

**REPORT TO MANAGING DIRECTOR
22 MARCH 2019**

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**A2 BEAN AND EBBSFLEET JUNCTION IMPROVEMENTS: ENVIRONMENTAL
IMPACT ASSESSMENT, SIDE ROAD ORDERS, COMPLUSORY PURCHASE
ORDERS AND SLIP ROAD AND ROUNDABOUT ORDERS**

1. Summary

- 1.1 Highways England are seeking representations on the proposed A2 Bean and Ebbsfleet junction improvements which are to be built under the Highways Act 1980. An Environmental Statement and formal notice of Side Roads Order, Compulsory Purchase Order and a Section 10 Line Order (the Orders) has been published for the purposes of objection or representation, by 28 March 2019.

2. RECOMMENDATION

- 2.1 That the response as set out in paragraph 6 of the report, be submitted as the Council's formal representation to Highways England's Orders.

3.0 Background

- 3.1 The scheme for the A2 junction improvements at Bean and Ebbsfleet was originally proposed as a Nationally Significant Infrastructure Project which requires a Development Consent Order for the purposes of s22 Planning Act 2008, which would have required an examination by Inspectors and control of any development if approved through the planning system and approval of any conditions by the Local Planning Authority. However, the design was subsequently amended and the total land area required for all works falls below the threshold set in respect of Development Consent Orders. As a result, authorisation for the scheme is sought through orders under the Highways Act 1980, together with an ancillary Compulsory Purchase Order affecting part of Council owned land at Spirits Rest Horse Sanctuary.
- 3.2 With regard to planning, Highways England is relying on permitted development rights provided under Class B of Part 9 of Schedule 2 to the Town and Country Planning (General Permitted Development)(England) Order 2015. This covers the carrying out by a strategic highways works in connection with Highways England functions. Planning permission is therefore not required and as such the Council has no control over the detailed delivery of the scheme. An Environmental Impact Assessment has been submitted and therefore any impacts of the scheme are required to be mitigated, however there is no formal process for the Council to agree the mitigations so it is important that any representations identify any concerns that the Council has with the proposed scheme and the proposed mitigation so that these can be considered at this stage.

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- 3.3 Following this representation stage, if no objections are received to the Orders then the Secretary of State may move to confirm them, following which, there will be a challenge period of 6 weeks. However, if objections are received, and not withdrawn, then a public inquiry will need to be held. Highways England advise that notice of whether a Public Inquiry will be held will be given on 24 April 2019.
- 3.4 The draft Orders give Highways England the authority to make alterations to the existing highways network to enable the Project to be built.

Line Order - Section 10 of the Highways Act 1980 relates to the status of trunk roads and provides that the Secretary of State may, by order, direct that highway or proposed highway shall become a trunk road. The section also confers the power on the Secretary of State to direct that Highways England will be the highway authority for the new road. The Order itself is provided in draft form, and would eventually be made by the Secretary of State.

Side Road Order – Section 14 of the Highways Act 1980 provides powers to highway authorities to stop up, divert, improve or otherwise alter a highway that crosses or enters the route of a classified road (in this case the A2 trunk road) and authorises the construction of new highways for purposes concerned with any such alterations or related purposes. The Order itself has been made by Highways England as highway authority and is submitted to the Secretary of State, who would be required to confirm it. The Order authorises the carrying out of the Bean Junction works and the Ebbsfleet Junction works, and further provides that each new highway created under it will be transferred to KCC as the local highway authority.

Compulsory Purchase Order – The Compulsory Purchase Order has been made by Highways England under the powers available to it under Highways Act 1980 and is submitted to the Secretary of State for confirmation. Highways England is satisfied that the use of compulsory purchase powers is warranted to acquire all of the land contained in the CPO and which includes part of the land at Spirits Rest Horse Sanctuary and which is all needed to enable the construction and operation of the scheme.

4.0 Summary of proposals

- 4.1 **Bean junction:** The proposal is to enlarge and signalise the existing North and South roundabouts at Bean. In order to accommodate the enlarged junction design the 11 residential properties forming Ightham Cottages are required to be demolished. The existing bridge over the A2 will be retained and used for northbound traffic. A new bridge will be built next to it to accommodate southbound traffic and a segregated cycleway and footway. A new (second) A2 eastbound slipway will be formed. The B255 (St Clements Way) north of the junction is to be altered on its southbound lanes. In order to prevent weaving across the 4 lanes where the Bluewater

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Parkway on-slip meets the B255 the road will be separated into 2 two-lane roads by the imposition of a barrier. As a result traffic exiting Bluewater will be directed to the existing roundabout junction onto the A296 (Watling Street): eastbound A2 traffic will use the existing A296 Watling Street slip road; and westbound A2 traffic exiting Bluewater will need to cross the existing roundabout, cross the enlarged signalised Bean junction roundabout and take the first exit onto the A2 London bound. The Bluewater traffic going westbound will therefore have to negotiate an additional roundabout and have more contact with local traffic using the A296 than at present. Local traffic travelling south from Greenhithe will no longer be able to merge and access the A296 from the slip or roundabout. So local traffic from the south will no longer be able to use the A296 slip road onto the A2 or turn right(west) at the A296 to access Darent Valley hospital. Instead local traffic from the south will need to stay in lane and arrive at the northern signalised Bean roundabout, where they will need to proceed around the roundabout in order to turn back onto the A296 to access the hospital or Dartford. Traffic seeking to go eastbound on the A2 can access the new A2 slip road from this northern roundabout.

- 4.2 **Ebbsfleet junction:** The proposal is to enlarge and signalise the existing east and west roundabouts including widening of the link road between the east and west roundabouts to dual carriageway. The junction proposed is in a similar form, but enlarged to the existing arrangement. The scheme will include access to the Ebbsfleet development and the land to the south which was previously a service station prior to the previous alterations to this junction. Improvements to the north-south cycleway and footway route include provision of controlled crossing points at the east and west roundabouts.
- 4.3 The A2 mainline will be adjusted to provide narrow lanes for approximately 1.5km between Bean junction and Ebbsfleet junctions to avoid impacts on significant constraints including ancient woodland, electricity pylons, a subway and the Grade II listed footbridge.
- 4.4 The scheme is expected to start construction early in 2020. Work to Bean junction is expected to be completed in March 2022 and the remodelling of Ebbsfleet junction is expected to be completed in August 2021. Traffic management will be in place throughout the construction period. Construction compounds for contractors have been identified. Initial estimates for the volume of earthworks indicate 15,000 vehicle movements over a 24 month construction period. It is expected that there are likely to be 20-25 HGV deliveries each day. At the peak 100 workers are expected to be on site.
- 4.5 Highways England advises that the specific transport objectives of the Scheme are to enhance capacity of the A2 Bean junction and the A2 Ebbsfleet junction in order to support the planned growth in the area. They emphasise that the capacity enhancements are driven by the growth plans and are not to address existing traffic congestions, poor safety or poor

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journey times. They confirm that the capacity of the A2 mainline itself is not included within the remit of the scheme.

5 Assessed Impacts and consultation responses

- 5.1 The Environmental Impact Assessment (EIA) published by Highways England provides an assessment of the likely effects of the scheme on the environment as well as the consideration of mitigation measures to address the effects. The assessment considers a worse-case scenario assessment at 2038, as well as during construction and the opening year (2022). The key topics are addressed below, but unusually for an EIA there is no assessment of transport effects. This is because as a transport scheme the EIA is not required to include this. In addition, no details of the traffic modelling has been provided as part of the published documents although this underpins the assessment of air quality and noise.

Transport

- 5.2 Highways England have previously sent the Council a link to the modelling data but the Council does not have the software or expertise to interrogate this. Following further requests by officers, further technical reports on the transport assessment were provided mid-March, which explain the assumptions behind the traffic modelling. The traffic modelling figures used to inform the design and assessment process is based on the wider traffic model prepared for the Lower Thames Crossing and assumes that this will be in place for the 2038 assessment year. KCC has appointed consultants to audit the model and following their report, KCC's Highways and Transportation confirms that the modelling demonstrates that the scheme will work satisfactorily and allow traffic to flow through the junction.
- 5.3 KCC had previously raised concerns, in response to the consultation by Highways England in 2018, in relation to the signal control operation of the junctions in relation to (a) the length of the internal stacking space (where it was questioned whether it was large enough to accommodate the queuing vehicle demand) and (b) whether the signals would be able to operate using MOVA or SCOOT and therefore be able to adapt to changes in flow, which would be valuable in this area where traffic patterns are unpredictable. KCC requested that the LinSig models (which looks at traffic signals) were released for review to address these concerns. The KCC signals team reviewed the LinSig models in November 2018 and confirmed that the models were a good reflection of the proposed road layout and indicated that it should be capable of coping with the traffic demand up until 2038. This included the predicted queue lengths being contained within the available stacking space, and the use of MOVA/SCOOT. MOVA/SCOOT are signal operation systems which can be linked to other signalised junctions across the area, to enable a co-ordinated traffic management system which can respond to incidences on the network by adjusting the signals to deal with traffic queues which are not the normal pattern. KCC

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Highways and Transportation confirm that their previous concerns with regard to these issues were therefore satisfactorily addressed.

- 5.4 Another key concern raised by KCC highways and Council officers was that the modelling for the proposed A2BE improvements was based on the operation of the junctions during an average weekday AM and PM peak hours only and did not take into account the operation of the junctions during the weekend period, when the flows may change given the junctions' locations adjacent to Bluewater. KCC therefore requested that the junctions be modelled for a future Saturday scenario to demonstrate whether the junctions would operate satisfactorily during this period. The results of this sensitivity assessment were provided to KCC and DBC on 08/03/2019. The results showed that both the Bean and Ebbsfleet junctions are predicted to operate within capacity during the future Saturday 2038 peak hour scenario. KCC advise that they are continuing to liaise with Highways England regarding some minor comments about the report, but that they consider that the results in general are satisfactory.
- 5.5 The additional technical reports provided by Highways England which included the transport Forecasting Report and a Technical Note from the Transport Data Package is being considered by KCC in order to ensure that the inputs into the model for the future scenarios are acceptable. Borough Council Officers consider that the assumptions input to the modelling have taken on board issues raised by Officers in particular with regard to future developments. KCC has also been involved in the process of inputting to the model so they do not anticipate any issues arising.
- 5.6 KCC highways advise that the new junction arrangements work according to the modelling and the traffic lights allow traffic to move through the junctions in platoons such that traffic should move through the junctions efficiently reducing delays. So on a normal day although local traffic may have to change the way they use the junction, KCC advise that this should not result in any delay to journey times. The modelling does not however, address or consider the impact of traffic when there are incidences on the wider network or when the Dartford Crossing is affected resulting in congestion across the area. As Members are aware this affects the local road network extremely quickly and the revised junction arrangement does not reduce the conflict between Bluewater traffic and local traffic or A2 bound traffic and local traffic. Highways England advises that the need for the proposed junction improvements at both Bean and Ebbsfleet is not to deal with existing traffic congestion at the junction and since this congestion generally arises due to incidences on the network or seasonal peaks at Bluewater, these congestion events have not been modelled as HE advise they are not designing for such events. Although this is acknowledged and understandable due to the difficulties in modelling such events, it is considered that an opportunity has been lost to configure the junction in such a way that enabled greater separation of local traffic from the strategic network traffic and the Bluewater traffic. Although it is acknowledged that the signalised roundabouts will allow opportunities for a managed network

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of signalised junctions, the roundabout on the A296 (Watling Street) is not to be signalised and therefore eastbound traffic from Dartford town centre/Darent Valley Hospital will still have to merge with eastbound traffic exiting Bluewater.

Air Quality

- 5.7 The Environmental Health Manager has reviewed the proposals with regard to air quality and considers the assessment methodology is acceptable. It is noted that the removal of Ightham Cottages which are the most sensitive air quality receptors is likely to mean that the Air Quality Management Area at Bean junction can be revoked. It is advised that the submitted air quality assessment shows that nitrogen dioxide levels are predicted to have a small increase as a result of the scheme at two receptor locations adjacent to the A2, the levels at these locations are however predicted to be well below objective levels by the opening year and so this is considered to be acceptable. The model shows a small decrease in pollution levels at the Hope Cottages receptors as a result of the scheme in 2038.
- 5.8 The Council currently operates a continuous air quality monitoring station at Ightham Cottages which will be lost as part of this scheme and therefore they request that arrangements should be made for this to be replaced/relocated to the south of the A2. This has been raised previously with HE but no details have been provided about the relocation of the Air Quality monitoring station.
- 5.9 The EIA assesses the potential for increased dust during construction at receptors within 200 metres of the work. It advises that with adequate mitigation, impacts can be reduced to avoid significant effects. An Outline Environmental Management Plan (OEMP) has been submitted with the EIA which sets out the measures to mitigate the impacts, such a water spray, sheeting vehicles, etc. and the OEMP advises that works will be carried out in accordance with the Environmental Protection Act 1990 and that the contractor will keep residents informed about the progress of the scheme.

Noise and Vibration

- 5.10 Environmental Health Officers advise that the noise and vibration assessment methodology in the EIA is acceptable. During construction, temporary noise barriers will be erected to minimise impact on Hope Cottages and Brickfield nursery at Bean which are the closest houses. Once the road is open the noise assessment assumes that four noise barriers will be in place: replacement barriers on the westbound slip road and the A2 and two new barriers: 1 to the north of Hope Cottages (65m long by 3m high) and the other between the access road for Hope Cottages and the new junction would be approximately 80m long. With the assumption that these noise barriers are in place, the noise modelling

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results shows that there will be no additional significant adverse impacts resulting from the scheme itself.

- 5.11 Environmental Health Officers have a couple of detailed queries which are being pursued with Highways England but the submitted information and mitigation is considered to be acceptable. The OEMP advises that the Principle Contractor will consult with the Dartford Environmental Health section to ensure they manage and control noise and vibration according to local guidance. It also advises that additional noise monitoring may be undertaken during the detailed design phase of the scheme to address any further concerns of Environmental Health Officers. These are considered to be welcome commitments to ensure impacts are minimised as construction takes place.

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Biodiversity

- 5.12 Extensive ecological surveys have been carried out to inform the EIA and the submitted information has confirmed that the following sites/habitats/species are present within/ adjacent to the red line boundary: Darenth Wood SSSI; Ebbsfleet Marshes, Northfleet Local Wildlife Site (LWS); Ancient Woodland; priority habitats including broadleaf woodland, hedgerows; 4 species of foraging bats; dormouse; breeding birds; slow-worm, common lizard and grass snake (and probable presence of adder); evidence of badgers; terrestrial invertebrates including species of principle of importance; Man orchid; and Great Crested Newts (within 1km of the application site). During construction three Veteran trees will need to be removed and the Scheme requires temporary and permanent habitat loss. All habitats taken for temporary land take are proposed to be reinstated after construction and enhanced. Permanent land take outside the highway boundary includes an arable field to the south-east of Bean junction, which is proposed to be planted with new woodland, scrub and grassland as mitigation for other habitat and tree loss.
- 5.13 KCC provides ecological advice to the Council on planning applications and have advised with regard to the EIA. They confirm that they are satisfied that sufficient survey effort has been carried to understand the ecological impacts associated with the proposed development. However they have concerns about the lack of information on the proposed mitigation.
- 5.14 The construction and operational phases of this development has the potential to impact the areas of Ancient Woodland, SSSI and LWS. During the construction phase this includes an increase in dust or decline in water quality or incursion from construction vehicles/equipment and during the operational phase a decline in the water quality entering the sites. The submitted information has detailed that pollution prevention measures and protection from incursion will be implemented during the construction.
- 5.15 With regard to other habitats and species the EIA and OEMP has only provided an overview of the measures proposed and due to the sensitivity of the retained/adjacent habitat it would have been preferable for a more detailed document to be submitted as part of the application. The KCC biodiversity officer raises concerns about the lack of information provided with regard to the proposed protected/notable species mitigation to be implemented. The submitted documents have detailed that the permanent and temporary habitat loss will total 7.13 ha. It is intended that habitat creation will comprise 5.64 ha of woodland, 2.80 ha of species-rich grassland, 0.61 ha of scrub and 200 m of native hedgerow. Since the majority of new habitat will be created within a single mitigation/habitat enhancement area, it is important that the detailed design allows for all the ecological mitigations/enhancements required and does not become dominated by a single habitat. There is a need to ensure that where areas

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are required as part of the ecological mitigation they are identified as such on the submitted landscaping plans to enable the Council and their advisors to understand if the proposed mitigation is achievable. There is also a need to understand if they are within the ownership/management regime of Highways England and how they will be managed appropriately for the future. The EIA advises that a Habitat Management Plan will be implemented for the maintenance and management of the new habitat. But the OEMP does not address who will be the body responsible for this post construction. It is important to ensure that the mitigation areas will be managed appropriately and by someone who understands managing sites for biodiversity.

- 5.16 If the scheme goes ahead it is considered that the detailed Construction Environmental Management Plan is produced clearly setting out exactly what measures will be implemented. At present the OEMP does not set out any requirement for the Council (or any other local authority) and their advisors to be consulted/involved with the detailed mitigation or the Habitat Management Plan. All mitigation is to be agreed between the Highways England and the principal contractors. It is considered important that the Council and the EDC are involved in these details in order to ensure that the mitigation integrates with other ecological works and habitat protection and creation in the area. There is a need to ensure that the current ecological interest of the site is maintained post development and therefore details should also be provided of how the site will be managed appropriately to retain the ecological interest.

Drainage

- 5.17 KCCI as Local Lead Flood Authority agree the principles of the combined infiltration and controlled surface water discharge to a watercourse as existing. They advise that they will continue to discuss proposals with Highways England. Environment Agency are also involved in discussions with Highways England. Very detailed provisions relating to drainage have been included within the OEMP as a result of Highways England's discussion with the Environment Agency. As the EA and KCC are both statutory bodies for drainage it is not considered that the Council needs to comment on this issue.

Landscape and visual

- 5.18 The proposal will result in the loss of existing mature screening vegetation around Bean junction and there will be more open views of the highway, particularly by users of the junction. The new overbridge will be visible from Hope Cottages and the A2 mainline will be more visible on the skyline due to the loss of mature vegetation to the west bound off-slip at Bean. Highways England propose to carry out advance planting where feasible to mitigate the loss of habitat and screening. The new 3m noise barriers will also be visible although Highways England advise that these will be softened by planting which is welcomed as this is a key gateway to the Borough. There will however be views from Hope Cottages which will be

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impacted upon by the new noise barriers and road infrastructure. Due to the proximity of the road Highways England advise that there is no opportunity for screening of views from the houses, which is regrettable but there is no opportunity to mitigate this impact. Longer distance views will be improved once the new planting matures.

- 5.19 At Ebbsfleet the ornamental amenity planting on the roundabouts and adjacent verges will be lost. However, there is not considered to be a significant adverse impact on the landscape character of the area and once the planting proposed has matured some of the more open views to the junction will be screened.
- 5.20 KCC heritage advises that the Kent historic landscape characterisation is now quite old and they consider is not sufficiently detailed for this level of assessment, they consider that the landscape characterisation has not adequately considered the historic landscape character.

Cultural Heritage

- 5.21 As part of the EIA, a desk-based assessment for the historic environment has been provided and a geophysical survey has been carried out at the Bean junction and limited archaeological trial trenching at the Ebbsfleet junction. The KCC heritage manager has advised the Council that she does not consider that the cultural heritage assessment adequately assesses or describes the known and potential historic environment resource; the character and nature of Palaeolithic sites and how they are recorded seems to have been misunderstood in the assessment. In particular Palaeolithic remains are not considered to have been adequately assessed. Highways England have been advised of this but further information on how this area will be treated and managed in the long term is required.
- 5.22 It is known that the 2nd century Roman temple was preserved as part of the HS1 works and will definitely survive. KCC advises that the scheme should aim to continue to preserve this site in situ rather than accept at this stage that excavation and recording would be appropriate mitigation. It is not considered that 'preservation by record' is equivalent to preservation in situ; and therefore KCC heritage advise that if it is impossible to preserve the site the effect would be greater than slight adverse which the EIA currently concludes. KCC emphasise that nationally important non-designated archaeological remains should be treated as though they were Scheduled Monuments. It is also requested that the impact of the scheme on waterlogged archaeological remains along the River Ebbsfleet should be assessed.
- 5.23 These issues with regard to archaeology have been raised with Highways England both before submission of the EIA and since it has been submitted. It is clear that further assessment work needs to be carried out in order to ensure that the scheme does not result in adverse impacts on sensitive archaeology in the area. Since archaeological remains can also effect

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planting schemes, drainage and other groundworks it is important that these issues are resolved. However, it is noted that the OEMP sets out the requirements for further archaeological evaluation and investigation prior to commencement and that the detail of this should be prepared in consultation with the KCC Heritage Manager.

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Other EIA subjects

- 5.24 **People and communities:** the construction of the scheme will result in the loss of part of the land at Spirits Rest Horse Sanctuary and the demolition of 11 residential dwellings, Ightham Cottages. The EIA considers this loss of dwellings against the housing stock in the County and therefore considers this loss to be small scale in comparison. Clearly this belittles the impact that this will have on the residents' lives.

Spirits Rest Horse Sanctuary comprises part grazing land and part woodland, leased to a third party. The Compulsory Purchase Order applies to the grazing land only. The Council is in discussion with Highways England to ensure that full and proper consideration is given to the needs of the displaced tenant in so far as this relates to the sourcing of alternative grazing land in the Borough for the relocation of her animals.

Other residential properties: Hope Cottages, Bean Farm House, Watling House, Beacon Drive, Ebbsfleet Green and Brickfield (nursery) will have impacts on their visual amenity, although with the exception of Hope Cottages, these views will be improved as the proposed landscaping matures. When the scheme opens there will be beneficial effects on the routes used by pedestrians and cyclists through the junctions, particularly at Bean junction as the new scheme will provide a dedicated pedestrian/cycle route on the new Bridge which assists in connecting Bean village to existing facilities north of the A2 and new facilities to come forward at Eastern Quarry. The EIA also assesses the impact of the scheme on the road users. Mitigations proposed within the EIA include supporting residents that are being relocated; control over construction activities; communication with residents and businesses, a complaint and advice helpline; recruitment for construction jobs to start at the district and regional level. As the scheme develops the mitigation also includes monitoring of the situation to ensure noise barriers are effective and identifying the need for new ones if appropriate.

- 5.25 Geology and Soils: there are very few human receptors and the scheme is not for development which introduces new receptors. The Environmental Health Manager has advised that the matter of contamination can be dealt with by the Environment Agency who will consider the impact of contamination on the controlled waters (the aquifer).
- 5.26 Materials and waste: the EIS advises that approximately 20,000 cubic metres of soil will be generated from cut and excavations will be transported off-site. The EIA concludes the scheme will have a negligible impact on the waste capacity in Kent. As KCC are the waste planning authority, the impacts should be for them to consider.

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6.0 Council's response

- 6.1 It is recommended that the following representation is made to Highways England in response to the publication of the Environmental Statement and Side Roads and Section 10 Line Orders for the A2 Bean and Ebbsfleet Junction Improvements.

Overview

The Council has identified significant growth in the Borough over the Local Plan period and beyond 2026. The A2 Bean and Ebbsfleet junction improvements have long been identified to meet the needs of this growth and are included within the Strategic Transport Programme to provide the strategic road improvements to support the additional development. The Council therefore supports the principle of the junction improvements.

Although the Council understand that DMRB does not require a transport assessment as part of the Environmental Impact Assessment the Council find it concerning that traffic information and the assumptions relating to the traffic modelling were only provided to the Council mid-way through the consultation process even though these underpin some of the other assessment work that the Council has statutory duties with regard to, i.e. noise and air quality. The Council defers to Kent County Council (KCC) as highways authority with regard to analysis and consideration of the transport modelling and has no comments to make with regard to the assumptions used for the traffic modelling. The Council understands that KCC's highways and transportation are satisfied that the proposed junctions will work in the scenarios put forward by the modelling and including during the peak hour on Saturday. The Council has no reason to dispute these findings.

However, the Council has a good local understanding of the area and has some concerns that although the junction improvements have significant costs associated with them, the junction designs do not utilize the opportunity to provide a scheme which provides a robust solution for the future. The proposed improvement scheme does not allow for future widening of the A2 and the proposed design of Bean junction is unlikely to ease traffic movements during periods of congestion or incidences on the network. These are a regular occurrence in this area affecting the quality of life for residents and the economy of the area.

It appears that the assumptions made are based on traffic flowing freely and take no account of the frequent incidences on the network or the seasonal higher traffic levels associated with Bluewater shopping centre. The Council is concerned therefore that there is no resilience allowed for in the proposals.

Incidences on the strategic road network around Dartford, both the A2 and the M25/A282 are common and can take hours to clear; causing significant impact in terms of queuing traffic across the area impacting on air quality and the quality of life of residents, employees and visitors to the Borough. The Council consider that Highways England should also be carrying out such

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sensitivity tests in order to demonstrate there is adequate resilience in the improvements proposed.

The Council, however, would not wish to see the delivery of these junction improvements to be delayed any further than the end of 2022 and in the absence of an alternative scheme the Council would request that the signalized junctions are provided with the capability of being linked to an Urban Traffic Management Control scheme so that at times of congestion the signalization on these junctions can be optimised.

The Council expresses extreme disappointment that the proposed scheme at Bean junction results in the loss of the homes of Dartford residents. However, the creation of a worsened environment for these residents should the properties have been retained could not be supported by the Council. The Council insists full and proper consideration is given to the needs of occupants and that every possible support, financial and otherwise is provided to mitigate their loss.

The Council is pleased to note the improvements to the non-motorised user routes, in particular the provision of a dedicated footway/cycleway across the A2 as well as the improved crossings. The Council supports these proposals.

Compulsory Purchase Order

The Compulsory Purchase Order affects part of Council owned land at Spirits Rest Horse Sanctuary. Although there is no objection per se to the Compulsory Purchase Order, the Council has a right to claim compensation for the land being acquired and for the rights in the grazing land that it owns and which are being acquired. These rights will be interfered with and the value of the remaining woodland will/may be reduced as a result of works carried out on the land being compulsorily acquired.

Spirits Rest Horse Sanctuary is leased to a third party. It is imperative that Highways England maintains a dialogue with the Council to ensure that full and proper consideration is given to the needs of the tenant in so far as this relates to the sourcing of grazing land for the relocation of her animals.

Highways England's compulsory order proposals do not include the woodland part of Spirits Rest Horse Sanctuary. In an informal meeting with Highways England, the Council made it known that it was not prepared to retain the woodland as the lack of adequate access to the woodland would be a concern and the fact that the woodland's value will/may be reduced as a result of works carried out on the grazing land being compulsorily acquired.

Environmental Impact Assessment and proposed mitigations

As Kent County Council is the statutory authority with regard to sustainable urban drainage, public rights of way and highways as well as the planning authority for minerals and waste the Council will defer to the technical advice provided by Kent County Council's officers on such matters and will provide no more detailed comments on these matters at this time. The Council has

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also not commented on the matters which fall within the remit of the Environment Agency with regard to pollution of controlled waters and geology and soils.

Air quality and noise

The Council is satisfied with the assessment methodology with regard to air quality and noise. The Council welcomes the commitment set out within the OEMP to work with the Council's Environmental Health Officers with regard to the detailed design of the scheme, the potential for further surveys and the impacts arising during construction.

The Council currently has an air quality monitor located at Ightham Cottages, which is located on land that will be lost as part of the development. It is important that this monitor is replaced in order to monitor the effectiveness of the scheme. As part of the mitigation for the development the Council requests that this monitor is moved to the south of the junction prior to development to enable a baseline to be established in the area where residential receptors are to remain.

Biodiversity

The Council is satisfied that sufficient survey effort has been carried to understand the ecological impacts associated with the proposed development. However, the Council has concerns about the lack of information on the proposed mitigation. The Environmental Statement and OEMP have only provided an overview of the mitigation measures proposed and due to the sensitivity of the retained/adjacent habitat a more detailed document might have been expected. If the Scheme goes ahead it is considered that the detailed Construction Environmental Management Plan is produced clearly setting out exactly what measures will be implemented. At present the OEMP does not set out any requirement for the Council (or any other local authority) and their advisors to be consulted/involved with the detailed mitigation or the Habitat Management Plan. All mitigation is to be agreed between the HE and the principal contractors. It is considered important that the Council and the EDC are also involved in agreeing these details in order to ensure that the mitigation integrates with other ecological works and habitat protection and creation in the area. The Council emphasises the need to ensure that the current ecological interest of the site is maintained post- construction.

Cultural Heritage

The Council's archaeological and heritage advisor is Kent County Council. Based on their advice, the Council is not satisfied that the cultural heritage assessment adequately assesses or describes the known and potential historic environment resource. The character and nature of Palaeolithic sites and how they are recorded seems to have been misunderstood in the assessment and Palaeolithic remains are not considered to have been adequately assessed. It is known that the 2nd century Roman temple was preserved as part of the HS1 works and will definitely survive. The scheme

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should aim to continue to preserve this site in situ rather than accept at this stage that excavation and recording would be appropriate mitigation. The Council consider that the nationally important non-designated archaeological remains should be treated as though they were Scheduled. The Council notes that the OEMP does set out the requirements for further archaeological evaluation and investigation prior to commencement and that the detail of this should be prepared in consultation with the Kent County Council's Heritage Manager and the Council would support this approach.

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Landscape and Visual Impact

The Council supports the replacement planting proposed in order to reduce the visual impact of the road infrastructure and improve the visual amenity of these gateways into the Borough. However the Council would also seek to ensure that such planting does not result in an adverse impact on the archaeology in the area. The Council would request that it is consulted on the detailed planting designs.

Conclusion

The Council is keen that the delivery of improvements at Bean and Ebbsfleet junctions is urgently progressed, in order to meet the needs of the development coming forward. However, it is considered that a more holistic view should be taken of the strategic road network allowing for an optimum solution which builds in additional capacity on the wider network, not only at this junction, in order to allow for resilience.

The Council considers that the junction proposals should not be considered separately from the A2 mainline capacity but that the junction proposals should allow for widening of the A2 in order to provide additional capacity. In addition, the proximity of the junctions to junction 2 of the M25 and the A2(T) and the inter-relationship of all these junctions with junctions 1A and 1B of the M25 results in incidences or capacity issues on one part of the road network impacting on the other parts of the strategic network and the local road network. Given the complexity of this road network and the interdependencies and its lack of resilience to incidences, the improvement works should be considered holistically in order to reduce the frequency of incidences causing impact on the local road network and other parts of the strategic network both during construction but also at operational stages of the development.

However, on the basis that the scheme goes ahead, the Council would request that it and its technical advisors be consulted on the biodiversity and archaeology aspects and that it be consulted and involved with the detailed Construction Environmental Management Plan and the detailed mitigations proposed.

3. Relationship to the Corporate Plan

ED4 Ensure the delivery of timely transport infrastructure

4. Financial, legal, staffing and other implications and risk assessments*

Financial Implications	None
Legal Implications	None
Staffing Implications	None
Administrative	None

**REPORT TO MANAGING DIRECTOR
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Appendix A

Implications	
Risk Assessment	No uncertainties and/or constraints

6. Details of Exempt Information Category

Not applicable

7. Appendices

None.

BACKGROUND PAPERS

<u>Documents consulted</u>	<u>Date / File Ref</u>	<u>Report Author</u>	<u>Section and Directorate</u>	<u>Exempt Information Category</u>
		Sonia Bunn	Regeneration, External Services Directorate	N/A