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To: Environment and Transport Cabinet Committee – 11 March 2016

Subject: **Proposed Response to the Highways England Consultation on proposed route options for a new Lower Thames Crossing**

Classification: **Unrestricted**

Past Pathway of Paper: Growth, Economic Development and Communities Cabinet Committee – 3 March 2016

Future Pathway of Paper: Cabinet - 21 March 2016

Electoral Division: Gravesham Rural – Bryan Sweetland, Gravesham East – Colin Caller, Jane Cribbon

Summary:

This report outlines a proposed response to the Lower Thames Crossing (LTC) route options consultation launched by Highways England (HE) on 26 January.

It is proposed that Kent County Council (KCC) responds in support of HE's selection of a bored tunnel at Location C (the east of Gravesend) as the only viable crossing location. However, it is proposed that regarding the route in Kent, KCC makes clear its support of the Western Southern Link (not HE's preferred route) in line with KCC's response to the previous 2013 consultation by the Department for Transport (DfT).

A key concern is the elimination of the C Variant (upgrades to the A229 Bluebell Hill) and so it is proposed that KCC reiterates the necessity for the HE/DfT to consider the connection between the M20 and M2. The proposed LTC route includes a junction with the A226 and so this will become an attractive route for local traffic in both Gravesend and the Medway Towns. More information is required on traffic redistribution and associated environmental effects (air/noise pollution, capacity on the existing network, road safety) as well as the contribution the junction makes to the economic case for the LTC before KCC can support this.

Section 2 of this report sets out HE's route options, and section 3 the key principles of the proposed content of KCC's response.

Recommendation:

The Cabinet Committee is asked to consider and comment on the proposed response to the Highways England consultation on a proposed route for a new Lower Thames Crossing.

1. Background

1.1 For many years, Kent County Council (KCC) has campaigned for increased capacity crossing the River Thames. In doing so, the key objectives for KCC have been:

- The ability to maximise the opportunity to provide real economic benefits both locally and nationally, and;
- To provide urgently needed network resilience and reliability, and improved strategic connectivity.

In pursuing both objectives, however, KCC has made clear that any solutions would need to mitigate against potential adverse impact on people and the environment.

1.2 This latest consultation is the next step in a project that has been ongoing for a number of years, with the previous consultation carried out in 2013. The details of the 2013 consultation can be found in Appendix A. The current consultation is non-statutory in advance of a preferred route being chosen by the DfT, the necessary detailed design and assessments will then be completed before a Development Consent Order is sought.

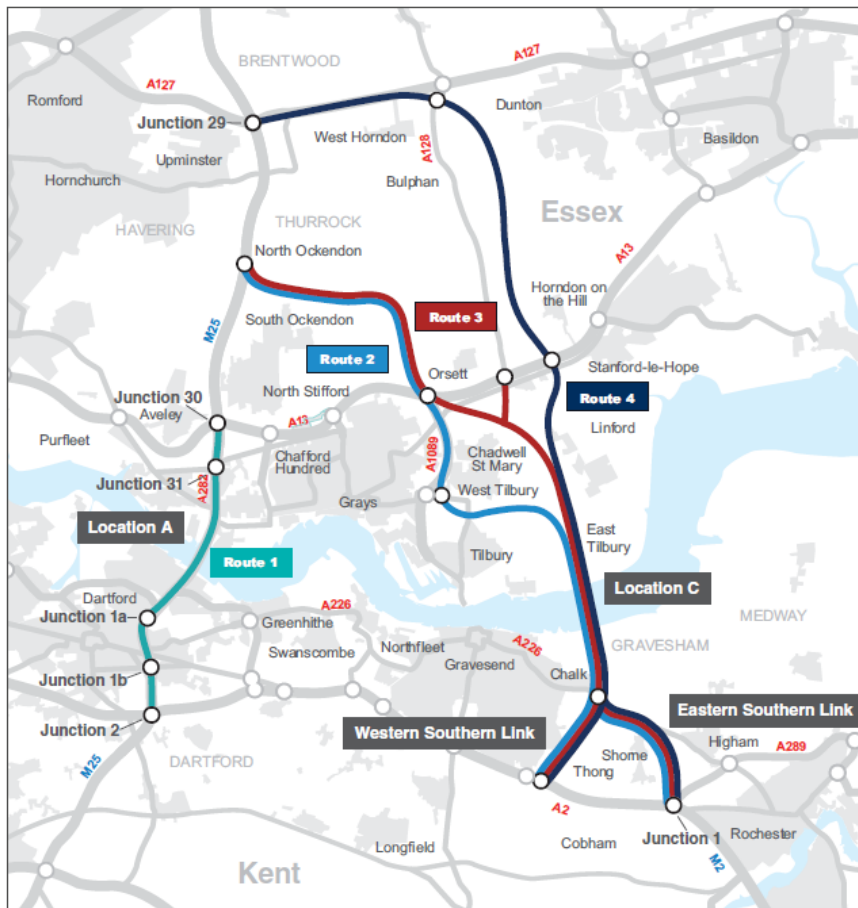
1.3. In response to the DfT's 2013 consultation, KCC expressed strong support for locating the new crossing at Option C (to the east of Gravesend), given the economic growth and job creation potential along with its positive impact on network resilience and the creation of a new strategic route from Dover to the Midlands and the North. This was supported on the condition that the connection of the proposed new Crossing to the M2 was moved westwards, thus connecting into the A2 and avoiding significant adverse environmental impact on the Kent Downs Area of Outstanding Natural Beauty (AONB), a Site of Special Scientific Interest (SSSI), ancient woodland and KCC's flagship country park (Shorne Woods). KCC's proposed western alignment would connect to the A2 between the East of Gravesend and Cobham junctions. Tunnelling was also supported as it was considered that this method would help to reduce the impact on the internationally protected Marshes. KCC also supported the Option C Variant (improvements to the A229 Bluebell Hill), recognising the importance of connectivity between the two motorway corridors.

1.4 KCC's full response to the Department for Transport's 2013 consultation on a new Lower Thames Crossing is attached at Appendix A.

2. Current consultation – January 26th to March 24th 2016

2.1 Following the 2013 consultation, Highways England (HE) was tasked with investigating route options for a new crossing. Location A (in the vicinity of the existing Dartford Crossing) and Location C (east of Gravesend) were assessed and, following further appraisal, a shortlist of four routes has been arrived at. The routes at Location C have two possible alignments in Kent: the Western Southern Link and the Eastern Southern Link. These proposed alignments, along with route options 1, 2, 3 and 4 through Essex are shown in Figure 1.

Figure 1- Lower Thames Crossing Route Consultation 2016 – Options



2.2 The current public consultation defines a proposed scheme within the Option C corridor¹: Route 3 with the Eastern Southern Link (ESL). This would be a dual carriageway connecting Junction 1 of the M2 to the M25 between Junctions 29 and 30, using a twin bored tunnel. There would also be a new junction with the A226. This proposal is stated to best meet the scheme objectives, which are:

- To support sustainable local development and regional economic growth in the medium to long term.
- To be affordable to Government and users.
- To achieve value for money.
- To relieve the congested Dartford Crossing and approach roads and improve their performance by providing free flowing north-south capacity.
- To improve the resilience of the Thames crossings and the major road network.
- To improve safety.
- To minimise adverse impacts on health and the environment,

2.3 HE’s proposed scheme has been recommended on the grounds that it:

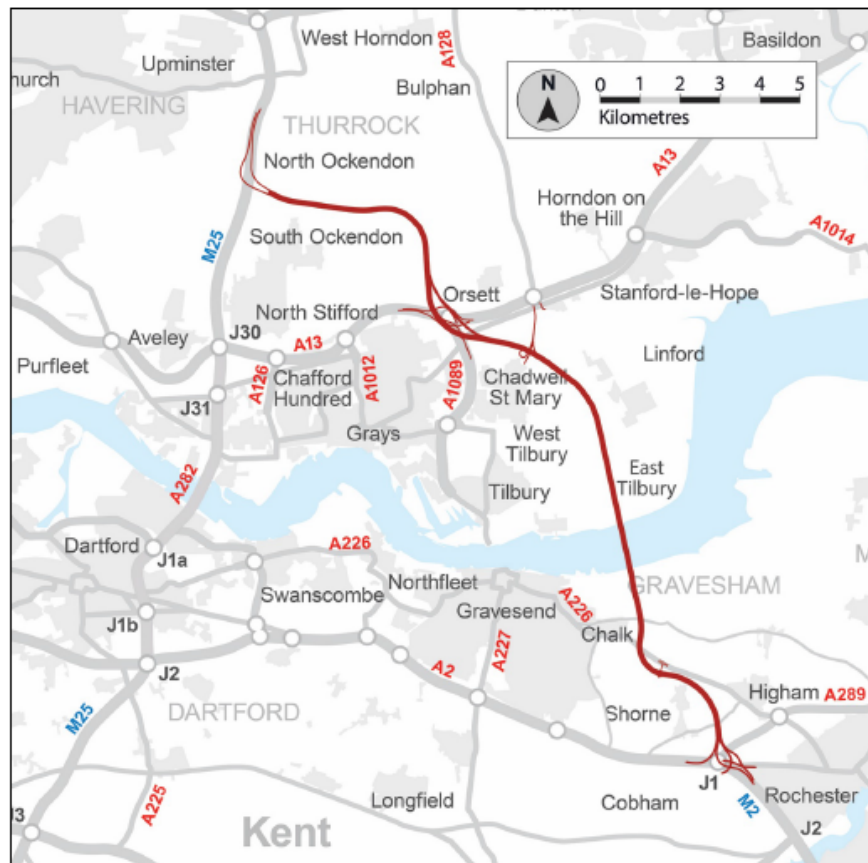
- Provides the best economic benefits of all the shortlisted routes evaluated and reduces traffic at Dartford and therefore reduces congestion.

¹ Consultation available at: <https://highwaysengland.citizenspace.com/cip/lower-thames-crossing-consultation>

- Can be largely constructed off-line avoiding the disruption caused by on-line works at Location A.
- Provides network resilience through a second independent crossing of the Thames.
- Provides a motorway-to-motorway experience for drivers.
- Reduces air and noise pollution along the existing A282 corridor at Dartford, whilst recognising that there are environmental and community impacts in the vicinity of the new scheme, including noise and air quality on communities alongside the proposed route.
- Will provide a new strategic link to the local, regional and strategic road network, increasing resilience and addressing future increases in traffic demand.

2.4 HE's proposed scheme is shown in Figure 2. The estimated the cost of construction is £4.3bn - £5.9bn.

Figure 2 - Highways England's Proposed Scheme – Route 3 with ESL



2.5 HE's analysis rejects additional capacity at the Dartford Crossing (Location A) as not meeting the transport and economic objectives for a new crossing. According to HE analysis, traffic would still have to be funnelled through the existing Dartford corridor junctions, so severe constraints on the network would remain, resulting in congestion. In addition, construction is anticipated to cause considerable disruption to the existing crossing for an estimated period of at least 6 years involving reduced speed limits and extensive traffic management. Finally, it was concluded that this location offered far less value for money compared to the three route options at Location C. However, the DfT are clear that Location A is still an option that they will consider in making their decision.

2.6 The two proposed route options in Kent will have varying impacts on the surrounding area. These, and more information on the current proposals, are explained in Appendix B.

3. Proposed KCC Response to the Highways England Consultation

3.1 Appendix C sets out the proposed detailed response to the Consultation Questionnaire. The key principles of this draft response are set out below. Further details will be added as they are received from KCC Officers and colleagues at Medway Council and Gravesham Borough Council.

3.2 KCC strongly agrees with the proposal for a new Crossing at Location C, east of Gravesend and Tilbury. The reasons for this are:

- **Economic benefits** – fundamentally the economic benefits of a new Crossing at Location C are significant and this location has the greatest potential for regeneration and job creation. Further, these benefits are of a substantially greater scale than expansion of capacity at Dartford can provide (see Table 1). The 2010 KPMG study calculated that Location C could contribute £12.7 billion to the local economy,
- **Network resilience** – the provision of an independent crossing built to modern standards and suitable for all users will not only radically improve the resilience of crossing the Lower Thames but also the resilience of the strategic road network (SRN) between Kent, the Midlands/North and mainland Europe.
- **Strategic transport benefits** – the HE consultation documents and other studies have shown that during incidents at Dartford, traffic diverts to other crossings (notably the Blackwall Tunnel) or the long way around the M25. Therefore by providing a suitable alternative crossing point, with the dual benefit of releasing capacity at Dartford, capacity will be released elsewhere on the SRN. The provision of a faster, more reliable route to the Midlands and North from the Kent ports will be particularly attractive to long-distance freight traffic and will have the benefit of diverting many of these journeys away from Dartford.
- **Bifurcation** – the new Crossing will enable Kent's policy objective of bifurcation to be implemented, splitting traffic to and from the Eastern and Western Docks in Dover between the M2/A2 and M20/A20 corridors. With the addition of some improvements to the M2/A2, this will create a high quality strategic corridor that will cater for the likely significant growth of the Port and thereby release capacity on the M20. By varying tolls linked to the Dartford Crossing, traffic can be encouraged to choose a particular route.

Table 1: KCC commissioned studies by KPMG and URS – job creation

	Location A	Location C
KPMG (jobs)	1000	6000
URS (jobs)		
Local jobs	7,600	9,100
Local + hinterland (all of Kent and Essex counties)	23,000	32,300

- 3.3 Essex County Council has proposed to support KCC's route choice south of the river and it is therefore proposed that KCC should reciprocate and support Essex's choice of Route 2, 3 or 4 to the north of the Thames. Regardless of the specific route chosen north of the river, the need for connectivity between the ports and the Midlands/North is imperative. The HE traffic modelling has shown that forecast traffic volumes on Routes 2, 3 and 4 are broadly similar at around 77,000 on average each day. Therefore traffic volumes have not been a factor in determining the HE's preferred route north of the Thames
- 3.4 KCC strongly supports the **Western Southern Link (WSL)**. This is also the proposed position of Medway Council and, as above, Essex County Council will offer their support. This is not HE's proposed route. The reasons for this route choice are:
- **KCC's proposals** – in 2014 KCC commissioned work to design an alternative alignment because the DfT's indicative route in the 2013 consultation went centrally through Shorne Country Park. It is KCC's alignment that is referred to as the WSL in the 2016 consultation and therefore historically we have supported it.
 - **Junction with the A2/M2** – the Eastern Southern Link (ESL) would terminate with the M2 at Junction 1. This is already a complex junction and using this will require a fourth level of slip roads on viaducts up to 23m high. The increase in complexity will also have possible safety implications and could lead to the whole junction locking up if there is an incident on one part of it. Conversely the WSL would create a new junction on the A2. Although this would require realignment of the A2, this could be completed with minimal disruption to the running of the A2.
 - **Relationship with Gravesend** – currently the majority of Gravesend Borough Council's (GBC) planned growth is to the west of the town centre but this new link to the SRN to the east of Gravesend could see development proposals put forward. The WSL would create a defined boundary that would limit urban expansion. The WSL is also an opportunity to enhance flood defences.
 - **Environmental impacts** – the WSL would mostly be located outside of the Kent Downs Area of Outstanding Natural Beauty (AONB) whereas the ESL has a greater footprint within it, as well as impacting on the Great Crabbles Wood Site of Special Scientific Interest (SSSI) Both would have impacts on the area's heritage but the ESL would divide Shorne Parish and be in closer proximity to a number of listed buildings.
 - **Traffic flows** – the choice of WSL or ESL does not have a significant impact on the total volume of traffic using the Crossing but it does influence the distribution of traffic on the existing road network. The ESL tends to attract more HGV traffic but with the WSL more light vehicles would divert

from Dartford. The ESL provides more relief to the A2 west of M2 Junction 1 and to the M20 at Maidstone, but puts significantly greater pressure on the M2 west of Junction 1 compared to the WSL.

- 3.5 KCC will argue that it is essential that property owners, who have already been blighted by the two proposed routes, are fully compensated for the loss of property value and inability to now sell if they need or want to move. This consultation has caused considerable distress in the local community and a swift decision on the preferred route option must be taken by Government following the consultation so as to minimise the uncertainty around the two potential routes through the community.
- 3.6 If Location C is chosen, irrespective of whether the WSL or ESL is built, there will be an improvement in air quality at Dartford on opening year owing to the forecast 14% decrease in traffic at the existing Crossing. The HE modelling has shown that no sensitive receptors (residential properties) will be at risk of exceeding air quality limits on any of the Location C routes. However, full modelling will be carried out at the next stage of project development. KCC is liaising with GBC on the air quality implications. For noise impacts the modelling has shown a net benefit as properties close to roads where traffic flow will decrease will have a reduction in noise levels but those in the vicinity of the new road or roads where traffic volumes will increase will have likewise experience an increase in noise levels. Again, KCC is liaising with GBC on this issue.
- 3.7 KCC strongly supports the choice of a bored tunnel because this would minimise the impacts on residents and the environment in North Kent. It will also eradicate the risk of a closure due to high winds, which already affects the Dartford Crossing. A bored tunnel will provide the most resilient river crossing. Of the three crossing alternatives (bored tunnel, bridge or immersed tunnel), the bored tunnel provides the least damaging environmental impacts, KCC therefore agrees with the HE contention that it is the **only viable option**.
- 3.8 Longer distance traffic using the new Crossing should remain on the Strategic Road Network (motorways and trunk roads) and not leak onto the Local Road Network which would cause traffic problems for KCC's roads. Therefore KCC requires more evidence before a judgement can be made on the proposals for a new junction with the A226. The reasons for this are:
- The new junction will improve accessibility to Gravesend, the Medway Towns and via the rural roads from the Hoo Peninsula. It is likely that traffic on the A226 (including through Higham) will increase as well as that on the local road network leading into the A226. The HE modelling shows an increase in the order of 8,000 vehicles per day on average using the A226 on opening year but it does not state which proportion will be from the west or east of the junction. No modelling demonstrating the effects on the local road network has been made available.
 - Likewise, in the event of an incident at the junction with the A2/M2 the alternative junction with the A226 will become the alternative route. It has not been demonstrated that the proposed junctions with the A226 can support forecast traffic flows and are future-proofed for growth; although the

WSL design is a substantial interchange the ESL design involves two relatively small roundabouts.

- KCC needs to assess modelling of a “no A226 junction” scenario to establish the impacts on trip distribution and at key pressure points on the network; and also the effect on the economic benefits of the Crossing.
- However, the addition of this junction would potentially be of benefit in the event of an incident in or near the tunnel as traffic could be directed to leave the LTC.

3.9 KCC urges the HE and DfT to address the C Variant (upgrades to the A229 Bluebell Hill, including the possibility of free-flow slips at the M2 and M20 junctions) in wider road investment plans. Although KCC welcomes the commitment to consider the A229 in regional route planning, the A229 is the most direct link between the M20 and M2 and already suffers from significant congestion and stress at peak times. The link between the two motorway corridors needs to be considered as part of the Lower Thames Crossing project. The reasons for this are:

- KCC has to date not been able to assess any traffic modelling that demonstrates why the C Variant has been ruled out. However, the information available shows that the A229 will have an increase in traffic. It can be inferred that a high proportion of the decrease in traffic volumes on the M20 west of the A228 would have diverted to the M2, with the A229 being the most attractive route. This is in the order of 5,000 vehicles a day.
- Not addressing the junctions at either end of the A229 but nevertheless encouraging increase traffic will have possible safety implications, with the slip roads blocking back on the A229. Information on how the junctions have been modelled is not available in the consultation documents and therefore it is unknown if this is fully taken account of.

3.10 KCC promotes a number of wider network improvements and believes these must be delivered in conjunction with the Crossing to fully realise its benefits. It is vital to the UK economy that the Channel Corridor operates efficiently and is resilient to incidents on the network. By splitting Port traffic between the M2/A2 and M20/A20 corridors (bifurcation) a second strategic route is available. To make this a high quality route the following upgrades are required:

- M2 Junction 7 (Brenley Corner) improvements to increase capacity and provide free-flow between the M2 and A2.
- Dualling sections of single carriageway on the A2 north of Dover along Jubilee Way to Whitfield and near Lydden.
- M20 Junction 7 improvements to provide ease of access between the A249 and M20.
- M2 Junction 5 Stockbury improvements to provide free-flow between the M2 and A249, which will improve another strategic link between the M2 and M20.

3.11 These upgrades have been costed by KCC and could be delivered for (*high level cost estimates are currently being updated*). In addition to these essential improvements, upgrades to the A249 to include widening and straightening, and the removal of at-grade junctions for local traffic would support bifurcation.

- 3.12 This consultation, whilst it is focused on route options, also needs to consider the impact on existing junctions on the local road network. Where improvements are required as a result of the changing traffic flows created by the new Crossing then such improvements should be funded as part of the scheme to avoid future problems for the Highway Authority.
- 3.13 KCC believes that the anticipated opening year of 2025 is unacceptably far away when congestion at the Dartford Crossing is a problem today. KCC disagrees with the contention that using private sector funding would lead to a 2 year delay in opening the Crossing, and has conducted research that demonstrates that private infrastructure investors across the world are ready to be involved in such a project today.
- 3.14 Finally, the Consultation Questionnaire asks for comments on the consultation itself. It is proposed to state:
- The consultation was launched unexpectedly without prior stakeholder notification. Hard copies of the Scheme Assessment Report were received a week after launch and hard copies of the appendices (including detailed maps) a week after that.
 - Information has been sporadically released on the consultation website throughout the first few weeks of the consultation, including relating to property blight which will be particularly pertinent and sensitive to the communities on the proposed routes.
 - A range of technical information that is necessary in assessing the impacts of the proposed scheme and relative merits of the different routes is not available, and has not been forthcoming following multiple requests to HE. This has also been the experience of other stakeholders, including Medway Council who have also tried to get the same information.

4. Financial Implications

- 4.1 It is unknown if there are any financial implications at this time. This is considered to be dependent on the final route chosen by the DfT and could include the potential for KCC to sell any property in the vicinity of the route.

5. Legal implications

- 5.1 In terms of KCC's consultation response, no known legal implications.

6. Equalities implications

- 6.1 In terms of KCC's consultation response, no known equalities implications.

7. Other corporate implications

- 7.1 In terms of KCC's consultation response, no known corporate implications.

8. Governance

- 8.1 The delivery of a new Lower Thames Crossing is being led by Highways England and KCC is part of a Stakeholder Advisory Panel.

9. Conclusions

- 9.1 Highways England's route consultation will close on 24th March 2016, after which they will make a recommendation to the Secretary of State on the preferred option. A final decision by the Secretary of State is expected before summer recess. At present, the expected timescales for delivery are for construction of the new crossing to commence in 2020/21 during the next Road Investment Strategy (RIS), with an anticipated operational date of 2025.
- 9.2 This paper is also being presented to Cabinet on 21 March 2016.

10. Recommendation

- 10.1 Cabinet Committee is asked to consider and comment on the proposed response to the Highways England consultation on a proposed route for a new Lower Thames Crossing.

11. Background Documents

Appendix A – KCC's Full Response to the Department for Transport's 2013 Lower Thames Crossing Consultation.

Appendix B – Background to the Lower Thames Crossing consultation and further details on the 2016 route options.

Appendix C – KCC's detailed proposed response to the consultation (draft).

Appendix D – Extract from Highways England Maps of Western Southern Link and Eastern Southern Link.

12. Contact details

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