirm, staff should also be able to access the site from the A2 to reduce the impact on Thong Lane.

Outline Materials Handling Plan

The document represents a very thorough approach in identifying the constraints and opportunities for materials handling and transportation. The lack of the additional dedicated mineral wharf importation capacity to supply the aggregate mineral needs via the River Thames is a disappointment. However, the facility at Tilbury (Construction Materials



Aggregate Terminal) with onward transportation by road does, to a significant degree, mitigate this.

With regard to waste (excavation wastes) it is noted that 11.7 million cubic metres are to be retained onsite (within the Outer Limits) while only 1.33 million cubic metres (un-usable materials) are to be transported by road to disposal sites, a ratio of nearly 9 to 1 in terms of avoiding onwards transportation and disposal. Therefore, it can also be said that the project is minimising waste arisings by reusing material as a rate of 88%. This is not for the Kent area alone. However, it can be said that the approach taken is supported by the policies of the Kent Minerals and Waste Local Plan 2013-30 (Partially Reviewed), and specifically Policy CSW 1: Waste Hierarchy. This policy requires sustainable waste management solutions for Kent and waste management proposals must demonstrate how it will help drive waste to higher levels of the waste hierarchy (away from disposal) whenever possible.

The identification of the facility at Tilbury (Construction Materials Aggregate Terminal) for the transportation of waste excavation material (and the required construction aggregate mineral inputs), where possible is commended. It is in accordance with Policy DM 13: Transportation of Minerals and Waste that seeks to give preference to non-road modes of transport.

Section 3 of the Materials Handling Plan document is titled: **Environmental setting and existing infrastructure – considerations and constraints**

The entire text related to the environment in italics is as follows:

3.1 Context

3.1.1 The geographical context and extent of the Project means that there are a number of constraints, including environmental and physical infrastructure, to consider in the planning of material movement for the Project. These are detailed below, and the relevant locations are indicated on Plate 3.1 & Plate 3.2. [on Plate 3.2 there is a single number for the Ramsar site]

3.2 Environmentally sensitive sites Thames Estuary and Marshes Ramsar

3.2.1 The Thames Estuary and Marshes Ramsar is a designated site of international importance located on the southern side of the River Thames, near Gravesend. In order to reduce harm to the Ramsar and its functionally linked habitat, the Project is not seeking to create a new jetty (deep or shallow water) on the south side of the River Thames within the Project's Order Limits. This forms a constraint on river transport of materials into or out of construction compounds on the south side of the River Thames.

Whilst it is understandable that this is not a document about environmental matters, it is important for readers of this document to be made aware of the range of environmental sensitivities, including for archaeological remains. For example, the excavation and stockpiling of materials or the construction of compounds, will have archaeological impacts which will require mitigation (e.g., preservation in situ, avoidance, archaeological excavations and watching briefs) and these will be intimately part of the materials handling processes and that details of approaches to mitigation are set out in the relevant environmental documents including the ES and AMS/OWSI etc. etc. (LTC to add specific references).



The additions recommended above would help to overcome the risk of silos of information with readers only accessing those documents that they think are relevant to them and failing to recognise that archaeological works will need to be considered in the detailed planning of material movement as essential parts of the construction process.

Design Principles

3.2 – Connecting People – PEO7 – Heritage Interpretation on PROW – this is welcomed

3.2 – PEO9 – WCHs south of the Thames – explains how new PROW routes will compensate for those lost. There is an opportunity here to consider how people have moved through the landscape in the past (taking account of topography and settlement history) and to design new routes that are based on an understanding of historical precedents.

Table 3.2 – include a Design Principle along the lines ‘Design proposals will take account of historical precedents for connectivity based on an understanding of the evolution of the historic landscape and land use.’

Table 3.6 – KCC welcomes LSP 07 – Respecting historic landscape – ‘To protect views across historic landscape and topography, the new landscape design will take account of local ‘historic’ landscape character, respect historic features and reference historic land use, patterns and boundaries.’ The word ‘historic’ should be added.

Table 3.6 – KCC welcomes LSP 13 – Hedgerow reinstatement – this work needs to take full account of the historical and archaeological information to decide on the most appropriate former boundaries to reinstate. There need to be clear descriptions of the most significant aspects of the historic landscape in a particular area so that proposals for hedgerow reinstatement (as well as future land use, planting and views) are clearly justified. Aspects to consider include the development of local settlement (e.g., Thong), agricultural holdings (including the historic farmsteads) and estates (Cobham).

Table 4.2 – KCC welcomes S2.01 – Wooded circle around Thong – ‘To retain the open rural setting of the village of Thong within the open grassland, wildflower meadow planting shall reference the historic layout and runways of RAF Gravesend as shown in the Environmental Masterplan (REF TBC).’ KCC would like to see reference to the loss of the historic route from Gravesend to Thong and how a route across Thong Green bridge could signpost this and link with other PROWs.

Table 4.3 – KCC welcomes S3.01 – Retain open views – the ability to have a wide field of vision from the higher ground across the marshland, up and down the Thames and into Essex is likely to have been an important aspect of past human experience here. This is supported by the location of various features including Bronze Age barrows, Iron Age enclosures, Romano-British settlement and cemetery and Chalk church. These aspects of setting for heritage assets in Kent (including views from heritage assets) are important considerations in the design of Chalk Park and Tilbury Fields.

Table 4.3 – S3.04 – KCC would like to see more detail about the use of historic and archaeological information to support the design and landscape planting. KCC recommends that wording is included within the Design Principles to ensure all relevant historical and archaeological data is used to inform the landscape and planting design of Chalk Park.



Table 4.3 – S3.06 – KCC question the basis for creating ponds on chalk in these dry valley locations as these would not have been typical. However, the potential ponding effect of the Romano-British embankment discovered just south of the A226 should be considered in this context to provide routes across the dry valley which might also create a ponding affect. A critical issue here, which the County Council understands is being considered, is the impact of pond creation on significant below-ground archaeological remains including early and later prehistoric sites which have been discovered through archaeological field evaluation south of the A226 below hill wash.

Table 4.3 – S3.09 – KCC welcomes the proposal for hedgerow reinstatement but ask that the proposals are clearly justified through use of historical and archaeological data.

Table 4.3 – S3.15 – KCC would ask that reference is made here to ensure appropriate views north from the lfield Road and that planting will take account of the archaeological interest of this area.

Appendix A – KCC recommends that recent archaeological data from the LTC field evaluation is used to inform the planting palette for the reintroduction of former species and combination of species. This in an opportunity to use archaeological data to set back the ecological baseline to an earlier period than the present day.

Wider Network Impacts Management and Monitoring Plan

This document appears to be an update of the Outline Monitoring Strategy of October 2020, for which KCC provided comments in February 2021. In particular, the suggestions on monitoring locations do not yet appear to have been updated, following the previous invitation for suggestions from local authorities. Please refer to the County Council's original comments, which were largely based on road sections identified where 2016 Base Year modelled traffic appears low, as compared with independent counts available from the Department for Transport (DfT) online. The Lower Thames Area Model (LTAM) may not highlight some impacts of the LTC in these road sections. KCC acknowledges the inclusion of the preliminary set of junctions identified for mitigation of LTC impacts (the "Stantec" mitigations) in Table 2.1, Initial areas considered for intervention, on page 5, and advise that these junctions are currently under review now that KCC's Kent Traffic Model has become available.

1.1.6 relates to mitigation works on the local road network. Whilst KCC welcomes the mitigation, it is disappointing that this would need to be implemented separately to the DCO as there is no guarantee this would come forward. Any mitigation required as a result of the LTC is required to be implemented prior to the opening of the scheme.

Table 2.1 Does not contain Bob Dunn Way.

3.1.10 As traffic flows are set to increase along Bob Dunn Way, this link and Junction 1a should be included in the monitoring regime (although mitigation should be provided prior to the opening of the tunnel).

Plate 3.1 needs a further step of implementing required mitigation.



National Highways propose to monitor construction vehicles on the network to ensure they are keeping to the permitting routes. This method should be discussed with KCC nearer the time but could include Automatic Number Plate Recognition (ANPR) / Real Time information.

Deliveries to compounds should be undertaken outside of the network peak hours where possible.

DCO Schedule 2 & Explanatory Note

Paragraph 5 has provision for the local planning authority and Natural England to be consulted on prior to the approval of the landscaping scheme for Shorne and Ashenbank Woods SSSI but it does not provide for KCC, as owner of the woodland, to be consulted. KCC would ask that this provision is added.

Paragraph 19 (2)(b) should include reference to the highway authority where that is relevant to the decision being appealed.

Paragraph 19 (2)(d) requires the local authority to submit their written representation within 10 business days. This is an unreasonably short timeframe and should be extended.

1.2.17 – Requirement 9 – Archaeological interests

Requirement 9 has not been changed since the DCO application in October 2020. This covers what is called ‘archaeological interests’ but we recommend that the requirement should cover the broader historic environment including archaeological interest. Section 6 has a typo and Section 7 should make it clear that the appendix number and application document number may change. The wording ‘and any subsequent iteration’ could be added.

(6) If the relevant planning authority determines in writing that the archaeological remains require further investigation, no construction operations are to take place within 10 metres of the remains until provision has been made for the further investigation and recording of the remains in accordance with details to be submitted in writing to, and, unless otherwise agreed by the Secretary of State, approved in writing by, the relevant planning authority, such approval not be unreasonably withheld or delayed.

(7) In this paragraph, “AMS-OWSI” means the draft Archaeological Mitigation Strategy and Outline Written Scheme of Investigation (Appendix 6.9 of the environmental statement, application document TR010032/APP/6.3). [... and any subsequent iteration]

Code of Construction Practice (CoCP) including the Register of Environmental Actions and Commitments (REAC)

Kent Roads Contract – KCC seeks clarity on whether the utilities diversions will be undertaken by Lower Thames Crossing contractors or by a third party.

Clarification is needed as to whether utility works are covered within the footprint of the Lower Thames Crossing or whether other diversions will be required when setting up compounds etc.



Community Helpline, Enquiries and Complaints Procedure

Contact details and information relating to the scheme needs to be shared with KCC, including an FAQ sheet for the Business Performance Team and Contact Point. KCC always experience an increase in complaints received for works undertaken by National Highways as the public are more likely to contact the local authority as they do not differentiate between who is responsible for what asset.

Covering Note – paragraph 3 – we suggest adding the words in bold below:

The REAC identifies all good practice and essential mitigation from our ongoing environmental assessments to be carried out during the construction and operation of the new road.

1.4.7 - The CoCP and REAC will be provided to Contractors and will be binding upon them. The REAC brings together into one document the good practice and essential mitigation commitments relied on in the Environmental Statement and other DCO Application documents.

3.1.7 – 3.1.11 – includes typos and incomplete text

Table 3.2 - there are no archaeology references for the REAC

Contractor Construction Environmental Manager – it is unclear if this role would be the only non-specialist person in the CoCP with an identified archaeology liaison role. KCC would like to see a presence for archaeology liaison within the construction and management team.

4.5.5 – Clarification is needed on the meaning of the following statement: *“Cultural heritage surveys have been carried out and will be presented in our DCO application. Environmental asset data and as-built drawings would be required for the operation of the Lower Thames Crossing.”* This section needs editing, expanding and clarifying.

6.10.1 Contractors will develop and implement appropriate measures to control the risk of environmental incidents such as pollution events, and contravention of ecological and archaeological legislation due to construction activities, materials and extreme weather events. This will be included in Contractors’ EMP2s or Environmental Incident Control Plans as most appropriate in line with the nature and scope of works. This is welcomed.

Table 7.1 – Pre-commencement REAC table – we are concerned that there is nothing on cultural heritage in this table.

The pre-commencement REAC should be consistent across environment assets. For example, there should be recognition of the cultural heritage issue of maintaining the integrity of archaeological sites through appropriate siting and construction of haul roads, compounds etc, and include the implementation of requirements, the requirement of the contractor and the relevant DCO securing mechanism to be stated.

Table 7.2 – REAC table – KCC welcomes the inclusion of eight cultural heritage issues.

KCC recommends that a note is added to the REAC to state that if construction plans change at any future stage the archaeological implications will be checked, the local planning authority archaeologists notified and alternative mitigation put in place where necessary.



The Register of Environmental Actions and Commitments (REAC) is not detailed and whilst the County Council is satisfied with the principle of what is proposed, KCC would advise that there will be a need for detailed documents demonstrating how all the measures within the REAC will be implemented. The County Council understands that the ecological surveys and details of mitigation will be submitted as part of the DCO which is expected to provide the detailed information. As detailed within the REAC, lighting, noise and vibration could have negative impacts on the surrounding habitats/species, and as mitigation has been proposed (such as erecting noise barriers outside of the sensitive period) National Highways must be satisfied that the avoidance measures can be implemented. The County Council highlights that as part of the application it must be demonstrated that any noise barriers etc can achieve the mitigation proposed.

TB006 - Employment of suitably qualified and experienced Environmental Clerks of Works (ECoW) throughout the construction phase of the project to supervise implementation of environmental mitigation and protection commitments.

KCC requests that an ECoW is also employed to oversee the whole project, in addition to an ECoW for each construction team/project area. Due to the size of the proposal there will be several different works areas being carried out at the same time across the same site.

TB027 Construction of replacement air raid bunker – The report states: An air raid bunker within Shorne Woods containing a hibernation bat roost would be lost as a result of the Project.

The County Council understood from previous meetings with National Highways that the plans had changed and the bunker was to be retained. Due to the risk of disturbance during construction it was agreed that a replacement roost would be created but not as a result of the removal of the bunker.

HR007 - Habitat enhancement in functionally linked land

The report has detailed that three fields will consist of either a standing ripe crop ready to be harvested, winter stubbles or grass ley from 1 October to 1 March each year during the construction. KCC are supportive of this but as it is directly next to a firing range, there is a need to ensure that is located in an appropriate area which birds associated with the designated sites will use. The County Council had received additional information assessing if the location was in an appropriate area in relation to construction compounds, but not the shooting range.

General Comments

Road Safety

Kent County Council has recently agreed a Vision Zero Road Safety Strategy. The safety of construction vehicles is an essential component to this. The County Council wants to ensure that vehicle fleets involved in construction of the LTC are as safe as they can be, their logistics plans are approved to avoid sensitive areas at sensitive times, and the drivers and operators have received the relevant training to have received one of the leading accreditation schemes (DVSA Earned Recognition, FORS and/or ISO39001).



KCC supports Section 6.1 of the Code of Construction Practice document (Construction Logistics), particularly requiring the full and demonstrable implementation of the national Construction Logistics and Community Safety (CLOCS) Standard by all relevant stakeholders of the LTC project (being highways/planning authorities, the Client, Principal Contractors, and all associated Fleet Operators) to ensure the safest construction vehicle journeys. As the CLOCS Standard defines, procurers of site and fleet operations must ensure all the reasonable actions are taken to identify risks then prevent harm to the community from collisions and emissions. As well as taking all reasonable preventative actions, all stakeholders must ensure visible robust compliance monitoring (incl. using CLOCS Site Conditions Assessments, CLOCS Gate Checks of fleet operations, and CLOCS Vox to capture driver feedback), and must provide regular reports to those procurers and agree immediate actions where non-compliances and harm (or risk of harm) is identified. Performance data should be benchmarked across the project and wider sector, with best practice captured and shared through CLOCS with the wider sector.

KCC looks for all LTC partner organisations to work with the County Council and all affected local councils to create the greatest positive legacy in driving up sustainable standards in construction logistics – incl. through collaborative delivery of CLOCS Construction Logistics Plan training and CLOCS Site Access Traffic Marshal (SATM) training, and encouraging many more organisations to become CLOCS Champions. All affected local authorities, LTC Client teams and Principal Contractors' teams should have at least 5% of their staff (at least 2 in every team) successfully completing these two short courses before site operations are planned or commenced, and all SATMs assessed as CLOCS competent; this training should also be actively promoted to all principal contractors across Kent and Essex to drive awareness and wider adoption, with costs covered by participants' organisations.

LTC project partners should also regularly communicate their mitigation efforts to local communities, as fear of injury or harm from construction vehicle journeys is a recognised major factor discouraging Active Travel (walking/cycling). Such communications should also urge the community to play their part by taking extra care to always use the highway safely, following the Highway Code at all times.

Public Health

The Kent County Council Public Health Team have had opportunity to feed comments into the Health and Equalities Impact Assessment (HEqIA) as part of the DCO application; however, it is noted that the HEqIA is not referenced at all within this consultation process which is disappointing. There is an area of concern that the Lower Thames Crossing project could increase health inequalities particularly around physical activity, access to open space and air quality without further mitigations being in place. Reducing health inequalities does not appear to be a consideration for the Lower Thames Crossing despite the project objective being to minimise impacts on health and the governments levelling up agenda.

Physical Activity and Open Space

There are a number of mitigations on the South Side of the river in Gravesham which support improvements to the existing PRoW network, cycle paths and development of new open space which will be positive for the residents who will use these improved facilities. Whilst this is positive it should be recognised that the majority (if not all) of these



improvements will be created in wards with already better health outcomes and lower levels of deprivation (Riverview and Shorne, Cobham & Luddesdown) to mitigate against the loss of open space or access to open space in wards with worse health outcomes and greater levels of deprivation (Westcourt which provides greater accessibility to Riverside and Chalk). In one of the more deprived wards of Riverside it is indicated that there will be no impact on footpaths, bridleways and cycle routes however whilst this may be the case there are neighbouring areas which are being impacted upon which will reduce residents in Riverside accessibility due to the close proximity. To ensure health inequalities are reduced and the impact on vulnerable groups understood further consideration needs to be placed on how LTC can improve outcomes for residents in the more deprived areas and not widen the gap between communities.

It is also noted that a number of areas are to have reduced access to open space during construction which may affect the ability of people to undertake physical activity, sometimes for up to five and a half years, however no mitigations have been suggested despite the significant length of time residents will be impacted. This is a particular concern as Gravesham Borough performs significantly worse than the national average on a number of Public Health Outcome Framework (PHOF) indicators associated with physical activity including; physically inactive adults, percentage of adults walking for travel at least 3 days per week, percentage of adults cycling for travel at least 3 days per week, prevalence of overweight (including obesity) in both reception year and year 6, prevalence of obesity in both reception and year 6 and percentage of adults classified as overweight or obese. It is disappointing that no mitigations have been suggested with the construction impact of LTC likely to affect the ability of people to undertake physical activity in a population which already performs significantly worse than the national average on a number of PHOF indicators associated with physical activity.

Air Quality

Whilst it is positive that air quality is likely to improve in Kent in certain areas particularly in and around Dartford and it is expected that the scheme overall will have positive improvements in air quality the approach of assessing this as an overall scheme and therefore not mitigating against increases in worsening air quality in certain areas will likely increase health inequalities. To not intend to monitor this situation particularly in areas where there are expected to be increases in air pollution which have a greater number of vulnerable residents who are more susceptible to health problems caused by air pollution is disappointing. Currently there is no clear evidence of a threshold concentration of NO₂ in ambient air below which there are no harmful effects for human health. Therefore reductions of NO₂ below the air quality standards is likely to bring additional health benefits. Whilst air pollution can be harmful to everyone, some people are more susceptible to health problems caused by air pollution such as:

- Older people
- Children
- Individuals with existing cardiovascular disease and or respiratory disease
- Pregnant women
- Low income communities

Areas of concern where there are predicted increases in air pollution due to LTC include:



- Higham ward is identified as having properties which are close to the M2 Junction 1 which will exceed air quality thresholds for the key traffic related pollutant of NO₂ of 40µg/m³. It has also been identified as having an older population with deaths from coronary heart disease (CHD) and respiratory disease higher than the national average.
- Shorne, Cobham and Luddesdown has an older population with air quality thresholds for the key traffic pollutant of NO₂ of 40µg/m³ exceeded.
- Singlewell has a high percentage children, high levels of deprivation and significantly higher than the national average incidents of lung cancer.
- Riverview has an older population
- Westcourt has a high percentage of children, high levels of deprivation with emergency hospital admissions for COPD and deaths from CHD significantly higher than the national average
- Chalk has an older population
- Aylesford North and Walderslade have an older population
- Snodland East and Ham Hill is the most deprived ward in the Tonbridge and Malling area with a high percentage of children and significantly higher than average levels of emergency hospital admissions for CHD, heart attack and COPD, incidence of lung cancer, percentage of deaths from respiratory diseases and deaths from causes considered preventable (under 75 years).

All these areas have higher than average numbers of people who are more susceptible to health problems caused by air pollution yet despite an increase in air pollution predicted to be caused by the LTC no mitigations or monitoring have been suggested.

Further clarification needs to be provided on air quality in a number of areas:

- On several occasions throughout the consultation documents it is stated that it is not expected that any rises in air pollution will exceed DEFRA's air quality standards however this is then contravened by information provided around the expected levels with certain wards expected to have levels exceeding the air quality standards within the Ward summaries document. Additionally there are a number of wards where there are expected to be rises in air pollution (shown in Figure 5-1 in the LTC Operations update document) and in some cases expected to exceed air quality standards which are not included within the Ward summaries document and therefore it is not indicated what the air quality is expected to be in that area including Snodland East & Ham Hill, Aylesford North & Walderslade, Boxley plus some areas of Medway which do not fall under Kent County Council's jurisdiction. Whilst these areas fall outside of the Order Limits areas, Dartford where improvements are expected in air quality has been included within the Ward Summaries.
- Within the Ward summaries document it would be useful to provide the expected level of increase (or decrease) in average NO₂ not just what the expected level will be so that the significance of the rise (or fall) can be accounted for. It would also be of use to understand this for the project overall. Current evidence estimates that that a 10µg/ m³ increase in NO₂ concentrations raises the number of attributable deaths by 4% (Faustini A et al., 2014) therefore it is important to develop this understanding.
- Within the Ward summaries document there is predicted to be no changes to air quality in both Westcourt and Chalk however Figure 5-1 in the LTC Operations update document indicates that there will be increases in NO₂



- An understanding of air pollution implications within the tunnel and its impact on users.

Healthcare

Given the size of the workforce set to be working on LTC further consideration needs to be considered on the impact this could have on local health care.

Cultural Heritage

It is noted that this consultation includes detailed plans for the LTC at a time when there are still a range of uncertainties about below-ground archaeological interest.

The County Council are waiting for the revised Oxford Cotswold Archaeology evaluation report which was missing figures (August 2021)

KCC are waiting to receive the draft WSI for the Palaeolithic evaluation in Kent.

KCC Cultural Heritage team raised in May 2021 the urgency for archaeological evaluation to continue in order to inform the decision-making process. Copy of letter is included below for reference:



Ed Dickinson
Lower Thames Crossing
Highways England

**Heritage Conservation
Environment Planning and
Enforcement**

Invicta House
County Hall
MAIDSTONE
ME14 1XX

Phone: 03000 419388
Ask for: Casper Johnson
Email:
casper.johnson@kent.gov.uk

19 May 2021

Dear Ed,

Re: Lower Thames Crossing field evaluation in Kent 2021

I have been reading with great interest the results of the archaeological trial trenching undertaken in summer 2020 for areas of the LTC scheme in Kent. In addition, I have been reviewing the final design and I have also been updated on the revised Order Limits, the proposals for which I understand are to be part of a non-statutory consultation in July 2021 ahead of a target date for a scheme DCO re-submission in late November 2021.

The 2020 archaeological trial trenching has revealed a range of potentially significant sites of archaeological interest dating from the Middle Palaeolithic, Late Upper Palaeolithic, Mesolithic, Neolithic, Bronze Age, Iron Age, Saxon, medieval and post-medieval to modern periods. The field evaluation has provided us with important evidence of the location and preservation of these sites, some of which could be considered of national importance. The data provides an indication of where similar sites might be predicted, particularly within dry valleys and where development impacts are likely.

For this reason I consider it essential that every effort should be made to undertake further field evaluation, including geophysical and fieldwalking surveys, geoarchaeological boreholes, archaeological trial trenching and Palaeolithic test pits as soon as possible. The data is needed to further define the archaeological interest and risks for the scheme and to inform detailed decisions about mitigation which may need to include the re-design of certain features such as areas of landscaping, creation of ponds and other types of habitat of ecological benefit.

I set out below the key areas where I think that it would be necessary to undertake field evaluation as soon as possible:



Land south of the A2 (WSI parcels 87 & 95) - Where not already undertaken these parcels would benefit from magnetometry and where cultivated, surface artefact collection to inform targeted evaluation trial trenching (see WSI X).

Land north of the A2 (WSI parcels 90 – 94 & 114) – These parcels would benefit from magnetometry to inform targeted evaluation trial trenching (see WSI W).

Land west of Thong Lane (WSI parcels 80, 84 & 102) – The 2020 trial trenching to the west of these areas (eastern part of 80, southern part of 84 and 102) provides a good understanding of the potential in these areas which could become more significant the closer to the present-day settlement of Thong. These parcels would therefore benefit from magnetometry (and on the higher ground resistivity) followed by targeted evaluation trial trenching (see WSI V).

Land east of Thong (WSI parcels 82 and 83) – These parcels would benefit from magnetometry followed by targeted trial trenching, In particular, as these parcels cover a dry valley where ponds are proposed the area of the ponds should be subject to early trial trenching. I recommend at least two trial trenches, orientated west-east across the dry valley, in the area of the proposed ponds. Significant archaeological remains of Palaeolithic, Mesolithic and Neolithic date as well as evidence of more recent activity has been recorded by the 2020 trial trenching within this same dry valley further to the north and buried below hill wash. This archaeological potential needs to be tested to understand the implications of locating ponds in this area east of Thong village (see WSI U).

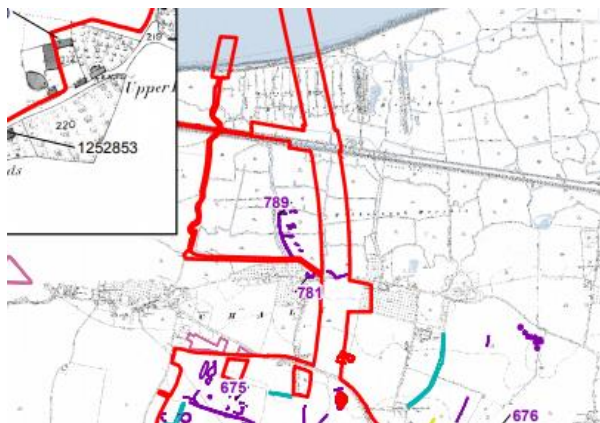
Land north-east of Thong (WSI parcels 78 and 79) – The 2020 trial trenching results demonstrate that these parcels are likely to have archaeological potential and will include part of the dry valley noted in relation to parcels 82 and 83 (above). It would be helpful if these parcels could be subject to trial trenching this summer and in particular parcel 79 (see WSI U).

Land north of Cascades Leisure Park (WSI Parcel 85) – The extensive trial trenching in the land south of the A226 in summer 2020 has provided a good understanding of the potential in these landscape zones of the LTC scheme area where the dry valleys cut north across the chalk. Given that evidence for Middle Palaeolithic, Mesolithic and Neolithic has now been recorded within the dry valleys where former land surfaces have been buried by hill wash and protected from more recent impacts such as cultivation it would be helpful if we could undertake targeted evaluation trial trenching this summer in key locations. It would also be useful to start considering options for fieldwalking (surface artefact collection) of these areas using local volunteer groups. I am concerned that as most if not all of WSI parcel 85 has been identified for construction works and subsequent landscaping, that there is a risk of having to undertake significant amounts of evaluation and mitigation fieldwork immediately in advance of construction if this field evaluation cannot be undertaken now. The lack of field evaluation in these areas, especially for Palaeolithic, Mesolithic and Neolithic sites at this stage also means, of course, that the ES will have areas of significant

uncertainty. It would be helpful if we could discuss, with the Palaeolithic specialists, the areas south of the A226 which should also be subject to Palaeolithic field evaluation this summer. Could you arrange such a meeting?

Land north of the A226 (WSI parcel 71) – It is good to know that evaluation trial trenching will take place in the remaining northern part of parcel 71 this summer and that this work will include Palaeolithic test pit evaluation. I will look forward to seeing the revised WSI with the Palaeolithic element. As I have noted to Tim Allen at OAS, I would like to see the methodology all for trenches to be stepped and deepened where necessary to allow safe access and recording. I hope that the Palaeolithic deposits of interest will not be deeply buried in this parcel, except in the north-east corner where the dry valley runs north (see WSI T).

Land at the wetland interface – the recent update on the revised order limits indicates an area of proposed groundworks associated with drainage from the tunnel and to support works for the tunnelling process – approximately in the area south of 789 on the plan below. The area indicated could have very high wetland-edge archaeological potential and should be subject to field evaluation this year. This could include purposive geoarchaeological boreholes and/or test pits. Perhaps we could discuss this area in more detail.



Fieldwalking – I mentioned above the need for fieldwalking (surface artefact collection) and metal detecting surveys. These survey methods will be helpful both for evaluating certain areas but also by way of mitigation against removal of plough soil during construction. The KCC Community Archaeologist and Finds Liaison Officer are both in a position to provide advice on trained local volunteers who could work with professional archaeologists. Could we also look at options for this autumn and next winter with OCA management of local volunteers? There is a group of KCC volunteers who form the Shorne Woods Archaeology Group who are trained and have carried out fieldwalking surveys and would be very keen to contribute to the LTC project.

Land access issues may make it difficult to undertake all the work listed above but I think it is important that we recognise the areas where we would like to see field evaluation to help inform the decision-making process and to understand risks.



Last summer there was a cut-off point at which DCO submission documents were effectively 'closed'. It would be useful to understand exactly which documents will be updated before the target November DCO re-submission and what cut-off dates are anticipated. We need to ensure that the issue raised in my comments of 5th February 2021 (v2) concerning the first DCO submission are not repeated for the re-submission.

One final point that I raised in February and has become clearer now that the 2020 trial trenching results are available is to ask if you and/or OCA could produce draft research framework plans for the Kent project area, with a geology base map and contours to show the location of sites of each main chronological period (i.e., one map per period). Such maps would help us to understand more clearly (especially if then also overlaid with an impact assessment scheme) exactly where we might expect to find further significant archaeological sites of a particular period and also so that we can underpin our decisions about further evaluation and mitigation with detailed research questions by period (and SERF theme).

I hope that is helpful and would be pleased to discuss further.

Yours sincerely

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Heritage Conservation Group

5. The consultation

Please let us know your views on the quality of our community impacts consultation materials, the accessibility of our online information and events, how we have notified people about our proposals, and anything else related to this consultation.

	Very Good	Good	Average	Poor	Very Poor	Not applicable
<u>Q5a. Was the information presented clearly?</u>		X				
<u>Q5b. Was the website easy to navigate?</u>		X				
<u>Q5c. Were the online webinars useful for understanding our latest proposals?</u>						
<u>Q5d. Did the telephone surgery answer your questions about our latest proposals?</u>						X
<u>Q5e. Were the physical events good quality?</u>						X
<u>Q5f. Were the physical events suitably located?</u>			X			
<u>Q5g. Was the consultation promoted well and to the right people?</u>		X				

Q5h. Please let us know the reasons for your responses to Q5a – Q5g and any other comments you have on the delivery of this consultation.

Presentation of information

Information within the consultation material was presented clearly and the Ward Summaries document was a helpful document for local residents who have specific concerns about the impacts on their local areas. However, the consultation consisted of a vast amount of information for respondents to read through, which in some cases could have discouraged members of the public from responding to the consultation. In addition, some of the documentation repeatedly referred to other technical documents – e.g. on a number of occasions the Ward Summaries document stated that “proposed mitigation measures are presented within the Code of Construction Practice (including the REAC)”. It is not necessarily helpful for respondents to have to search through a number of documents to find an answer to their query.



Website

Overall the material on the consultation website was well presented and easy to navigate. The fly-through videos provided were particularly helpful and provided a visualisation of the full extent of the new crossing and the impact it will have on the local area. Furthermore, the interactive map was a valuable asset in determining the changes made to the design since the previous consultation in 2020.

Online webinars

It was disappointing there were only two online webinars scheduled for the south of the river, the first being very early in the consultation period and the second being the week before the deadline for responses. This does not allow many opportunities for local residents or other interested parties to attend an online webinar if the two dates provided were unsuitable. It is also noted the webinars were both scheduled for the same evening slot which may not have been convenient for those who work shifts.

Timing of consultation

KCC had previously raised concerns about proposals to hold the community impacts consultation over the pre-election period between April and May 2021. The County Council was pleased feedback was considered and the consultation postponed until after the elections on the 6th May. However, it is frustrating the consultation was then rearranged for the summer months (July – August), following the pandemic and when many officers are taking much needed annual leave, making responses difficult to finalise as many technical officers are unavailable. The County Council would never be permitted to undertake a major consultation within the summer months so it remains disappointing that National Highways did not choose to hold the community impacts consultation immediately after the elections in early May, when the timing would have been more convenient and accessible for all.

Furthermore, the formal consultation period has been only 8 weeks long and accounting for the various needs of governance only offers 4-6 weeks in which to prepare the technical draft responses to what is well over 3,000 pages of core and technical documents. The County Council previously raised concerns with National Highways regarding the length of the consultation and how this prohibits any formal governance being achieved. It is positive this feedback was taken onboard mid consultation and local authorities provided with a four week extension to provide a fully governed response.