

LONDON BOROUGH OF HILLINGDON

COMMENTS ON EXA'S FIRST WRITTEN QUESTIONS

HIGHWAYS ENGLAND'S RESPONSE

Question	Council Response	Highways England Response
<i>National Policy Statement for National Networks (NN NPS)</i>		
<p><i>1.1 Having regard to the criteria listed in para 1.2 of the National Policy Statement for National Networks (NNNPS), is there any reason why the application should not be determined in accordance with the NPS?</i></p>	<p><i>It is not considered that the applicant's submission sufficiently satisfies the criterion of paragraph 1.2 with regard to the scheme not resulting in adverse impacts outweighing its benefits. The impacts of the scheme are significant and don't appear to have been fully addressed within the submission.</i></p> <p><i>Furthermore, the Scheme could potentially lead to the Secretary of State being in breach of a duty imposed by legislation in that the Council believe the identification of the Scheme as Low Risk in terms of EU limit value compliance is not a correct interpretation of the EU Air Quality Directive (2008/50/EC). Given the judgement handed down R (Client Earth) v the Secretary of State for the Environment, Food and Rural Affairs (2013) UKSC (2014) EUJC C- 404/13 (2015) UKSC 28 the Council is clear that air quality must not be made worse where it is already non-compliant and in breach of the legislation even where the increase in limit value is slight. The Council are therefore, concerned that Highways England's approach to the EU Limit Value test is potentially unlawful.</i></p>	<p>Highways England believe that this question relates to the choice of the procedure and not the merits of the application.</p> <p>The Scheme has large benefits for the local area, the region and the country in terms of socio-economic benefits, reducing congestion, reducing driver stress, reducing journey times, reducing noise levels and increasing the consistency of traffic flows along this transport corridor. There are some minor or negligible disadvantages to the Scheme, which are openly acknowledged, such as a slight increases in air pollution in some locations. Such negative impacts have been properly assessed and mitigated wherever possible. To that end, it is absurd to suggest (in the wording of para 1.2 of the NN NPS) that the Scheme would "result in adverse impacts of the development outweighing its benefits".</p> <p>In terms of air quality, The ExA has been invited to assess the Application including Highways England's assertions regarding EU limit values. To that end, the ExA will not be in breach of these laws</p>

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		<p>for examining the application. Whether the ExA agrees with Highways England's assessment of the severity of Air Quality impacts in this regard, is then a matter of planning judgment for the ExA and not for the Council. Of course the Council is free to submit their own assessment. Again, it is not unlawful for the ExA to accept such submissions, but only right and proper.</p> <p>The application should therefore be determined in accordance with the NN NPS rather than any other procedure.</p>
<p><i>1.2 To what extent would the project deliver the objectives of NNNPS to increase the capacity and improve the performance of the Strategic Road Network?</i></p>	<p><i>The Applicant purports that the scheme by its very nature will increase capacity. It is questionable as to whether the scheme would improve performance as the lack of a hard shoulder has the potential to cause significant delays in the event that an accident occurs along the smart motorway as proposed.</i></p>	<p>Highways England point out that the effects of All Lane Running have been included in the Traffic Modelling carried out, which suggest congestion will be reduced and both capacity and performance increased (as per paragraphs 4.3.3 and 4.3.4 of the Engineering and Design Report, Application Document Reference 7.3). Highways England have control measures in place to mitigate against live lane accidents, such as the implementation of a controlled environment through Variable Mandatory Speed Limits and Closed Circuit Television. If an incident does occur, CCTV can enable Highways England's Regional Control Centre to pinpoint the incident and then the Centre staff can protect the area through the setting of signs and signals and make use of the full CCTV coverage to manage both an efficient safety response and maintain safe traffic flows past the incident.</p>

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		<p>In terms of live lane incidents and delays, the evidence from the M42 Smart Motorways Hard Shoulder Running Pilot Scheme demonstrates that use of the hard shoulder as a running lane has reduced the occurrence of severe congestion on that section. Average journey times were reduced and consistent journey times have been achieved (with a 22% reduction in the variability of journey times when compared to the M42 before the Pilot scheme).</p>
<p><i>1.3 Would the project deliver appropriate environmental and social benefits as required by NN NPS para 3.3?</i></p>	<p><i>It is not considered that the scheme has clearly demonstrated any environmental benefits.</i></p>	<p>Highways England considers that the Scheme will deliver appropriate environmental and social benefits, as required by paragraph 3.3 of the National Policy Statement for National Networks ("NN NPS").</p> <p>The Scheme for which development consent is sought provides additional capacity while minimising land-take, thereby avoiding adverse impacts associated with extensive land-take on local communities and the environment. The benefits for London Borough of Hillingdon include:</p> <ul style="list-style-type: none"> - reduced congestion and more reliable journey times; - improvements in ambient noise levels at year of opening due to the provision of low noise surfacing across all lanes; - replanting of areas of vegetation removal; and

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		- reduction in night-time glare due to the replacement of the luminaries with modern LED cut off lanterns.
<i>1.4 Are the local authorities satisfied that the traffic forecasts and economic case for the project have been adequately tested through the use of the M3/M4 variable demand transport model, and that the requirements of paras 4.5 and 4.6 of NNNPS have been met?</i>	<i>No. We still do not understand the extent to which we can expect traffic migration to the principal and local road network. We are particularly concerned with pressure from HGVs in the Heathrow villages and impact on already congested roads such as A408 Stockley Road, A312 Hayes Bypass and A4020 Uxbridge Road. The concern applies both to the construction period and after completion of the scheme.</i>	<p>The traffic model suggests that with the implementation of the Scheme, there is forecast to be some re-routing of traffic between junctions 3 and 4 essentially to make use of the improved M4 for more of their journey. This results in a slight net increase (approx. 120 vehicles per hour in the am peak) using the A408 Stockley Road but a slight decrease (approx. 20 vehicles per hour in the am peak) on the A312 Hayes Bypass. These effects are similar in each of the four modelled periods.</p> <p>During the second phase of construction of the Scheme between junctions 8/9 and 3, the strategic traffic model suggests there may be some re-routing away from the M4, principally to the M40. No impacts are forecast in the Hillingdon area (ie between junctions 4b and 3) during the first phase of work.</p>
<i>1.5 Does the Thames Valley Multi Modal Study (TVMMS) provide an adequate assessment of options to comply with the requirement in NNNPS para 4.27?</i>	<i>Within London we expect that use is made of TfL's WELHam Model.</i>	<p>Transport for London ("TfL") has independently considered the effects of the Scheme within London and has confirmed that it is content with the proposals as per the signed Statement of Common Ground between TfL and Highways England dated 12 October 2015.</p> <p>Highways England believes the TVMMS provides a sufficient assessment of options and alternatives. Although TfL's Model may be of interest and value</p>

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		<p>to the ExA, the traffic forecasts and economic case for the Scheme have been developed through the use of the M3/M4 variable demand transport model. This model, which covers a large area of south-east England, has been validated in accordance with DMRB standard criteria. The M3/M4 variable demand model underpins the economic case for the Scheme which complies with the Treasury Green Book.</p> <p>The various options considered for the Scheme are detailed in Table 4, Paragraph 5.1.11 of the Engineering and Design Report (Application Document Reference 7.3). This assessment concluded that the smart motorway solution proposed for the M4 is the most suitable option for this stretch of motorway and provides greater benefits than other modal solutions and existing technology. It allows Highways England to deliver the additional capacity that is required to tackle congestion by making best use of the available road space, and is supported by paragraph 2.23 of the NN NPS.</p>
<p><i>1.6 Are the local authorities satisfied that the applicant has demonstrated good design as required by NNNPS paras 4.32 to 4.34?</i></p>	<p><i>No- the designs and scale of some of the installations are significant and adversely impact on the local area and residents living close to the site.</i></p>	<p>Highways England would be keen to understand which installations the Council is referring to as this comment is unsubstantiated. The landscape and visual impact of the Scheme assessment is presented in Chapter 8 of the ES. As detailed in paragraph 8.2.14, location-specific mitigation (planting) has been provided in order to minimise the adverse effects of the Scheme on the landscape and on visual amenity. The proposed mitigation is</p>

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		identified on the Environmental Masterplan (Application Document Reference Number 7.4, Annex A, sheets 1 to 31) and will be provided via a landscape strategy secured by a requirement in the Development Consent Order.
<i>Local Development Plans</i>		
<i>2.1 Does the applicant accurately identify the Development Plans and Transport Plans currently in place for each of the 11 local authorities Table 1, APP-089 against which the application falls to be assessed?</i>	<i>No- all policies and documents which have not been considered are set out in Appendix 1.</i>	A response to each of the suggested policies has been provided in Appendix 1 below.
<i>2.2 Do the local authorities agree the applicant's assessment of the project against the relevant policies of each Council? If not, please identify any areas of conflict and explain the reasons why the project would be in conflict.</i>	<p><i>The Council's concerns are set out at [INSERT]. Additionally, there has been no attempt to set out the amount of energy used as would be expected in any major development, and how this will be reduced through the use of renewable energy for example.</i></p> <p><i>The development is likely to result in a significant draw down of power in the London area yet without any requirement of an assessment would indicate it is being treated differently to all other major developments. Policy 5.2 of the London Plan is the relevant policy as is EM8 of the Local Plan.</i></p>	<p>It is not agreed that a calculation of the amount of energy to be used in major developments is an expectation in planning decisions such as that for the Scheme. The NN NPS, as the primary consideration for NSIPs makes no reference to this requirement.</p> <p>Reference to Policy EM8: 'Land, Water, Air and Noise' of the Adopted Local Plan is included within the planning assessment for LB Hillingdon in the Planning Statement (Document Reference Number 7-1) insofar as it relates to the proposed development.</p> <p>Policy 5.2 of the London Plan provides guidance on Minimising Carbon Emissions. However, this Policy is not considered to be relevant to the</p>

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		Scheme, as the policy criteria and supporting justification refer to developments associated with both residential buildings and non-domestic buildings.
<i>2.3 Are there any developments which are either proposed in or in accordance with Local Plans which might be affected by the project? If so, please identify and explain what the effects would be.</i>	<i>There are currently significant concerns about the relationship between the proposed development and the supporting road network. The modelling information provided is not clear, yet it must be assumed that there would be an increase in movements on the local network. If this is the case then it could impact upon current and committed development in terms of those supporting junctions.</i>	Highways England has provided a response to the Council's stated concerns over the effects of the Scheme on the local road network in its response under 1.4 above.
<i>2.4 Is the scheme compatible with regional and local strategies to increase uptake and mode share for public transport, walking and cycling?</i>	<i>No. The scheme is likely to increase severance. Considerable effort is needed to mitigate the worsening conditions, especially the Sipson Road subway area and along the Public Rights of Way</i>	<p>Cycling and walking options on the national motorway network are prohibited. The boundary of the Scheme only encompasses the M4 and its immediate surrounds (mostly the existing motorway and verges). The Applicant is only required to provide mitigation where the Scheme is shown to impact on amenity in terms of walking, cycling and public transport. As this has not been shown, no such mitigation measures are planned.</p> <p>The Sipson Road subway provides a pedestrian route under the M4 (cyclists must dismount and walk through the subway). It requires extending by approximately 5m to accommodate ALR through junction 4. Asymmetric widening to the south side has been selected as the preferred option, as explained in Chapter 5 of the EDR. Some footway closures are anticipated to construct the widening and a diversion is available via Holloway Lane to the east. No works are proposed at the Holloway</p>

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		<p>Lane underbridge. Following the completion of the construction works, the subway will be reopened for use. No works are anticipated at the Fuller or St Dunstan's subways between junctions 4 and 3.</p> <p>There are no proposed impacts along the PRsoW in the Hillingdon area (or elsewhere). Where the Scheme crosses or needs to temporarily divert a PRow (as is the case for the Sipson Subway) mitigation is in place and impacts will be kept to a minimum. There are no permanent closures along the entire length of the Scheme and diversions in the Hillingdon area are only temporary and will cause only minor disruption.</p>
Green Belt		
<p><i>3.1 The scheme includes the widening of the M4 at junctions of the motorway to alter sliproads; the construction of new overbridges; and the widening of underbridges. To what extent would these works have an impact on the openness of the Green Belt and constitute inappropriate development? To what extent would these operations have an impact on the five purposes of including land in the Green Belt?</i></p>	<p><i>The scheme will have impacts upon the openness of the Green Belt as the M4 will encroach closer towards the Green Belt boundaries. In this regard, we have highlighted that greater detail is required about the proposed replacement planting (which has not yet come forward) to manage the impact on the Green Belt.</i></p>	<p>The landscape and visual impact assessment for the Scheme is presented in Chapter 8 of the ES and will be mitigated where needed. As detailed in paragraph 8.2.14, location-specific mitigation (such as trees and shrub planting) has been provided in order to minimise the adverse effects of the Scheme on the landscape and on visual amenity. The proposed mitigation is identified on the Environmental Masterplan (Application Document Reference Number 7.4, Annex A, sheets 1 to 31) and will be provided via a landscape strategy secured by a requirement in the Development Consent Order.</p>

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<p>3.2 In respect of proposed new gantries, to what extent would their construction have an impact on the openness of the Green Belt and constitute inappropriate development? To what extent would they have an impact on the five purposes of including land in the Green Belt?</p>	<p><i>One of the five purposes that the Green Belt is to preserve the setting and special character of historic towns. As set out above, the Council wish to see sufficient detail of the replacement planting to ensure there are no detrimental impacts on the setting and special character of adjoining conservation areas and listed buildings.</i></p>	<p>Again, sufficient details of the visual mitigation have been provided on the Environmental Masterplan Annex 1 and Annex 2 (Application Document 7.4).</p> <p>In regards to the setting and special character of 'historic towns' within the Green Belt, Chapter 7 of the ES has identified the potential impacts to Cranford Park Conservation Area and Harlington Village Conservation Area and associated listed buildings. The recent extension to Harlington Village Conservation Areas is noted, although the predicted significance of effect on the setting of the Conservation Area remains only slight adverse. Highways England therefore believe the Scheme preserves the setting and special character of these "historic towns".</p> <p>In particular, the Grade II* listed Church of St Dunston in Cranford Park Conservation Area lies within the Zone of Visual Influence ("ZVI") of the Scheme as described in paragraph 7.13.16 of the ES and shown on Drawing 7.1 Sheet 15 (Application Document Reference 6-2). This asset will not be subject to direct physical impacts as a result of the Scheme.</p> <p>The listed buildings within the Harlington Village Conservation Area, including the Grade I listed Church of St Peter and St Paul, are located outside of the ZVI of the Scheme, as described in paragraph 7.13.11 of the ES and shown on Drawing 7.1</p>

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		<p>Sheet 15.</p> <p>The Grade II listed war memorial within Cherry Lane Cemetery does lie within the ZVI as stated in paragraph 7.13.14 of the ES. This asset will not be subject to direct physical impacts as a result of the Scheme.</p> <p>Vegetation clearance would be minimal at these locations and where it is removed would be replaced as indicated in the Engineering and Design Report, Annex A2, Vegetation Clearance Sheet 30 and Annex A1, Environmental Masterplan Sheet 30 (Application Document Reference 7-4). It is a requirement of the Outline Construction Environmental Management Plan (Appendix 4.2A of the ES) (Application Document Reference 6-3) that the contractor must protect the adjacent trees to be retained throughout the construction phase, in accordance with BS5387.</p>
<p><i>3.3 Six potential construction compounds are proposed. To what extent would they have an impact on the openness of the Green Belt and constitute inappropriate development? To what extent would these operations have an impact on the five purposes of including land in the Green Belt?</i></p>	<p><i>Clarity on the selection of construction sites is required so that the impacts can be fully understood and assessed. Considerable concern exists with the construction site possibly proposed off A408 Stockley Road due to its impact on the local highway network and protected species, which have been found at the site.</i></p>	<p>The compound off the A408 Stockley Road (Construction Compound 11) was selected due to the need to have temporary site space at the Eastern end of the project as outlined in the Summary of proposed development, Section 2.1 of the EDR. Our response to question 9.2 of the First Written Questions details the use of the compound will be for vehicle recovery plus material storage and/or Concrete Batching Facility to support the main construction works from junctions 8/9 to 3.</p> <p>The compound will be temporary only and the area</p>

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		<p>will be reinstated to its original condition on completion. The use of the area as a temporary site compound is therefore not considered to have an effect on the five purposes of including land in the Green Belt.</p> <p>Impact on the local highway network is considered to be minimal and traffic accessing and leaving the site would be via the A408 to the M4 junction 4 and existing Pro-Logis roundabout .The detailed assessment of the vehicle routes will be included within the detailed traffic management plan that will be developed during the construction planning stage and in consultation with stakeholders.</p> <p>Any protected species found on the site would be identified during pre-work surveys and appropriate translocation or protection measures agreed. The site would be returned to its existing condition upon completion of the works.</p>
<i>Environment ; Environmental Statement</i>		
<p><i>4.1.1 Chapter 5 Section 5.5 APP-145 sets out the methodology for establishing the baseline for the Environmental Impact Assessment (EIA). Are consultees and interested parties satisfied with the approach as adopted?</i></p>	<p><i>No.</i></p> <p><i>The methodology for air quality proposes that a significant effect will only occur where there is an increase of 0.4ugm of NO2 even if it is in an area exceeding EU limit values. This highly questionable as set out in section 1.1 above and is further nor compatible with the NPPF or local policies.</i></p> <p><i>In addition, the Council is concerned that the assessment of air quality did not adequately describe the impacts on health.</i></p>	<p>Highways England notes that the question posed by the ExA concerns the adequacy of the approach taken to assess the baseline, but London Borough of Hillingdon's response concerns the interpretation of the significance of the effect of the Scheme on air quality and health.</p> <p>Highway England therefore assumes that London Borough of Hillingdon has no objection to the methodology for establishing the baseline.</p>

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	<p><i>No health impact assessment has been undertaken which is surprising given the extent of additional emissions in highly sensitive areas. The methodology only relates to a more mathematical exercise in terms of exceedences but does not go to the depths of presenting the health effects of the scheme as would be expected.</i></p>	<p>A risk assessment has been undertaken to establish the potential for the Scheme to affect the information reported to the EU and in particular to test whether the Scheme would cause:</p> <ul style="list-style-type: none"> • a compliant zone/agglomeration becoming non-compliant; and/or • delay Defra's date for achieving compliance for the zone/agglomeration ie the change on a road link would result in concentration higher than the existing maximum value in the zone; and/or • result in an increase in the length of roads in exceedance in the zone which would be greater than 1% when compared to the previous road length. <p>The risk assessment has been undertaken using Highways England Interim Advice Note ("IAN") 174/13 '<i>Updated air quality advice on risk assessment related to compliance with the EU Directive on ambient air quality and on the production of Scheme Air Quality Action Plans for user of DMRB Volume 11, Section 3, Part 1 'Air Quality'</i>.</p> <p>Following this methodology the Scheme is not anticipated to cause any of the three above situations to occur. This is because the compliance assessment identified that there was only one area where Pollution Climate Mapping ("PCM") road</p>

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		<p>sections within the study area of the local operational air quality assessment were expected by Defra to be non-compliant in the year of opening for the Scheme.</p> <p>The PCM road links comprise a section of the A4 located between Warkworth Gardens and Windmill Road in Brentford.</p> <p>However, the resultant concentration predicted at this location with the contribution of the Scheme was not higher than the highest PCM Road section annual average NO₂ concentration of 69.5 µg/m³ within the Greater London Urban Area and additionally the change in concentration along the A4 PCM road section is imperceptible (ie less than 0.4 µg/m³).</p> <p>No other PCM road sections were identified to be in non-compliance in the opening year in the Reading/Wokingham Urban Area and South East zone which cover the Scheme and local operational air quality assessment study area.</p> <p>On the basis of this evaluation the Scheme is considered to have a low risk of causing a compliance issue against EU Limit Values and no air quality action plan for the Scheme is required. The compliance risk assessment was reported in Section 6.15, paragraphs 6.15.4 to 6.15.7 of the ES.</p> <p>This approach and the outcome of the risk assessment is considered to be consistent with</p>

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		<p>relevant planning policy.</p> <p>Air quality objectives are set for the protection of human health, therefore the assessment of the effects on air quality focuses on those receptors that do not achieve that objective.</p> <p>A Health Impact Assessment has been prepared for the Scheme. In addition Public Health England has stated that they agree "<i>that the methodologies used for the assessment of health impacts via air, land and water are appropriate</i>" Then regarding Air Quality, they go on to say:</p> <p><i>"As described in paragraph 6.2.25 of the Environmental Statement (Application Document Reference 6.1), the air quality objectives1, which form the basis of the assessment of the impact of the Scheme on air quality, are selected based on the way they affect human health, with mean annual objectives relating to chronic impacts on human health and 24 hour objectives relating to acute impacts on human health. Paragraph 6.2.81 of the ES (Application Document Reference 6.1) explains that sensitive receptors have been selected based on locations where people will be present, given the potential impact of air quality on human health. It is agreed that the approach set out in the ES (Application Document Reference 6.1) is suitable to assess the impacts of the Scheme on air quality as it affects human health."</i></p> <p>Highways England therefore considers that the</p>

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		methodology for the assessment of significant effects utilised for this Scheme is appropriate for the assessment of air quality and the effect of that on human health.
<p><i>4.1.4 An outline of the CEMP APP-293 is provided. The approval and implementation of the CEMP is secured through Requirement 8 of the draft DCO APP-026 . The outline CEMP sets out a series of proposed measures and standards applied by the Highways Agency (as was) and its contractor throughout the construction period. The final CEMP will be certified to BS EN ISO 14001. Do any interested parties have any comments on the sufficiency of the outline CEMP for securing mitigation? The ExA would be interested in particular in comments from NE, the EA and the LPAs who would be responsible for approving the CEMP under requirement 8 of the DCO.</i></p>	<p><i>The Council has concerns in relation to the current version of the CEMP due to its limited detail. The Council is further concerned that Highways England are able to modify the CEMP 'at any time' after the authorised development has commenced. The Council would request an amendment to the DCO to ensure any amendments to the CEMP are approved in writing by the Council.</i></p>	<p>The outline Construction Environmental Management Plan ("CEMP") sets out the initial framework for the management of construction-related activities likely to have a significant adverse impact on local communities and the environment. As the detailed design is developed, the designers will provide the contractor with construction drawings, schedules and specifications. The contractor in turn will develop their proposals for building the Scheme based on the detailed design, their own resources and taking into account matters discussed with the regulatory authorities and local planning authorities. This process is explained in paragraphs 2.2.1 to 2.2.2 in the outline Environmental Management Plan (Appendix 4.2A of the ES) (Application Document Reference 6-3).</p> <p>Highways England considers that the level of detail provided in the outline CEMP is proportionate given the stage of the project at the time of the DCO Application. The final CEMP which the statutory environmental bodies and the local planning authorities will be asked to approve will be a more detailed document that will take into account matters raised by them during consultations leading up to the preparation of the final CEMP.</p> <p>Once approved by the ExA, the DCO would not be</p>

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		<p>amended and Highways England would be obliged to abide by all conditions in the DCO.</p> <p>The final CEMP, approved under Requirement 8, Schedule 2 of the DCO is the detailed document prepared by the contractor prior to the start of construction. However, the CEMP is a "living document", meaning that the contractor will update, review and revise the CEMP during the construction period. This reflects a fundamental aim of ISO 14001 Environmental Management Systems to seek continual improvement in environmental performance. Any subsequent revisions of the CEMP will still have to comply as a minimum with the final CEMP approved under the DCO.</p> <p>In the event that the contractor wishes to change arrangements previously agreed with the local planning authorities, for example to handle an unforeseen problem at a construction site or compound, they would consult with the local planning authority on the best way to handle the matter and if appropriate the CEMP would be revised accordingly, for example by including correspondence or minutes with the local planning authority on the outcome of discussions. Highways England does not consider that it is necessary to set up a formal process for approval of revisions to the CEMP by third parties. Highways England has agreed to the deletion of sub-paragraph 3 in requirement 8, which previously allowed modification of the CEMP at any time.</p>

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<p><i>4.1.5 Requirement 8 allows the undertaker to modify the CEMP at any time after the authorised development has commenced without the requirement to seek the agreement of the LPA and without any reference to what has been assessed within the ES. There is also no requirement for the CEMP to deliver the mitigation measures identified in the ES, where the ES is relying on the CEMP as the mechanism to deliver the mitigation. Therefore, please explain how the EIA can rely on this mitigation when concluding on the residual significance of the development?</i></p>	<p><i>The Council query in the first instance how the ES can rely on the published draft CEMP which is significantly lacking in any detail to make its conclusions within the ES.</i></p> <p><i>The Council agree that changes to the CEMP post confirmation of the draft DCO need to be issued to the Council for written approval.</i></p>	<p>Highways England does not accept that only limited detail has been provided in the version of the CEMP that was submitted with the Application. However, it is acknowledged that version is intended to be outline in nature, and will be developed throughout the course of the Examination and after consent for the Scheme is given, before being approved pursuant to requirement 8 of the DCO. A further iteration of the CEMP is being provided at Deadline III.</p> <p>Furthermore, Highways England has agreed to the deletion of sub-paragraph 3 in requirement 8. This amendment is reflected in the revised draft of the DCO which was submitted at Deadline II.</p>
<p><i>Environment; Landscape and visual impact</i></p>		
<p><i>4.2.2 Has the baseline information for the landscape and visual impact assessment (LVIA) been agreed with relevant stakeholders?</i></p>	<p><i>The Council have in principle agreed the baseline information for the LVIA however, the Council still await winter views.</i></p>	<p>Highways England is willing to provide winter photomontages, but unless Hillingdon has archive winter photographs, we have to wait until later in the season when the leaves have dropped from the deciduous trees and shrubs to take the photographs. Highways England would like to agree with Hillingdon those existing photomontages for which winter views are requested, bearing in mind that dense vegetation including evergreens already show effective screening of the M4 motorway and winter views would not show any significant change in</p>

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		views.
<p>4.2.11 Although Cumulative effects are discussed APP-148 , can the applicant confirm that the scope of the cumulative assessment has been agreed with relevant stakeholders?</p>	<p>The applicant asked the Council for details of applications to be included in the cumulative assessment but then seemingly did not use these in the cumulative assessment. Please see Appendix 2, which sets out all the relevant developments that should be considered.</p>	<p>A list of developments was provided by London Borough of Hillingdon in response to a request for planning information made on behalf of Highways England in December 2014. The list of sites detailed in Appendix 16.2 of the ES (Application Document Reference 6-3) sets out those sites used in the cumulative assessment, initially to develop the traffic forecasts and subsequently for use in the environmental assessments that drew on those forecasts. The traffic forecasts were prepared during the early months of 2014, based on information obtained from local planning authorities in December 2013 to January 2014. The development site collation process was ‘frozen’ in February 2014 at which time the detailed model development took place.</p> <p>Following receipt of details of each development, an initial sieve is applied so as only to capture developments of strategic importance to the highway network. Only developments above the following thresholds were included in the Uncertainty Log:</p> <ul style="list-style-type: none"> a) residential over 50 residential units; and b) non-residential over 1,000 square metres. <p>For the second sieve, the development proposals were reviewed against the land use assumptions within the appropriate model zone. If the model</p>

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		zone land use and planning assumptions already reflected the proposed development, no change was made to the model. If, however, the development represented a significant departure from what was contained within the model, the development was explicitly modelled and the Alternative Planning Assumptions adjustment within TEMPRO was applied. In some cases, e.g. the former NATS site, the changes were such that it was necessary to create a new zone within the model to represent the development proposals.
<i>Ecology and Nature Conservation</i>		
<i>4.4.3 Table 9.5 APP-149 sets out the significance of the residual effect of the scheme on ecology and nature conservation. Is there any evidence to challenge the conclusions set out in this Table?</i>	<i>Not all the relevant surveys and information have been made available, specifically with regard to the proposed construction compound where protected species have been found. The development itself (not including the construction compound) is unlikely to result in a significant effect but further details are still required, and the applicant should be contributing to enhancement not simply mitigation.</i>	All compound areas have now been surveyed with the exception of Construction Compound 9 in relation to which Highways England experienced difficulties getting access. Notices have now been served and Highways England anticipates that these surveys will commence in the next week, with the results provided to the Examining Authority in due course and before the end of Examination. Any additional surveys and pre-construction surveys (including subsequent mitigation and any licence requirements and/or legal compliance) have been reported within Appendix 5.3 of the ES (Application Document Reference 6-3) and all will be included within the final authorised CEMP. Highways England is seeking to enhance the Scheme in compliance with national, regional and local policy (including the Highways England

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		Biodiversity Action Plan) via otter ledges within the Scheme, non-native invasive species remediation within the Scheme and construction footprint, maximising the biodiversity potential of any soft landscaping via detailed design and provision of bat boxes on strategically located land to be monitored and maintained by Local Bat and/or Wildlife Groups.
Air Quality		
<p>4.6.1 Chapter 6 Section 6.3 APP-146 sets out the air quality regulatory/policy framework. The NNNPS para 5.13 states: "The Secretary of State should refuse consent where, after taking into account mitigation, the air quality impacts of the scheme will affect the ability of a non-compliant area to achieve compliance within the most recent timescales reported to the European Commission at the time of the decision." Having regard to the final judgement of the Supreme Court in the "ClientEarth" case, does the assessment of air quality impacts set out in the ES indicate that the scheme would comply with this requirement of the NNNPS?</p>	<p><i>Please refer to section 4.1.1 above for previous comments.</i></p> <p><i>The ES indicates an increase in concentrations as a result of the Scheme on a road that is currently identified as non-compliant and will still be so in 2022. There are no mitigation measures identified to address this issue. With this in mind the council is of the opinion that without mitigation this Scheme does not comply with the NNNPS.</i></p> <p><i>Concerns raised in the Council's LIR in regard to the modelling methodology under-estimating concentrations, the assessment not taking a worse case approach in terms of Euro 6/V1 emissions and the historic trend analysis of no downward trend all support the Council's concerns that there could be exceedences in 2022. There is no mitigation suggested. With this in mind, should the Council's concerns be proved a reality, this Scheme would not comply with the NNNPS.</i></p>	<p>Highways England has explained how the Scheme is consistent with paragraph 5.13 of the NN NPS, as outlined in paragraph 6.18.8 of the ES, within Highways England's response to Question E4.6.1 of the ExA's first written questions.</p> <p>Highways England's response to the ExA's Question E4.6.1 also addresses the implications of the <i>ClientEarth</i> case for the Scheme.</p> <p>Section 104 of the Planning Act 2008 requires an application for development consent to be determined in accordance with the NN NPS. An Examination of an application for Development Consent is not the appropriate forum to challenge the policy contained in the NN NPS. As noted at section 1 of Annex D to the ExA's Rule 8 letter dated 11 September 2015:</p> <p><i>"...the merits of Government Policy, as set out in the National Networks National Policy Statement ("NNNPS"), are not a matter for debate during the</i></p>

Question	Council Response	Highways England Response
		<p><i>examination."</i></p> <p>The compliance risk assessment undertaken for the Scheme has been undertaken using Highways England IAN 175/13 <i>'Updated air quality advice on risk assessment related to compliance with the EU Directive on ambient air quality and on the production of Scheme Air Quality Action Plans for user of DMRB Volume 11, Section 3, Part 1 'Air Quality'.</i></p> <p>This does include the consideration of the location with the highest concentration of NO₂ anticipated in the Opening Year of the Scheme (2022) within the Greater London Urban Area ie Marylebone Road in central London. This location of highest concentration is considered because, as noted above, a zone will not be compliant with EU Limit Values if one location is predicted to be non-compliant (ie there is no compliance throughout the zone).</p> <p>The change in NO₂ concentration from the Scheme was also considered for a section of the A4 located between Warkworth Gardens and Windmill Road in Brentford, which forms part of the road network which contributes to the compliance reporting undertaken by Defra. This section of road was considered because it is within the local operational air quality study area for the Scheme. In this location, the change in concentration along the A4 PCM road section is imperceptible (ie less than 0.4 µg/m³).</p>

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		<p>No other PCM road sections were identified to be in non-compliance in the opening year in the Reading/Wokingham Urban Area and South East zone which the Scheme and local operational air quality assessment study area.</p> <p>On the basis of this evaluation, the Scheme is considered to have a low risk of causing a compliance issue against EU Limit Values, and no air quality action plan for the Scheme is required. The compliance risk assessment is reported in paragraphs 6.15.4 to 6.15.7 of the ES.</p> <p>For information, over 1,000 road links within the Greater London Urban Area are predicted to have higher predicted concentrations within the Pollution Climate Mapping models used to report compliance with the Ambient Air Quality Directive than the section of the A4 between Warkworth Gardens and Windmill Road in Brentford.</p>
<p>4.6.2 To what extent have the local authority Environmental Health Officers and Air Quality Officers been consulted on the assessment set out in Chapter 6? APP-146 Can the applicant, local authorities and other interested parties identify areas of agreement and disagreement with regard to the assessment of air quality impact set out in the ES?</p>	<p><i>The Council requested additional information on methodology and were sent numerous document. The Council have also requested details on numbers of cleaner vehicles assumed in the fleet, rate of ingress, assumed emissions from the vehicles. This has not yet been received.</i></p> <p><i>The Council has sought expert advice on the current HE's methodology for calculating emissions, which is not available publicly. The Council's consultant has requested the document directly from HE.</i></p>	<p>Highways England uses Defra's publically available Emission Factor Toolkit (EFT), which is published on their website, in the assessment of this scheme. EFT contains information on the national fleet composition and rates of ingress of different vehicle types and Euro standards, which inform the emission rates used in Highways England's air quality assessment.</p> <p>Information on the supporting guidance used for this assessment is available at the following website</p>

Question	Council Response	Highways England Response
	<p><i>The Council's concerns are all highlighted in the LIR.</i></p>	<p>www.standardsforhighways.co.uk.</p> <p>As set out in paragraphs 6.2.57 to 6.2.58 of the ES the assessment of effects on air quality follows the methodology outlined in DMRB and Interim IAN 170/12 "Updated air quality advice on the assessment of future NO_x and NO₂ projections for users of DMRB Volume 11, Section 3, Part 1 'Air Quality'".</p> <p>Highways England is aware of a range of recent publications on Euro 6 and Euro VI emissions tests which indicate discrepancies in real world emissions versus the prescribed European Emission Standards. IAN 170/12 v3 already makes allowances for Euro 6/VI vehicles performing differently between the laboratory testing and the real world.</p> <p>The modelling undertaken for this assessment uses Defra's published vehicle emission factors, background maps and associated tools. The Scheme assessment applies Highways England IAN 170/12 v3 ('Updated air quality advice on the assessment of future NO_x and NO₂ projections for users of DMRB Volume 11, Section 3, Part 1 'Air Quality') and long term trends ("LTT_{E6}") spreadsheet version 1.1, which is the updated interim LTT curve issued for use in highways air quality assessments for Highways England schemes in 2014.</p> <p>In developing the projection factors for IAN 170/12</p>

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		<p>v3 (LTT_{E6}), Highways England took into account long term measured trends of NO_x and NO₂ (LTT) as well as the emission projections from Defra's emission factor toolkit ("EFT"), based on only improvements in emissions attributed to Euro 6/VI vehicles and their penetration into the UK fleet up to 2030 (E6 Only).</p> <p>The measured NO_x and NO₂ trends were based on monitoring data collected before the introduction of Euro 6/VI vehicles on to the UK road network, and consequently the monitoring data doesn't record the impact of Euro 6/VI emissions. Recent emission testing for Euro 6/VI vehicles indicates that whilst measured emissions may be higher, they are lower than Euro 4/IV and Euro 5/V emission measurements. Consequently this is likely to lead to reduction in emissions over time as more Euro 6/VI vehicles enter the national fleet (International Council on Clean Transportation).</p> <p>Highways England has adopted a precautionary approach where future changes in NO₂ concentrations would lie between the pessimistic (LTT) and optimistic future projections (E6 Only). It is difficult to estimate precisely where the balance lies in defining the trend line LTT_{E6}, especially on a timescale where the end point is as far away as 2030. Assuming a balance between the two extremes is a prudent way of describing a reasoned NO_x and NO₂ trend line up to 2030 that could be applied to scheme assessments. Highways England keeps this information under review as new</p>

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		evidence emerges on measured vehicle emissions, including Euro 6/VI vehicles A separate document in direct response to the LIR has also been submitted.
<i>4.6.4 Has the study area for the assessment of construction effects and for the assessment of operational effects been agreed with the local authorities?</i>	<i>No</i>	The methodology for defining the study area for construction and operations in relation to the air quality assessment was set out in the Scoping Report for the ES (issued August 2014). London Borough of Hillingdon did not provide comments on the Scoping Report that indicated that they were not satisfied with how the study area for the Scheme would be defined.
<i>4.6.6 Paras 6.2.7 to 6.2.14 of Chapter 6 APP-146 sets out details of sensitive receptors that may be affected by changes in air quality as a result of the construction and operation of the scheme. Some 3,275 sensitive receptors are identified. To what extent has the definition and identification of sensitive receptors been agreed with local authorities and any other relevant stakeholders?</i>	<i>The Council is not aware of any process where receptors were agreed prior to the assessment.</i>	The methodology for defining the selection of sensitive receptor locations for the air quality assessment was set out in the Scoping Report for the ES (issued August 2014). London Borough of Hillingdon (though given the opportunity to comment) did not provide comments on the Scoping Report that indicated that they were not satisfied with how these receptors would be defined.

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<p>4.6.7 Whilst the regional air quality assessment set out under para 6.15.11 APP-146 provides results for both the opening year (2022) and the design year (2037) of the scheme, the detailed level assessment, as described in paras 6.2.55 to 6.2.64 APP-146 limits predictions to the baseline year (2013) and the opening year. Can an assessment of local air quality effects be provided for the design year with and without the scheme?</p>	<p>The Council supports the suggested approach and would give the full operational impacts at capacity in 2037.</p>	<p>An assessment of the predicted effects of the Scheme in 2037 has been provided in Highways England's response to Question E4.6.7 of the ExA's first written questions which concludes that the design year calculations prepared (for 2037) confirm that the local air quality assessment undertaken for the opening year of the Scheme is the worst case from the first 15 years of operation, and that overall, significant air quality effects are not anticipated.</p>
<p>4.6.8 Chapter 6 Section 6.16 APP-146 deals with cumulative impacts. Have the key statutory bodies agreed the scope of the cumulative assessment? Are there any additional developments which should be included in the assessment?</p>	<p>No- the Council provided a full list of relevant developments to be included in the applicants cumulative assessment, but only 2 developments were included. Please see Appendix 2 which sets out all the relevant developments that should be considered. Please also note earlier comments about reasonably foreseeable development in section [INSERT].</p>	<p>The list of developments contained within Appendix 2 was provided by LB Hillingdon in response to a request for planning information made on behalf of Highways England in December 2014. The list of sites detailed in Appendix 16.2 to the ES sets out those sites used in the cumulative assessment, initially to develop the traffic forecasts and subsequently for use in the environmental assessments that drew on those forecasts. The traffic forecasts were prepared during the early months of 2014, based on information obtained from local planning authorities in December 2013 to January 2014. The development site collation process was 'frozen' in February 2014 at which time the detailed model development took place.</p> <p>In determining which development sites should be explicitly modelled, two criteria were used to sieve out those smaller developments for which it would</p>

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		<p>be reasonable to assume would be appropriately represented in the general National Trip End Model growth forecasts used within the model. The cut-off criteria were for residential developments: 50 units, and for non-residential development: 1000sq.m. Sites below these thresholds were not explicitly modelled.</p> <p>Sites above these thresholds in size were checked against the land use assumptions already existing within the model for those sites. If the land use allocated within the model was representative of the proposed development, both in scale and trip characteristics, the decision was taken not to revise the model. If, however, there was a material difference, as was the case with the NATS site, the proposed development was incorporated into a new zone, with bespoke trip generations and subsequent rebuild of the model matrices to reflect the additional zone(s).</p>
<i>Noise and Vibration</i>		
<p><i>4.7.1 Do the local authorities agree that the locations of sensitive receptors and the areas most exposed to noise from major roads have been correctly identified (Figure 12.1 APP-253 to APP-256)?</i></p>	<p><i>Yes, the locations in LBH are correctly identified.</i></p>	<p>London Borough of Hillingdon confirms that the locations of sensitive receptors and the areas most exposed to noise from major roads have been correctly identified.</p>

Question	Council Response	Highways England Response
<p>4.7.2 Has the baseline for the assessment of noise and vibration including the spatial scope (study area) for both construction and operational phases of the scheme together with the identification of the 21 monitoring locations been agreed with local authorities?</p>	<p>Yes, although the Council are concerned with the existing high levels of noise and the impact of traffic noise from the Scheme, especially in relation to Cranford Park Conservation Area and whether sufficient mitigation will be provided.</p>	<p>London Borough of Hillingdon confirms that the baseline for the assessment of noise and vibration including the spatial scope (study area) for both construction and operational phases of the Scheme together with the identification of the 21 monitoring locations are agreed in regard to noise and vibration.</p> <p>The proposed mitigation for the Scheme comprises low noise surfacing across all lanes, along the complete extent of the Scheme, and a number of new noise barriers, the heights and extents of which are defined in Table A12.2.1 of Appendix 12.2 of the ES (Application Document Reference 6-3). Existing noise barriers will be retained or replaced like for like in terms of length and height, and at an appropriate specification, if in poor condition. The heights and extents of existing noise barriers are defined in Table A12.1.1 of Appendix 12.1 of the ES (Application Document Reference 6-3).</p> <p>The locations and extents of existing noise barriers and the new noise barriers are provided in Figure 12.2 of the ES (Application Document Reference 6-2). However, following consultation with London Borough of Hillingdon and South Bucks District Council post DCO submission, a revised Figure 12.2 and revised Tables A12.1.1 and A12.2.1 were provided in response to Question E4.7.18 of the Examining Authority's first written questions. The revised drawing and tables incorporated revisions relating to the noise barriers to the London Borough of Hillingdon area and to Dorney Reach, and the minor corrections as submitted in response to the</p>

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		<p>Examining Authority's Rule 6 Letter.</p> <p>The noise and vibration assessment, as reported in Chapter 12 of the ES (Application Document Reference 6-1), is for the Scheme with the above mitigation in place. The magnitude of impact for the Scheme is minor beneficial in the short term and negligible in the long term. The significance of effect during the operation of the Scheme is assessed as slight beneficial in the short term and neutral in the long term, with the vast majority of the Scheme corridor experiencing negligible or minor reductions in noise levels with the Scheme in operation (see paragraph 12.4.110 of the ES).</p> <p>These noise reductions are shown in Figure 12.4 for the short term and in Figure 12.5 for the long term (Application Document Reference 6-2). Sheets 14 and 15 are relevant to the London Borough of Hillingdon area. The general reductions in noise levels across the London Borough of Hillingdon area (including Cranford Park) with the Scheme in operation are evident.</p> <p>It is noted in paragraph 12.4.112 of the ES that there is potential to further improve the noise climate within the Scheme corridor through enhanced mitigation. A qualitative appraisal of an enhanced mitigation strategy to achieve this is provided in Appendix 12.5 of the ES (Application Document Reference 6-3). This enhanced mitigation strategy comprises the provision of additional noise barriers, as outlined in Table A12.5.1 of Appendix 12.5 of</p>

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		<p>the ES and the replacement of some existing noise barriers with higher noise barriers as outlined in Table A12.5.2 of Appendix 12.5 of the ES.</p> <p>The possible replacement of existing barriers and the possible provision of new barriers to the London Borough of Hillingdon area form part of this enhanced mitigation strategy.</p> <p>The effects of implementing this enhanced mitigation strategy have not been assessed in Chapter 12 of the ES. Hence, the assessment provided in Chapter 12 of the ES (which concludes that the vast majority of the Scheme corridor will experience noise reductions with the Scheme in operation) is very much a worst case.</p> <p>Work is ongoing to provide a quantitative assessment of the enhanced mitigation strategy outlined in Appendix 12.5 of the ES. This comprises an iterative process which is employed to estimate the numbers of receptors experiencing specific reductions in noise levels for an additional noise barrier, as outlined in Table A12.5.1 of Appendix 12.5 of the ES, or replacement of an existing barrier, as outlined in Table A12.5.2 of Appendix 12.5, monetising the benefits of these reductions in noise levels (as employed in Transport Analysis Guidance ("TAG") appraisal) and comparing this monetisation value with the cost of the mitigation to provide a cost benefit analysis. Thus, the lengths and heights of new barriers (if specified), and the heights of replacement barriers</p>

Question	Council Response	Highways England Response
		(if specified), will be optimised. The results of that assessment, and the results of the assessment of the landscape and visual impact of any additional noise barriers proposed, will be provided to the Examination in due course.
<i>Cultural Assets</i>		
<p><i>4.8.1 Chapter 7 Table 7.3 APP-147 concludes that there would be no more than moderate adverse impacts on cultural heritage assets or their setting during the construction phase of the scheme, and no more than slight adverse impacts on the setting of cultural heritage assets during operation of the scheme. Does any party have evidence to challenge this conclusion?</i></p>	<p><i>The Council has requested winter views and provision of additional planting in areas (see Local Impact Report) in order to mitigate any impacts of the scheme on the local heritage assets.</i></p>	<p>The Council has not provided any evidence to challenge Highways England's conclusions in this respect and it is assumed the Council does not have any such evidence.</p> <p>London Borough of Hillingdon provided Highways England with a list of viewpoints for the photomontages. Photomontages were prepared for all the sites and were sent to the Council on 27 July and 14 September 2015.</p> <p>As explained earlier, Highways England is prepared to provide winter photomontages of key views. We are currently waiting for the appropriate season to take winter views.</p> <p>Three photomontages (nos. 30, 31 and 32) have been prepared from locations along St Pauls Close at the north edge of the Harlington Conservation Area and are included as Appendix A to this response.</p> <p>Photomontage 30 is looking north west from the west end of St Pauls Close where there will be a framed view to the westbound gantry G1-07 (Type</p>

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		<p>3, 12.4m in height) through a gap in the existing vegetation. This is the worst case winter scenario where the gantry forms the dominant element in this view, but set in the context of the M4 motorway. However, as the viewer moves further eastwards the visual effects of the gantry quickly reduce as the existing vegetation bordering St Pauls Close become the main focus of the view and help to at first reduce its massing before helping to conceal it. Photomontage 31 and 32 look north east from the east end of St Pauls Close where the eastbound gantry G1-09 (Type 3, 12.8m height) will mostly be concealed by the intervening dense vegetation. This is the worst case winter scenario and shows how the existing vegetation along the north edge of the Harlington Conservation Area helps to conceal the M4 Motorway in views from St Pauls Close and the adjacent residential properties.</p>
<i>Effects on all travellers</i>		
<p><i>4.9.1 The assessments have been undertaken in accordance with the general principles and structure of assessment methodology contained within Design Manual for Roads and Bridges (DMRB)I Volume 11, Section 2, Part 5 HA 205/08 'Assessment and Management of Environmental Effects' APP-352 , which has been applied, as appropriate, and tailored to the context of the</i></p>	<p><i>The Council is unaware of the approach having been agreed.</i></p>	<p>The assessment was reported in the Preliminary Environmental Information Report and subsequently in the published ES and two meetings were held with the Council by Highways England to discuss traffic matters. As such London Borough of Hillingdon has had sufficient opportunity to raise any issue it might have had with the assessments.</p>

Question	Council Response	Highways England Response
<i>proposed development. Has the approach to the assessment used, and its results, been agreed with relevant stakeholders?</i>		
Engineering and Design		
<i>5.1 To what extent have the local authorities and road user bodies been involved in the engineering and design of the project?</i>	<i>The Council has had no involvement in the engineering and design of the project.</i>	Highways England confirm that London Borough of Hillingdon have had no involvement in the engineering and design of the project.
<i>5.7 Are the local authorities satisfied that the solution chosen for each of the overbridges or underbridges in their Council area are appropriate?</i>	<i>The Council are currently in a very early stage of discussions in relation to the one subway, namely the Sipson Road M4 subway area. The Council are keen for the other subways and their surrounding areas to be improved and upgraded.</i>	Highways England is aware that the Designer taking forward the scheme to the detailed design stage is having discussions with the parties with an interest in Sipson Road Subway. A solution will be developed during that stage. Whilst there is a need to undertake works to extend the roof of Sipson Road Subway to accommodate the smart motorway proposals is to achieve a like for like improvement overall. Other subways in the Hillingdon area beneath the motorway are unaffected by the smart motorway scheme and as such no works are proposed.
Traffic Safety		
<i>6.1 The Road Safety Audit (RSA) APP-096 is based on the terms of reference of the DMRB document HD/03. That document has now been replaced by HD/15. To what extent does the RSA require</i>	<i>The RSA does require updating to accord with the current standards within HD/15.</i>	The only Road Safety Audit ("RSA") carried out to date on the Scheme design was the Stage 1 RSA. This RSA was conducted in accordance with HD19/03 and was prior to the publication of HD19/15. HD19/15 does not require completed audits to be updated or repeated retrospectively, so

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<i>updating to meet the terms of reference of the latest advice? Can such an update be provided?</i>		the Scheme has followed the appropriate RSA and any additional audits would be unnecessary and redundant. However the Stage 2 RSA, conducted on the detailed design, and the Stage 3 RSA, conducted on the constructed scheme, will be based on HD19/15 or any subsequent replacement.
<i>6.13 Is there any new evidence which has emerged since April 2014 which could impact on the hazard scores in the hazard log?</i>	<i>Evidence should be collected from TfL.</i>	<p>Highways England agree that feedback and evidence from TfL will help in the design and assessment of the scheme. Throughout the preliminary design stage feedback from TfL has been fed into the design process accordingly (eg including discussions on traffic flows and traffic modelling). Regular meetings have been held with TfL and a statement of common ground has been signed between Highways England and TfL and the Greater London Authority ("GLA") dated 12 October 2015. Meetings with TfL will continue through the detailed design stage of the scheme.</p> <p>Since April 2014 there has not been any published data on the initial M25 ALR scheme operation that has resulted in any further changes to the hazard log scores. Operation and performance monitoring is currently underway on the first ALR scheme on the M25 J23-27 to measure actual safety performance and compare it with the safety levels before the introduction of ALR. The one year monitoring report will be published by the end of 2015.</p> <p>The one year report will give an indication of the actual safety level that can be achieved with ALR and will enable the Scheme's hazard log to be reviewed in line with any evidence from the initial</p>

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		<p>operation of the M25 ALR scheme. Data, including for example, the rate of non-compliance with the red X signal and also the rate of breakdowns, will enable the Scheme's hazard log assumptions to be checked and reviewed and if necessary changed. Section 4 of the Hazard Log Report (Annex E of the EDR) provides an explanation of when the hazard log will be updated. It says:</p> <p><i>"The hazard log will be updated as and when required during the scheme design process. In particular it will be updated if either of the following occurs:</i></p> <ul style="list-style-type: none"> • <i>New hazards that are identified as the design develops will be added to the hazard log and their risk will be assessed. Additional mitigation measures will be identified where necessary;</i> • <i>Risk assessments of existing hazards will be reviewed and updated as the design develops;</i> • <i>Future design changes, for example if mitigations identified to protect maintainers change;</i> <p><i>If significant new evidence emerges which could impact on the hazard scores, for example monitoring results from other similar Smart Motorway schemes or recommendations from an investigation into a road worker incident (either on</i></p>

<i>Question</i>	<i>Council Response</i>	Highways England Response
		<i>the scheme or another ALR scheme).</i> "

Question	Council Response	Highways England Response
<i>Socio-economic impacts</i>		
<p>7.1 Does the scheme comply with the need to be designed to minimise social and environmental impacts and improve quality of life in accordance with para 3.2 of the NNNPS?</p>	<p>No.</p>	<p>Highways England considers that the Scheme does comply with the need to be designed to minimise social and environmental impacts and improve quality of life in accordance with paragraph 3.2 of the NN NPS:</p> <p>The Scheme has been designed to minimise social and environmental impacts in the following ways:</p> <ul style="list-style-type: none"> (a) The Scheme has been developed to minimise land-take (both permanent and temporary) where possible. Where land-take has been necessary, for example as described in paragraph 14.10.7 of the ES in relation to allotment plots directly affected by the construction works between junctions 6 and 5, a worst case scenario has been described and assessed. Where possible, the number of people potentially affected by land-take has been minimised. (b) Community severance issues could reduce accessibility to a range of community assets. In developing the Scheme, the most appropriate construction methodology for the required improvements to structures, such as overbridges and underbridges, has been selected based on the particular circumstances applying in relation to each structure. Potential social impacts have been minimised by considering the

<i>Question</i>	<i>Council Response</i>	Highways England Response
		<p>availability of diversion routes, and the existence of sensitive receptors in the vicinity of the structure.</p> <p>(c) road lighting will be retained at its current locations and no new road lighting will be introduced (see paragraph 8.2.11 of the ES). Paragraph 5.6.7 of the outline CEMP outlines that lighting will be designed, positioned and directed so as not to intrude unnecessarily on adjacent buildings, ecological receptors, structures used by protected species and other land uses to prevent unnecessary disturbance or interference with local residents, railway operations, or passing motorists. The requirements of the Construction Environmental Management Plan are secured under Requirement 8, Schedule 2 of the draft DCO (Application Document Reference 3-1).</p> <p>(d) Chapter 9 of the ES (Application Document Reference 6-1) demonstrates the approach the Scheme has taken to avoid and mitigate impacts on ecology and nature conservation. Where possible, habitats will be restored after construction works have finished, and biodiversity will be taken into account during landscaping, including the use of wildflowers and native and fruit-bearing species which will provide benefits to wildlife in general (paragraph 9.16.4).</p>

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		<p>(e) Table 11.11 of the ES highlights that the design approach has been and will be carried out to minimise the amount of the excavated materials exported offsite, thereby minimising environmental impacts. The production of a Materials section within the Construction Environmental Management Plan (secured by Requirement 8, Schedule 2 of the draft DCO), a Material Management Plan and a Logistics Plan (Annexes B and C of the outline CEMP will support the contractor in identifying and maximising opportunities for the reuse of materials onsite as the Scheme progresses. Throughout the design process, "designing out waste" principles have been considered in order to minimise the quantity of material resources required for the Scheme. One objective of the Materials Management Plan, as stated in paragraph 11.2.36 of the ES, will be to ensure that material resources and waste arisings are handled and used in a manner which prevents harm to human health and pollution of the environment.</p> <p>(f) Paragraph 11.4.68 of the ES states that the Scheme will, where possible, maximise the reuse of site-won materials and procure materials with a high percentage of recycled content.</p> <p>(g) Areas of land falling within the footprint of new earthworks may be stripped of</p>

<i>Question</i>	<i>Council Response</i>	Highways England Response
		<p>potentially valuable topsoil which may be reused within the Scheme or, where surplus to requirements, potentially offered for beneficial reuse offsite in the surrounding area. Topsoil existing at temporary construction compound locations would be stripped and stockpiled for later reinstatement following the decommissioning and removal of the construction compounds (paragraph 10.5.3 of the ES).</p> <p>(h) Potential impacts on cultural heritage assets are discussed in Chapter 7 of the ES. Paragraph 7.5.14 of the ES states that mitigation measures to reduce impacts include the introduction of archaeological watching briefs in areas where unknown archaeological remains may be present. This will be applicable across the entirety of the Scheme (Table 7.3 of the ES), thereby minimising any potential negative impacts.</p> <p>(i) Paragraph 6.6.8 of the ES highlights potential adverse impacts from construction dust emissions at sensitive receptors close to the Scheme route during construction works. Paragraphs 6.5.6, 6.7.6, 6.8.6, 6.9.6, 6.10.6, 6.11.6, 6.12.6, and 6.13.6 of the ES highlight that amenity impacts (including dust) will be minimised through the preparation and implementation of a Construction Environmental Management</p>

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		<p>Plan, and thus secured by Requirement 8, Schedule 2 of the draft DCO. Mitigation measures are presented in Appendix 6.1 of the ES.</p> <p>(j) Phasing of construction activities will be such that the section between junctions 12 to 8/9 should be completed by early 2018, as per paragraph 8.3.7 of the EDR, thus residents within this section will experience minimal disturbance after this time. Similarly, people living between junctions 8/9 and 3 may experience only minimal disturbance until early 2019. Activities are all dynamic in nature, as the works move along the Scheme, and the worst case noise levels will prevail for only a short period of time (paragraph 12.4.50 of the ES).</p> <p>(k) Impacts from construction compounds will be minimised through optimising site layout. Noise bunding and/or barriers will further minimise the impact from noise on social and environmental receptors (paragraph 12.4.87 of the ES). A range of good site practices will be adopted in order to mitigate construction phase noise and vibration, and are described in paragraph 12.4.27 of the outline CEMP.</p> <p>(l) Paragraph 12.11.10 of the ES identifies a small number of receptor locations along the route of the Scheme which may</p>

<i>Question</i>	<i>Council Response</i>	Highways England Response
		<p>experience noise increases and appropriate mitigation has been identified.</p> <p>(m) Construction works will occur near to and within watercourses, abstraction points and surface water features and will also involve works to the drainage network. The majority of predicted residual effects within Chapter 10 of the ES are neutral or slight adverse following the minimisation of impacts through mitigation measures. During operation, where it is necessary to safeguard highway users and the wider environment, long-term monitoring of settlement and leachate/gas regimes within disturbed areas of landfill will be implemented (paragraph 10.5.8 of the ES), thereby minimising any potential negative impacts on the local population and environment.</p> <p>(n) Chapter 15 of the ES provides a summary of the predicted impacts on road drainage and the water environment and includes measures that will augment existing pollution control measures. Appropriate control measures will be secured through the CEMP under Requirement 8, Schedule 2 of the draft DCO.</p> <p>(o) Paragraph 4.1.1 of the outline CEMP</p>

<i>Question</i>	<i>Council Response</i>	Highways England Response
		<p>requires a community engagement strategy to be prepared for the Scheme which will include a programme of high quality, effective and sustained communication with communities and stakeholders, setting out areas affected by construction works and information regarding planned construction works.</p> <p>Furthermore, the Scheme has been designed to improve quality of life in the following ways:</p> <p>(a) Paragraph 5.2.10 of the Socio-Economic Report (Application Document Reference 7-2) highlights that <i>"the effect of the operation of the Scheme on community and private assets in general is considered to be beneficial overall. The operation of the Scheme would relieve congestion and smooth the flow of traffic along the M4. It can therefore be expected for there to be improvements in the road network relied upon by local businesses and residents."</i></p> <p>(b) Where common land, which forms part of the carriageway of the M4 motorway, is being acquired as part of the Scheme, replacement common land is being provided at plot 10-01c (shown on the replacement land plan submitted with the DCO Application (Application Document Reference 3-1)). This represents a benefit of the Scheme as it provides additional</p>

<i>Question</i>	<i>Council Response</i>	Highways England Response
		<p>common land to replace common land that is not capable of being used currently.</p> <p>(c) During operation, additional noise barriers will be incorporated between junctions 5 and 4b. Low-noise surfacing has been incorporated across all lanes of the Scheme along the Scheme extent (paragraph 12.11.11 of the ES) during operation. Compared to a Do Minimum scenario, the residual operational noise effects of the Scheme are predicted to be negligible or beneficial (paragraph 12.4.110 of the ES), demonstrating that quality of life may be improved as a result of the Scheme.</p> <p>(d) Paragraph 13.8.12 of the ES identifies beneficial effects of the Scheme in relation to factors such as road safety and reduction of general congestion. Journey time reliability will improve as a result of the introduction of the Scheme.</p> <p>(e) Furthermore, in compliance with the need to improve quality of life in accordance with the National Networks National Policy Statement, an important objective of the Scheme is to continue to deliver a high level of safety performance of the network using smart motorway techniques. The WebTAG Appraisal Summary Table (Appendix 1 of the Socio-Economic Report) produced for the Scheme indicates</p>

<i>Question</i>	<i>Council Response</i>	Highways England Response
		<p>that as a consequence of implementing the Scheme, there is likely to be a decrease of 33 fatal, 303 serious and 1,622 slight injury accidents across the modelled timeframe (60 year). This demonstrates that the Scheme could have a positive impact, potentially reducing the casualties within the study area.</p> <p>(f) The reduction of general congestion and the likelihood of 'traffic flow breakdown' are other key outcomes that have been identified from studies following the introduction of a smart motorway. Each of these factors is considered to be able to reduce driver stress (as noted in paragraph 13.8.16 of the ES) and improve quality of life in compliance with the requirements of the National Networks National Policy Statement.</p> <p>(g) Paragraph 14.4.13 of the ES notes that the Scheme provides an opportunity to develop good practice in terms of use of a proportion of the workforce from local communities, development of skills and training programmes, and apprenticeship schemes. The Socio-Economic Report highlights that the construction phase of the Scheme is likely to have a positive impact on employment in the sub-region. Construction of the Scheme is estimated to create in the region of 400 temporary full</p>

<i>Question</i>	<i>Council Response</i>	Highways England Response
		<p>time employment jobs, equating to some 2,000 person years of employment over a five year period (paragraph 6.2.1).</p> <p>(h) Paragraph 6.2.7 of the Socio-Economic Report identifies that traffic congestion is a possible constraint to the further economic development of the sub-region, affecting not only travel to work journeys, but also the attractiveness of the wider area as a place to live and visit. The operation of the Scheme is anticipated to relieve congestion and smooth the flow of traffic along the M4. Therefore, it can be expected for there to be improvements in the road network relied upon by local businesses and residents. It is also considered that the Scheme could lead to an increase in potential employment opportunities. This is through improvements to the road network, which is relied upon by local businesses and residents, and the associated beneficial effect of the Scheme on the future economic growth of the sub-region (as described in paragraph 6.2.13 of the Socio-Economic Report).</p>

Appendix 1: Local Planning Policies

Hillingdon Local Plan Part 1- Adopted November 2012

Policy	Policy Guidance	Highways England Response
<p><i>HE1: Heritage</i></p>	<p><i>The Council will:</i></p> <ol style="list-style-type: none"> <i>1. Conserve and enhance Hillingdon's distinct and varied environment, its settings and the wider historic landscape, which includes ...</i> <p style="text-align: center;"><i>Designated heritage assets such as statutorily Listed Buildings, Conservation Areas and Scheduled Ancient Monuments; ... and</i></p> <p style="text-align: center;"><i>Archaeologically significant areas, including Archaeological Priority Zones and Areas.</i></p> <i>2. Actively encourage the regeneration of heritage assets, particularly those which have been included in English Heritage's 'Heritage at Risk' register or are currently vacant.</i> <i>3. Promote increased public awareness, understanding of and access to the borough's heritage assets and wider historic environment, through Section 106 agreements and via community engagement and outreach activities.</i> <i>4. Encourage the reuse and modification of heritage assets, where appropriate, when considering proposals to mitigate or adapt to the effects of climate change. Where negative impact on a heritage asset is identified, seek alternative approaches to achieve similar climate change mitigation outcomes without damage to the asset.</i> 	<p>The policy requirement and its accompanying supporting justification are considered to be a statement of policy intent on the part of the Council, describing the actions it would wish to see undertaken in relation to heritage matters, rather than providing policy guidance for the consideration of the planning application.</p> <p>Reference to Policies BE4 (Listed Buildings) and BE10 (Conservation Areas) below are considered to provide the relevant guidance regarding development proposals on these matters, along with Policies BE1 and BE3 on Archaeology referred to within the planning assessment undertaken for LB Hillingdon, within the Planning Statement (Application Document Reference 7-1).</p> <p>As pointed out elsewhere in this response the designated heritage areas and listed buildings in the proximity to the Scheme have all been assessed and considered when designing the Scheme and in the ES. The measures undertaken are therefore believed to be in line with this local policy.</p>

Policy	Policy Guidance	Highways England Response
<p><i>BE1: Built Environment</i></p>	<p><i>"The Council will require all new development to improve and maintain the quality of the built environment in order to create successful and sustainable neighbourhoods, where people enjoy living and working and that serve the long-term needs of all residents. All new developments should:</i></p> <ol style="list-style-type: none"> <i>1. Achieve a high quality of design in all new buildings, alterations, extensions and the public realm which enhances the local distinctiveness of the area, contributes to community cohesion and a sense of place;</i> <i>2. Be designed to be appropriate to the identity and context of Hillingdon's buildings, townscapes, landscapes and views, and make a positive contribution to the local area in terms of layout, form, scale and materials and seek to protect the amenity of surrounding land and buildings, particularly residential properties; ...</i> <i>6. Incorporate a clear network of routes that are easy to understand, inclusive, safe, secure and connect positively with interchanges, public transport, community facilities and services;</i> <i>7. Improve the quality of the public realm and provide for public and private spaces that are attractive, safe, functional, diverse, sustainable, accessible to all, respect the local character and landscape, integrate with the development, enhance and protect biodiversity through the inclusion of living walls, roofs and areas for wildlife, encourage physical activity and where appropriate introduce public art; ..."</i> 	<p>It is considered that the intention of Policy BE1 and its supporting justification relate to building proposals and the public realm rather than strategic highway schemes. The Policy is not therefore considered directly relevant to the Scheme.</p> <p>High quality of design has been incorporated throughout the Scheme as evidenced most appropriately in the Engineering and Design Report ("EDR") (Application Document Reference 7-3).</p> <p>Incorporate a clear network of routes that are easy to understand. The Scheme will be maintaining the current network of routes and merely enhancing or improving access to the M4 Motorway so compliance with this aim is assured.</p> <p>Improve the quality of the public realm. The public realm areas within the Scheme are to be retained and maintained wherever possible. The vegetation clearance within Hillingdon's area and replacement planting proposals are indicated in the EDR, Annex A2, Vegetation Clearance Sheet 28 and Annex A1, Environmental Masterplan Sheet 28 (Application Document Reference 7-4).</p>

Policy	Policy Guidance	Highways England Response
<p><i>Policy EM1: Climate Change Adaptation and Mitigation</i></p>	<p><i>The Council will ensure that climate change mitigation is addressed at every stage of the development process by: ...</i></p> <p>2. <i>Promoting a modal shift away from private car use and requiring new development to include innovative initiatives to reduce car dependency ...</i></p> <p>6. <i>Targeting areas with high carbon emissions for additional reductions through low carbon strategies. These strategies will also have an objective to minimise other pollutants that impact on local air quality. Targeting areas of poor air quality for additional emissions reductions ...</i></p> <p>8. <i>Encouraging the installation of renewable energy for all new development in meeting the carbon reduction targets savings set out in the London Plan. Identify opportunities for new sources of electricity generation including anaerobic digestion, hydroelectricity and a greater use of waste as a resource ...</i></p> <p><i>The Borough will ensure that climate change adaptation is addressed at every stage of the development process by:</i></p>	<p>The following response is provided in relation to the individual criteria highlighted within Policy EM1 and their relevance to the M4 smart Motorway scheme:</p> <p>2. The key objectives of the Scheme are set out in paragraph 1.2.1 of the Planning. The Scheme does not seek as an objective to promote reductions in car use or dependency. Whilst other schemes and projects may help the Council achieve this shift away from private car use, the objectives of the Scheme are to alleviate the very real and current problems of traffic congestion affecting the Thames Valley transport corridor.</p> <p>6. The policy wording is considered to represent a policy intention on the part of the Council, rather than offering policy guidance for the proposed development.</p> <p>8. The guidance seeks the encouragement of renewable energy in new developments. Whilst the Council's encouragement for this is recognised in most developments, the installation of renewable energy is not considered a practical proposition for the Scheme.</p> <p>The planning assessment for LB Hillingdon contained within the Planning Statement has assessed the issues of flooding, water and drainage under Policy EM8 'Land, Water, Air and Noise', alongside Policy OE7 on 'Surface Water Drainage and Flood Prevention.'</p>

Policy	Policy Guidance	Highways England Response
	<p>10. <i>Locating and designing development to minimise the probability and impacts of flooding.</i></p> <p>11. <i>Requiring major development proposals to consider the whole water cycle impact which includes flood risk management, foul and surface water drainage and water consumption.</i></p> <p>12. <i>Giving preference to development of previously developed land to avoid the loss of further green areas.</i></p> <p>13. <i>Promoting the use of living walls and roofs, alongside sustainable forms of drainage to manage surface water run-off and increase the amount of carbon sinks ...</i></p>	<p>Paragraph 5.2.17 of the Planning Statement notes, in response to the guidance contained in the NN NPS that the Scheme is largely (and to the extent possible) contained within the footprint of the existing carriageway and hence represents previously developed land.</p>
<p><i>EM6: Flood Risk Management</i></p>	<p><i>The Council will require new development to be directed away from Flood Zones 2 and 3 in accordance with the principles of the National Planning Policy Framework (NPPF).</i></p> <p><i>The subsequent Hillingdon Local Plan: Part 2 -Site Specific Allocations LDD will be subjected to the Sequential Test in accordance with the NPPF . Sites will only be allocated within Flood Zones 2 or 3 where there are overriding issues that outweigh flood risk. In these instances, policy criteria will be set requiring future applicants of these sites to demonstrate that flood risk can be suitably mitigated.</i></p>	<p>Based on the flood risk assessment carried out for the Scheme, this is not considered a relevant policy consideration for the proposed development.</p> <p>Reference instead is made to Policy OE7 on Surface Water Drainage and Flood Prevention within the planning assessment for LB Hillingdon (Planning Statement) in which the issue of flood risk is addressed.</p> <p>As part of this assessment, reference is made to Chapter 15 of the Environmental Statement (Document Reference Number 6-1) in which it is stated, 'that A Flood Risk Assessment has been prepared as an addendum to the EIA to identify potential sources of flood risk in relation to the Scheme. This shows that the proposed works within the section of the Scheme running through the Borough are not at risk of flooding and have therefore been excluded from the FRA.'</p>

Policy	Policy Guidance	Highways England Response
	<p><i>The Council will require all development across the borough to use sustainable urban drainage systems (SUDS) unless demonstrated that it is not viable. The Council will encourage SUDS to be linked to water efficiency methods. The Council may require developer contributions to guarantee the long term maintenance and performance of SUDS is to an appropriate standard.</i></p>	<p>Reference is made in the planning assessment for LB Hillingdon (Planning Statement) to Policy EM8 of the Adopted Local Plan in relation to 'Land, Water, Air and Noise'. This refers to the Drainage Strategy that has been prepared to manage the surface water runoff generated by the Scheme and to outline suitable mitigation measures to manage the additional runoff from the increased impermeable area.</p>
<p><i>EM7: Biodiversity and Geological Conservation</i></p>	<p><i>The Council will review all the Borough grade Sites of Importance for Nature Conservation (SINCs). Deletions, amendments and new designations will be made where appropriate within the Hillingdon Local Plan: Part 2- Site Specific Allocations Local Development Document. These designations will be based on previous recommendations made in discussions with the Greater London Authority.</i></p> <p><i>Hillingdon's biodiversity and geological conservation will be preserved and enhanced with particular attention given to:</i></p> <ol style="list-style-type: none"> <i>1. The conservation and enhancement of the natural state of: ... Colne Valley Regional Park ...</i> <i>2. The protection and enhancement of all Sites of Importance for Nature Conservation. Sites with Metropolitan and Borough Grade 1 importance will be protected from any adverse impacts and loss. Borough Grade 2 and Sites of Local Importance will be protected from loss with harmful impacts mitigated through appropriate compensation.</i> <i>3. The protection and enhancement of populations of protected species as well as priority species and habitats identified within the UK, London and the Hillingdon Biodiversity Action Plans.</i> 	<p>The planning assessment undertaken for LB Hillingdon within the Planning Statement has addressed the issues of biodiversity through a range of relevant policy considerations. This includes policies EC1 and EC3 of the Adopted Local Plan in relation to the Protection of Habitats and policies ec2 and ec3 of the Adopted UDP in relation to nature conservation interests. There are no identified sites of importance for geological conservation within the vicinity of the Scheme.</p>

Policy	Policy Guidance	Highways England Response
	<p>4. <i>Appropriate contributions from developers to help enhance Sites of Importance for Nature Conservation in close proximity to development and to deliver/ assist in the delivery of actions within the Biodiversity Action Plan.</i></p> <p>5. <i>The provision of biodiversity improvements from all development, where feasible ...</i></p> <p>7. <i>The use of sustainable drainage systems that promote ecological connectivity and natural habitats.</i></p>	

Hillingdon UDP Sep 1998 (Saved policies Sep 2007)

Policy	Policy Guidance	Highways England Response
<p><i>Policy BE4: Conservation Areas</i></p>	<p><i>New development within or on the fringes of conservation areas will be expected to preserve or enhance those features which contribute to their special architectural and visual qualities; development should avoid the demolition or loss of such features. There will be a presumption in favour of retaining buildings which make a positive contribution to the character or appearance of a conservation area. Applications for planning permission should contain full details, including siting and design, or replacement buildings. Applications for consent for demolition will depend upon the submission and approval of such details.</i></p>	<p>It is recognised that the Scheme lies close to the designated boundaries of Cranford Park and Harlington Conservation Areas.</p> <p>The assessment of the effects of the proposed development on these conservation areas, along with other heritage assets have been considered within the ES. The following conclusion is drawn regarding the impact of the introduction of new gantries or other structures within the vicinity of these assets, that is considered to be in compliance with the policy guidance:</p> <p><i>'..As such, these new visual intrusions will not have a negative impact on these assets' significance. Concerns had been raised by the local authority regarding the possibility of impacts on the setting of Cranford Park and the conservation area. However, no increases in noise level above 3dB have been identified in association with any of these assets. Consequently, for the reasons explained in paragraph 7.2.17, there is not anticipated to be an adverse impact on the setting of these heritage assets as a result of noise. In light of the above, the magnitude of impact is, therefore, considered to be minor and temporary in all cases. The significance of the effect in all cases is predicted to be slight adverse.'</i></p>

Policy	Policy Guidance	Highways England Response
<i>BE10: Listed Buildings</i>	<i>Planning permission or listed building consent will not normally be granted for proposals which are considered detrimental to the setting of a listed building.</i>	<p>It is recognised that several listed buildings within the boundary of Cranford Park Conservation Area, in addition to the Church of St Dunstan are located close to the Scheme.</p> <p>The assessment of the effects of the proposed development on these listed buildings, along with other heritage assets have been considered within the ES. The following conclusion is drawn regarding the impact of the introduction of new gantries or other structures within the vicinity of these assets, that is considered to be in compliance with the policy guidance:</p> <p><i>'..As such, these new visual intrusions will not have a negative impact on these assets' significance. Concerns had been raised by the local authority regarding the possibility of impacts on the setting of Cranford Park and the conservation area. However, no increases in noise level above 3dB have been identified in association with any of these assets. Consequently, for the reasons explained in paragraph 7.2.17, there is not anticipated to be an adverse impact on the setting of these heritage assets as a result of noise. In light of the above, the magnitude of impact is, therefore, considered to be minor and temporary in all cases. The significance of the effect in all cases is predicted to be slight adverse.'</i></p>
<i>BE19: Residential Amenity</i>	<i>The Local Planning Authority will seek to ensure that new development within residential areas complements or improves the amenity and character of the area.</i>	Policy BE19 is not considered relevant to the proposed development, which is not located within a residential area.

Policy	Policy Guidance	Highways England Response
<i>BE34: River Corridors</i>	<p><i>When considering proposals for development adjacent to or having a visual effect on rivers the Local Planning Authority will, where appropriate, seek:</i></p> <ul style="list-style-type: none"> <i>(i) To ensure and where possible enhance the role of the river and its immediate surroundings as a wildlife corridor;</i> <i>(ii) Environmental improvements to waterside areas;</i> <i>(iii) Building designs which complement the visual qualities of the riverside;</i> <i>(iv) Public access to the waterside linked to the footpath network in the surrounding area;</i> <i>(v) A minimum 6 metres of land reserved and landscaped alongside rivers, suitable for public access; and</i> <i>(vi) To enhance or create views through and from the development, from and towards the watercourse.</i> 	<p>Based on the detailed requirements set-out within Policy BE34, this is not considered to be relevant to the Scheme, as there are no proposals to incorporate the range of proposals set-out within the policy criteria.</p>
<i>BE39: Tree Preservation Orders</i>	<p><i>The Local Planning Authority recognises the importance of tree preservation orders in protecting trees and woodlands in the landscape and will make orders where the possible loss of trees or woodlands would have a significant impact on their surroundings.</i></p>	<p>Policy BE39 is a policy statement of intent on the part of the Council and provides no guidance against which to consider the Scheme and is not therefore considered of relevance to the proposed development.</p>
<i>OE1: Environmental Considerations</i>	<p><i>Planning permission will not normally be granted for uses and associated structures which are, or are likely to become, detrimental to the character or amenities of surrounding properties or the area generally, because of:</i></p> <ul style="list-style-type: none"> <i>(i) The siting or appearance;</i> 	<p>It is considered that Policy OE1 is primarily concerned with the consideration of new uses as opposed to the physical and functional change associated with an existing use through the creation of a smart motorway.</p> <p>Nonetheless, the matters referred to within this policy are</p>

Policy	Policy Guidance	Highways England Response
	<p><i>(ii) The storage or display of vehicles, goods, equipment or other merchandise;</i></p> <p><i>(iii) Traffic generation and congestion;</i></p> <p><i>(iv) Noise and vibration or the emission of dust, smell or other pollutants,</i></p> <p><i>Unless sufficient measures are taken to mitigate the environmental impact of the development and ensure that it remains acceptable.</i></p>	<p>covered in detail by other specific topic policies as part of the planning assessment for LB Hillingdon within the Planning Statement.</p> <p>Specifically, reference is made within the Adopted Local Plan to Policy EM8: Land, Water, Air and Noise, Policy OL26 Trees and Woodland, Policy EC1 and EC3 Protection of Habitats, Policy EC3 Protection of Habitats, Policy BE1 and BE3 Archaeological Sites. Additional policies within the Adopted UDP, namely Ec2 and Ec3 Nature Conservation and Be3 sites of archaeological interest are of relevance in demonstrating the compliance of the proposed development with the planning policy framework.</p>
<p><i>OE3: Noise</i></p>	<p><i>Buildings or uses which have the potential to cause noise annoyance will only be permitted if the impact is mitigated within acceptable levels by engineering, lay-out or administrative measures.</i></p>	<p>Policy OE3 is not considered relevant to the Scheme. It is considered that the issue of noise is more appropriately addressed by Policy EM8 of the Adopted Local Plan, considered as part of the planning assessment for LB Hillingdon within the Planning Statement (Application Document Reference 7-1). As is documented elsewhere in this response, noise levels are predicted to slightly improve as a result of the Scheme and the implementation of mitigation measures (low noise surfacing and noise barriers).</p>

Policy	Policy Guidance	Highways England Response
<p><i>AM3: Road Construction and Improvement</i></p>	<p><i>Proposals for new roads or widening of existing roads will only be permitted if the primary justification is:</i></p> <ul style="list-style-type: none"> <i>a) To improve safety; or</i> <i>b) To promote pedestrian movement, cycling or public transport, or other improvement of the environment; or</i> <i>c) To reduce existing local congestion in a cost effective way, consistent with council objectives for safety, the environment, walking, cycling, public transport, accessibility and mobility; or</i> <i>d) To promote the economic regeneration of an area by improving its accessibility in a cost effective way, consistent with council objectives for safety, the environment, walking, cycling, public transport and mobility; or</i> <i>e) To accommodate vehicular trips likely to be generated by new development in areas where improvements to public transport cannot provide sufficient capacity to accommodate the increased demand and where the work, along with any complementary traffic calming measures and parking controls in nearby streets judged to be necessary by the local highway authority or the local planning authority, is funded by the development.</i> 	<p>It is not considered that the primary purpose of Policy AM3 is of direct relevance to the Scheme. Through the planning assessment undertaken within the Planning Statement reference is made to Policy AM2, which is considered to provide more relevant policy guidance, along with Policy AM5, which is supportive of the M4 junction 3-4b Scheme (insofar as it relates to LB Hillingdon).</p> <p>In terms of economic regeneration, the Appraisal Summary Table for the Scheme (at Appendix B to the Socio-economic Report, Application Document Reference 7.2) suggests large economic benefits.</p> <p>In terms of safety the Scheme the Hazard Log report, Annex E of the Engineering and Design Report, leads to the conclusion that, the All Lane Running design of the Scheme is likely to be no worse in terms of safety performance than the current M4 motorway. In fact Annex E concludes that the Scheme can expect "A reduction in risk for 13 of the 17 highest scoring existing motorway hazards through a combination of regularly spaced variable mandatory speed signals, speed enforcement, and full CCTV coverage."</p> <p>In addition the hazard log report states that "Calculations show that the total score for 'after' represents approximately a reduction of risk of 18% when compared with the safety baseline."</p> <p>Promotion of pedestrian or cycling is not an objective of the Scheme but assessment and mitigation for such road users in proximity of the Scheme is thoroughly considered in the ES and dealt with elsewhere in this</p>

Policy	Policy Guidance	Highways England Response
		<p>document.</p> <p>In terms of traffic. The Scheme will generate slightly more traffic than currently uses the M4, but through the use of Smart Motorway technology, congestion, average journey times and predictability of traffic flows will all be enhanced. This is considered further in the ES and at 4.3.13 of the LIR document and also see paragraphs 4.3.3 and 4.3.4 of the Engineering and Design Report, Application Document Reference 7.3.</p>
<p><i>AM7: Pedestrians and Wheelchair Users</i></p>	<p><i>The Council will accord priority to the needs and comfort of pedestrians in the design and implementation of road construction and traffic management schemes except where safety considerations dictate otherwise. In particular it will seek to minimise the diversion of pedestrian routes from pedestrian desire lines and the delays experience by pedestrians at signal controlled road crossings.</i></p>	<p>Highways England accords similar consideration to non-motorised users in general. DMRB Volume 11, Section 3, Part 8 "Pedestrians, cyclists, equestrians and community effects", provides best practice guidance in the consideration of severance and amenity effects of schemes, whether in construction or in operation. Paragraph 2.5 of the same document points out the need to give proper consideration to vulnerable groups, which would encompass wheelchair users. All of these issues have been given due consideration in designing and planning the Scheme. It is also to be noted that Highways England undertakes Equality Impact Assessments of its schemes to ensure no group is disproportionately disadvantaged.</p>

Policy	Policy Guidance	Highways England Response
<p><i>AM9: Cyclists</i></p>	<p><i>The council will:</i></p> <ul style="list-style-type: none"> <i>(i) Provide a network of well signposted cycle routes throughout the borough to promote safer cycling and better conditions for cyclists, using predominantly either quiet roads or purpose built cycleways; particular attention will be paid to the provision of suitable routes to schools and contributing additions to the London-wide strategic cycle route network;</i> <i>(ii) Take account of the needs of cyclists in the design of highway improvement schemes;</i> <i>(iii) Promote secure, attractive and adequate cycle parking facilities in the boroughs town centres, public transport interchanges and at other major attractions, and will require development proposals to include clearly visible, well-designed, covered, secure and accessible bicycle parking for users of the development and where appropriate, for the general public.</i> 	<p>Policy AM 9 is not considered relevant to the Scheme. Paragraph 5.2.83 of the Planning Statement notes that cyclists are prohibited from using the motorway.</p> <p>However, where cyclists and cycle lanes are impacted by the Scheme, these have been and will continue to be considered and planned for as part of the detailed construction planning (for example by minimising the impact of unavoidable diversions that may affect cyclists and by reinstating diverted roads and highways as soon as practically possible). This mitigation will be included in the CTMP.</p>

LB Hillingdon

Your Ref: TR010019

Planning Obligations SPD 2014

3.5 Following the adoption of the LB Hillingdon Community Infrastructure Levy (CIL), the Council revised the Planning Obligations SPD in 2014 to ensure planning obligation requests relate to site specific mitigation, in accordance with the Planning Act 2008. Chapters 5 and 8 are relevant to the current proposals with regard to ensuring appropriate mitigation is secured for the LB Hillingdon.

Noise SPD 2006

3.6 Noise has a significant effect on the environment and on the quality of life enjoyed by individuals and communities. The DCO proposals raise a number of noise concerns, both during the construction phase and the operational phase of the works. All mitigation proposed within the LIR accords with the SPD and national tests for the imposition of appropriate planning obligations and mitigation.

Highways England Response

In line with the planning assessments undertaken for each of the 'host' local authorities, as set out in section 5.3 of the Planning Statement (Application Document Reference 7-1), the Applicant has assessed the acceptability of the proposed development against key planning and transportation policies within both adopted and emerging plans as listed in Appendix 1 of the Planning Statement. The assessment has not considered detailed guidance provided in supplementary planning documents published by individual 'host' authorities.

Highways England note that local planning policies, where relevant, can be important considerations for the purposes of the Examination. That is why, in each chapter of the ES, the relevant local policies that have been assessed are referenced. Ultimately however, Section 104 of the Planning Act 2008 requires an application for development consent to be determined in accordance with the relevant national policy statement (in this case the NN NPS) and not local planning policies. Highways England therefore have ensured the Scheme is compliant with the NN NPS and have only included those local policies (as referenced) where they are relevant. It is not incumbent on HE (or the ExA) to have regard to all local policies or associated SPDs.

Both of these policy documents refer to areas that have been covered in great detail within the application documents and within subsequent responses to the Council (including but not limited to the comments in this document) and to the ExA (and numerous other interested parties). Neither of the SPDs raise issues that are not already covered elsewhere and it is noted that the Council does not make reference to particular sections of the SPDs or to any issues they raise that are not otherwise dealt with in this LIR and responded to above. To that end, Highways England is of the view that the SPDs are not of further relevance and no further comments are required.

LB Hillingdon

Your Ref: TR010019

Appendix 2- Letter sent to HE re Cumulative development

Further to your letter dated 12 December and received 24 December 2014, please find below details of schemes located within the borough that we wish to have considered as part of your ES.

It is noted that your own letter identified only 1 scheme, and for completeness, this site has been included at the top of the table below.

Proposals	Address	Planning references	Date Received (if under consideration)	Date Approved/Refused (if determined)
Current Applications				
Section 73 application seeking a variation to condition 2 (approved plans) of planning permission ref. 38065/APP/2014/2143 (Re-development of the site to provide 5 industrial units (Use Class B1(c), B2 and B8) with associated parking, servicing and landscaping (Involving demolition and refurbishment of existing units) dated 2/12/14) to remove the 2 metre gap between units 2 and 3 by extending either or both units	EC House, Swallowfield Way, Hayes	38065/APP/2015/206	20/1/15	
Redevelopment of the site to provide 6 industrial units (Use Classes B1(c), B2 and B8) and the provision of associated landscaping, parking and service space (involving demolition of existing building).	Silverdale House, Pump Lane, Hayes	49670/APP/2014/3855	13/11/14	
Conversion and extension of existing office building to form a 200 bedroom hotel with banqueting suite, conference facilities, and rooftop restaurant, including a seven-storey extension to rear, a three storey addition at roof level, and single-storey side extension, together with the creation of a new vehicle access, and alterations to car parking and landscaping	1 Nobel Drive, Harlington	46214/APP/2014/2827	03/09/14	

Proposals	Address	Planning references	Date Received (if under consideration)	Date Approved/ Refused (if determined)
Determined application				
Proposed mixed-use redevelopment comprising: 773 dwellings comprising 12 no. studios, 152 no. 1-bedroom flats, 316 no. 2-bedroom flats, 21 no. 2-bedroom houses, 23 no. 3-bedroom flats, 181 no. 3- bedroom houses, 59 no. 4-bedroom houses and 9 no. 5-bedroom houses; Class D1 Primary Healthcare facility including room for joint community use (up to 185sqm gea); Class C2 Nursing Home (up to 3630sqm gea); Classes A1-A3 Shop units to complement Mulberry Parade (up to 185sqm gea, depending on size of Primary Healthcare facility); Class B1 Business units including site management office (up to 185sqm gea); Energy Centre (up to 220sqm gea) with combined heat and power unit; foul water pumping station; associated access roads from Porters Way (and excluding all access including pedestrian and bicycle access from Rutters Close); 1085 car parking spaces; cycle parking; public open space areas; cycleways and footpaths; and landscaping works (Outline Application)	Former London Air Traffic Control Centre (NATS), Porters Way, West Drayton	5107/APP/2009/2348		Approved- 02/11/09
Stockley Park, business/office park	Stockley Park, Stockley Road, West Drayton	Historic extant consent for industrial use		Approved 1980
Southall Gas Works redevelopment	LB Ealing			

Proposals	Address	Planning references	Date Received (if under consideration)	Date Approved/ Refused (if determined)
Western International Market	LB Hounslow Please confirm when the modelling work was undertaken and if it includes the recently opened Costco store and other units within the site			
Outline planning application for a mixed use development of the Old Vinyl Factory site including the demolition of up to 12,643 sqm of buildings and construction of up to 112,953 sqm (112,953 sqm includes the retention and re-use of 784 sqm of the Power House and 901 sqm Pressing Plant) of new floorspace. Uses to include up to 510 residential units (maximum area of 49,000 sqm GEA), up to 7,886 sqm of new B1 floorspace, up to 4,000 sqm of A class uses (A1, A2, A3, A4, A5), up to 4,700 sqm of D1 and D2 uses, an energy centre (up to 950 sqm), car parking, works to access and creation of new accesses and landscaping	The Old Vinyl Factory, Blyth Road, Hayes	59872/APP/2012/1838		Approved 19/4/13
Demolition of warehouse extension to Apollo House and erection of a part 4, part 5, part 6 and part 7 storey building comprising 132 residential units, cafe (Class A31, community room (Class D2), S x workshop units (Class 81,58 or A2 uses), and associated car parking and landscaping	Gatefold Development, Blyth Road, Hayes	51588/APP/2011/2253		Approved 27/3/12

Proposals	Address	Planning references	Date Received (if under consideration)	Date Approved/ Refused (if determined)
Comprehensive redevelopment of the site to provide a part 11, part 9, part 5 and part 4 storey building comprising 120 residential units, office floorspace, 97 car parking spaces and hard and soft landscaping	20 Binh Road, Hayes	1425/AP/2011/3040		Approved 08/04/13
Original consent Erection of a four storey building to provide 6,966sq.m of Class 81(a) Office floorspace, provision of 70 associated car parking spaces at basement level, associated landscaping and ancillary works	Hyde Park Hayes, Unit 4, Millington Road, Hayes	40652/APP/2012/2030		Approved - 05/07/13
S73 permission Variation of condition 14 (contamination) of planning permission 40652/APP/2012/2030 granted 5 July 2013 for the Erection of a four storey building to provide 6,966 sq.m of Class 51(a) Office floorspace, provision of 70 associated car parking spaces at basement level, associated landscaping and ancillary works		40652/APP/2013/1981		Approved 09/09/13
Original permission Erection of five storey building to provide 13,880sq.m of Class B1(a) Office floorspace, provision of car parking spaces at surface and basement level, associated landscaping and ancillary works	Hyde Park Hayes, Unit 5, Millington Road, Hayes	45753/APP/2012/2029		Approved 05/07/13

Proposals	Address	Planning references	Date Received (if under consideration)	Date Approved/ Refused (if determined)
<p>S73 permission</p> <p>Variation of condition 14 (contamination) of planning permission 45753/APP/2012/2029 (Erection of five storey building to provide 13,880sq.m of Class B1(a) Office floorspace, provision of car parking spaces at surface and basement level, associated landscaping and ancillary works</p>		45753/APP/2013/1980		Approved 09/09/13
<p>Original consent</p> <p>Mixed use development comprising 7,310 sqm (gea) industrial/warehousing unit (Use Classes B1c, B2, B8); 7998 sqm (gea) retail store (Use Class A1) and petrol filling station, together with associated car parking, landscaping and alterations to adjacent highway</p>	Unit 3, Millington Road, Hayes	32157/APP/2011/872		Planning refusal 20/4/12 Appeal allowed 15/11/12
<p>New 3 Form of Entry primary school (630 students) plus a nursery (45 students) and a Special Resource Provision Unit for approximately 12 pupils, associated car parking, hard and soft play areas, sports pitches, pedestrian and vehicular access routes and landscaping.</p>	Eastern end of Lake Farm country park Between Botwell Lane and Botwell Common Road	68911/APP/2012/2983		Approved 14/5/13

Proposals	Address	Planning references	Date Received (if under consideration)	Date Approved/ Refused (if determined)
Change of use of existing building from office (Use Class B1(a)) to Hotel (Use Class C1), including 4-storey side extension (to rear of adjacent petrol station), and 4-storey rear extensions, and associated amendments to landscaping and car parking	272-276 Bath road, Heathrow, UB3	464/APP/2013/2115		Approved 21/3/14
Change of use of existing building from office (Use Class B1(a)) to 123 room Hotel (Use Class C1), including 4-storey side extension (to rear of adjacent petrol station), and 4-storey rear extensions, and associated alterations to landscaping and car parking	272.276 Bath road, Heathrow, UB3	464/APP/2014/1210		Approved 31/7/14
Change of use of existing building from office (Use Class B1(a)) to 136- room Hotel (Use Class C1) and one flat for staff, including 4-storey side extension (to rear of adjacent petrol station), and 4-storey rear extensions, and associated alterations to landscaping and car parking.	272-276 Bath road, Heathrow, UB3	464/APP/2014/2886		Approved 9/1/15
Demolition of existing buildings and erection of a five storey, 192 bedroom hotel, basement and surface level car parking, bar/restaurant, meeting rooms and other associated works	1 and 1a Bath Road, Heathrow	35805/APP/2009/2433		Approved 1/2/12
Erection of a part four, part five, part six storey, 623-bedroom hotel with ancillary restaurant/bar facilities, landscaping, parking for 354 cars and associated works	276 Bath Road, Heathrow	35293/APP/2009/1938		Approved 28/5/10
Demolition of existing hotel and erection of two hotels: one 4-star hotel with 250 bedrooms, and one budget hotel with 353 bedrooms, together with associated parking and landscaping	Heathrow Park hotel, Bath Road, Longford	3063/APP/2009/415		Approved 14/9/09

Proposals	Address	Planning references	Date Received (if under consideration)	Date Approved/ Refused (if determined)
Redevelopment of site to provide a 5 star luxury hotel (560 rooms), a conference and ballroom facility, a new 20-lane bowling centre, car parking, landscaping and associated works (including demolition of existing Airport Bowl premises and car park)	Airport Bowl, Bath Road, Heathrow	38807/APP/2008/3493		Approved 16/3/09
Part outline, part full planning application for a proposed hotel development of up to 660 bedrooms (approximately 30,000sq.m) with ancillary cafe, bar and restaurant facilities, car parking, service access, courtyard space, landscaping and improved ground level pedestrian access including public realm improvements (all outline application) and a perimeter veil structure wrapping around the hotel buildings (in full application detail)	Former Contractor's Compound, South Of Swindon Road Heathrow Airport	67622/APP/2013/2532		Approved 30/7/14
Demolition of existing warehouse buildings and erection of 602 bedroom 8-storey hotel with associated car parking (Outline application including details of access, appearance, layout and scale - landscaping reserved)	Site Of Building 717 Located Between Sheffield Way And Southern Perimeter Road Heathrow Airport	50657/APP/2013/2214		Approved - 9/7/14
Relevant Refusals subject to Appeal				
APPEAL BY: Heathrow Airport Limited Enabling works to allow implementation of full runway alternation during easterly operations at Heathrow Airport including the creation of a new 'hold area' at the western end of the northern runway, the construction of new access and exit taxiways, and the construction of a 5 metre high acoustic noise barrier to the south of Longford Village	Northern Runway, Heathrow Airport	LPA REF: 41573/APP/2013/128 8 PINS REF: APP/R5510/A/14/222 5774		Refused 21/3/14

LB Hillingdon

Your Ref: TR010019

Projects Identified in the relevant Development Plan

Hillingdon's Local Plan: Part 2 - Site Allocations and Designations

The Council has consulted on the draft Local Plan Part 2, which ended on 4 November 2014. The next stage of the Local Plan process is submission to the Secretary of State for Communities and Local Government. A Report to Cabinet on the outcome of consultation is timetabled for March 2015 to seek agreement on the next stage of the plan making process, submission.

A copy of the document can be found on the council website by following this link: <http://vAvw.hillingdon.gov.uk/media.jsp?mediaid=32151&filetype=pdf>

Highways England's Comment

Highways England notes that the Council's Emerging Development Management policies document 2014 is likely to be an important and relevant consideration in the determination of the Application. The National Policy Statement for National Networks ("NN NPS") notes that the national policy regarding the weight to be given to policies in emerging plans (as contained in the NPPF) applies to applications for development consent (as well as orthodox planning applications). However, Highways England considers that any conflict between the Scheme and the emerging development plan is a matter of weight for the Secretary of State to balance. NN NPS 5.173 states that:

"Where the project conflicts with a proposal in a development plan, the Secretary of State should take account of the stage which the development plan document has reached in deciding what weight to give to the plan for the purposes of determining the planning significance of what is replaced, prevented or precluded. The closer the development plan document is to being adopted by the local plan, the greater the weight which can be attached to the impact of the proposal on the plan."

EAH/EAH/366530/1/UKM/72091772.1