



A14 Cambridge to Huntingdon Improvement Scheme Development Consent Order

Response to Examination Authority's First Written Questions by

South Cambridgeshire District Council

15 June 2015

Question Reference:	Q1.1.1
Question:	
Has agreement over the establishment of the baseline for the air quality assessment been reached with CCC, HDC and SCDC? If so, please give the relevant reference. If not, why not?	
Response:	
<p>South Cambridgeshire District Council has had discussions with Highways England and their air quality consultants and we are in broad agreement with the baseline approach used in the Air Quality Assessment.</p> <p>South Cambridgeshire District Council is still in discussion with Highways England over post completion air quality monitoring. An appropriate baseline for future air quality monitoring of PM₁₀ and NO₂ should be agreed with the Council prior to the commencement of monitoring work when a full monitoring year of data is available, early next year. Further information is provided in the Council's Written Representation (see paragraphs 87-93).</p>	

Question Reference:	Q1.1.2
Question:	
<p>The assessment of air quality is based on DMRB, Local Air Quality Management Technical Guidance and Interim Advice Notes (IAN). Since the submission of the application IAN185/15 has been published.</p> <p>What are the implications for the application of IAN 185/15 and if it had been in place before the application was accepted for examination, in what ways would this have influenced the outputs from the air quality assessment?</p>	
Response:	
<p>This will need to be studied in detail before we can ascertain if there is going to be any influence. However, Interim Advice Notes (IANs) are issued by the Highways Agency from time to time and they usually contain specific Guidance, which shall only be used in connection with works on motorways and trunk roads in England, subject to any specific implementation instructions contained within an IAN.</p> <p>At the time of the submission, the assessment was undertaken with the latest guidance as set out in IAN175/13 which was the most up to date guidance for Highways Agency road schemes and considered suitable for this assessment at the time.</p> <p>Moreover, this was done in conjunction with DMRB with the assessment verified because such screening model is not always conservative.</p> <p>It is unclear whether it is possible to take a retrospective decision should there be any influence the recent IAN 185/15 might have if any.</p>	

Question Reference:	Q1.1.3
Question:	
The methodology for the assessment of air quality effects is set out in the ES at 8.2.21ff. Para. 8.2.68 states that the overall approach and methodology to assess air quality effects was agreed with the local authorities. What was agreed and with which local authorities? Please provide details.	
Response:	
The methodology for assessment of air quality effects was set out in the Environmental Impact Assessment Scoping Report Chapter 6 and Preliminary Environmental Information Report as part of the draft scheme consultation in Spring 2014. The Council considered that these were broadly satisfactory in terms of the baseline data used, the year of assessment and the use of the ADMS Roads dispersion mode.	

Question Reference:	Q1.1.5
Question:	
Please explain when, how and where air quality would be monitored or why no monitoring is proposed with particular reference to NO _x , NO ₂ , CO, PM ₁₀ and PM _{2.5} .	
Response:	
<p>South Cambridgeshire District Council assumes that this question relates to potential post completion air quality monitoring.</p> <p>It appears HE are not proposing any post construction monitoring of air pollutants of concern as the ES concludes that the scheme has no significant impacts on air quality in the operational phase.</p> <p>The main pollutants of concern are NO₂ and PM₁₀ as air quality management areas have been declared for them in accordance with national objectives. An appropriate baseline for future air quality monitoring of PM₁₀ and NO₂ should be agreed with the Council once a full monitoring year of data is available, early next year and this should be secured by requirement to be approved in consultation with the Council. Further information is provided in the Council's Written Representation (see paragraphs 87-93). South Cambridgeshire District Council is still in discussion with Highways England on this matter.</p>	

Question Reference:	Q1.1.8
Question:	
Please explain how the assessment of air quality has taken into account the proximity of the proposed road scheme to sensitive receptors including housing and schools and the mitigation measures proposed during the operational phase in such locations? Where and how would these measures be secured?	
Response:	
<p>HE have undertaken air quality impact assessment in accordance with DMRB HA207/07 to define the affected road network (ARN) and have assessed a 200m corridor either side of this and study area and to identify sensitive relevant receptors.</p> <p>The proposed air quality mitigation measures relate to the construction phase of the scheme.</p> <p>No mitigation measures are proposed during the operational phase as it is expected that air quality will improve in some areas and remain around the same in others. It is important that post-completion air quality monitoring is carried out to check that air quality does not worsen beyond that predicted in the ES. If this were to be the case, and air quality did give rise to significant adverse impact, the Council would require mitigation to be considered. This should be secured through appropriate Requirements to be approved in consultation with the Council. (see also Written Representation paragraphs 87-93).</p>	

Question Reference:	Q1.1.10
Question:	
Table 8.12 of the ES concludes that during the operational phase the overall scheme would have no significant impacts on air quality. Can the applicant explain further how it has reached its conclusion of no significant air quality impacts?	
Response:	
This question is for the applicant to answer.	

Question Reference:	Q1.1.11
Question:	
Table 8.9 of the ES states that the modelled results indicate that the scheme would benefit air quality within the Brampton AQMA. Can the applicant explain how it reached this conclusion in further detail?	
Response:	
This is a matter for Huntingdonshire District Council and the applicant.	

Question Reference:	Q1.1.14
Question:	
Have the results of the air quality assessment been agreed with Interested Parties and if so, by whom and if not, why not?	
Response:	
SCDC have no objection to the applicant submitted Air Quality report. Although, the Council raised some questions regarding the submitted report and assessment most of those concerns have been addressed by the applicant or are almost at the point of agreement, and will be considered in the Statement of Common Ground.	

Question Reference:	Q1.1.15
Question:	
What effect, if any, does the Supreme Court judgment on the Air Quality Directive (R (on the application of ClientEarth) (Appellant) v Secretary of State for the Environment, Food and Rural Affairs (Respondent) Judgment Given on 29 April 2015) have on the proposed scheme? In responding, please make reference to the National Networks NPS.	
Response:	
None, provided the A14 scheme does not contribute negatively to the quality of air in SCDC and its environs.	

Question Reference:	Q1.1.16
Question:	
With the existing NO ₂ annual mean objective in Cambridge already being exceeded (ES8.8.3) how would the proposed scheme improve this position?	
Response:	
This is a matter for Cambridge City Council and the applicant.	

Question Reference: Q1.1.17

Question:

Dust from construction is identified as a significant effect which could be mitigated through best practice measures implemented via the Code of Construction Practice. If best practice measures are not followed by contractors or prove to be ineffective, what further action can be taken by local authorities to control these effects?

Response:

It is uncertain if LAs can take any enforcement action against dust from construction activities.

Under s.79 (1) of the Environmental Protection Act 1990 every local authority is placed under a duty to ensure their area is inspected from time to time to detect any statutory nuisance. LAs therefore have a duty to investigate alleged statutory nuisances including “any dust, steam, smell or other effluvia arising on industrial, trade or business premises and being prejudicial to health or a nuisance”. This can include complaints about dust from construction sites.

The dust must interfere materially with the personal comfort of residents in the sense that it materially affects their well being even though it might not be prejudicial to their health. If dust only affects property or possessions e.g. dust falling on vehicles or in a garden it might be an inconvenience to their owners but is unlikely to be considered a statutory nuisance.

S.80 of the EPA provides that where a local authority is satisfied a statutory nuisance exists or is likely to occur or recur, it must serve an Abatement Notice which will require abatement or prohibit or restrict its occurrence or recurrence and may require the execution of work or taking of steps for such purposes, specifying the time within which compliance is required.

However construction work on the highway because of their location may not qualify as a statutory nuisance, as generally the activity is not on ‘premises’ but the highway. Borrow pits are likely to be considered premises.

It is noted that the Planning Act 2008 appears to provide a general absolute defence to action in respect of statutory nuisance. Essentially a defence of statutory authority to a nuisance claim exists in the case of Nationally Significant Infrastructure Projects such as the A14 Improvement Scheme.

This is why the Infrastructure Planning Regulations 5(2)(f) require that the issue of potential common law nuisance and statutory nuisance must be considered and duly addressed within the DCO including any proposals by the applicant to mitigate or limit them. For the A14 DCO the following submitted document is applicable: *Volume 6.0 - 6.4 Statement Relating to Statutory Nuisances, APFP Regulation 5(2)(a), Revision 0, December 2014.*

However the submitted draft DCO document - *Volume 3.0 - 3.1 Draft Development Consent Order, APFP Regulation 5(2)(b), Revision 0, December 2014 section 39 - Defence to proceedings in respect of statutory nuisance* only refers to noise and specifically control of noise from construction sites.

Question Reference:	Q1.5.3
Question:	
What are the missing movements at the Girton interchange, between the A428 and the A14 and M11? (Relevant Representation 471)	
Response:	
The missing links referred to are between the A428 to/from A14 in the Huntingdon direction and A428 to/from M11. This issue is addressed in the Council's Written Representation (paragraph 21).	

Question Reference:	Q1.5.4
Question:	
Why can't The Avenue, north east of Madingley, be closed to traffic at its junction with the new local access road to reduce the risk of Madingley being used as a route between the A14 southbound and the A428 westbound? If this junction is not to be closed, what would prevent eastbound A428 traffic from using Madingley to access the A14 westbound?	
Response:	
<p>Cambridgeshire County Council, the local highway authority, does not support the closure of The Avenue, Madingley. The County Council has concerns about the wider impacts of the road closure and the lack of consultation with nearby communities that could be impacted by traffic seeking an alternative route. On the basis of traffic modelling undertaken to date, the County Council considers there would be little benefit to Madingley village from closing The Avenue unless Dry Drayton Road was also closed; this has not been the subject of consultation.</p> <p>As the County Council has not yet reached final agreement on traffic impacts on local roads with Highways England, this position will be reviewed when Highways England submit their report on Local Traffic Impacts on 2 August 2015. A final response taking into account any further representations from Madingley Parish Council will be made in the County Council's written comments on Highways England's Local Traffic Impact submission.</p> <p>Further information is provided within Cambridgeshire County Council's response to Relevant Representations 1 and 485.</p>	

Question Reference:	Q1.5.10
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Question:

Why were connections to cater for the missing movements at Girton interchange, between the A428 and the A14 and M11, not accommodated within the scheme? In particular, why was a link between the A428 eastbound and the A14 westbound not accommodated? Would such a link reduce future traffic through Dry Drayton? If so, by how much, or if not, why not? In particular, why was a link in both directions between the A428 to the west and the M11 to the south westbound not accommodated?

Would such a link reduce future traffic on the A1303? If so, by how much, or if not, why not?

Response:

South Cambridgeshire District Council commented at the pre-application consultation that HE should consider additional movements at the Girton Interchange (A428 to/from A14 in the Huntingdon direction and A428 to/from M11), and if not part of this scheme the Route Based Strategy for the A428 should be brought forward urgently.

HE has advised that these links are outside the scope of the scheme, but design of the scheme would not preclude their inclusion in the future. They have confirmed that the linkages between the A428 and M11 will be considered as part of the work to look at the possible Expressway between Oxford and Cambridge as identified in the Roads Investment strategy published in the 2014 Autumn Statement. This is welcomed.

Question Reference:	Q1.6.2
Question:	
Art 3 – Given the disapplication of powers particularly those in relation to watercourses, flood defence, land drainage and waterways what agreements, if any, has been reached as to the inclusion of these provisions with the relevant authorities as per s150 of the 2008 Act?	
Response:	
South Cambridgeshire District Council is responsible for maintaining Award Drains in the District. As highlighted in the Written Representation at paragraphs 95-96, the Council's Land Drainage Byelaws require a 5 metre maintenance access strip along all the award drains so that mechanised maintenance works may be undertaken. The Council is still seeking confirmation that this principle will be applied to enable it to continue to carry out its duties effectively, and is having ongoing discussions with Highways England.	

Question Reference:	Q1.6.17
Question:	
Art 43 - Who are the persons referred to as 'the parties' that are anticipated in this article to be able to refer any matters (of disagreement) to arbitration. Is it considered they are to include 'relevant planning authorities', 'relevant highway authorities' and 'relevant traffic authorities'? If not, why?	
Response:	
A Local Authority could be one such party, depending on the circumstances.	

Question Reference:	Q1.6.18
Question:	
Art 44 - A bespoke appeal process is anticipated which is outside the normal statutory process and public general legislation. Has discussion been had with the relevant authorities about the appeal process? If so, what was the outcome?	
Response:	
Article 44 refers to Appeals and states that " <i>the undertaker may appeal in the event that a local authority issues a notice further to section 60 or 61 of the Control of Pollution Act 1974</i> ".	
This concerns section 60 or 61 prior consent notices relating to the control of demolition and construction site noise & vibration levels.	
The applicant or their representatives have had some discussions regarding Section 60 & 61 prior consents in general, but no discussions about this appeal process.	

Question Reference:	Q1.6.27
Question:	
Req 6 - 6(1) How is it considered the timing of the submission of the landscaping scheme be regulated and should the scheme be submitted before development commences? If not, why not/	
Response:	
<p>The timing of the submission of landscaping schemes would be controlled by conditions.</p> <p>On a very large project such as the A14 improvements there will be several conditions required covering landscape design, implementation, and restoration / aftercare, some covering the scheme as a whole, and some referring to specific locations.</p> <p>1) Conditions covering the vision for the scheme as a whole – material should be submitted before construction commences and will cover proposed landscape treatments across the scheme, response to landscape character areas, landscape treatments and planting lists, phasing, the general layout of landscape areas (e.g. borrow pits, junctions) etc, and specifications, plans and timescales for restoration, management and aftercare of landscape areas. (e.g. timescales of management addressed in the Council’s Written Representation at paragraphs 116-119).</p> <p>2) Conditions covering specific areas – e.g. a junction in a sensitive area or a borrow pit. These will be more detailed and address any specific issues. Information should be submitted well in advance of the commencement of construction of the specific area so that the detailed design can be assessed.</p>	

Question Reference:	Q1.7.6
Question:	
In Table 16.17 of the ES it states that the regional economy would benefit from the creation of 800 - 1600 additional jobs to the local region during construction of the proposed scheme. Please set out the extent to which this assessment is agreed by your local authority, identifying areas where you disagree with the analysis and providing reasons.	
Response:	
There has been no specific discussion over the number of jobs to be created during construction, and the Council is unable to quantify the resources needed to construct the proposed scheme, including those in local supply chains. The Council agrees that construction of such a large project will create jobs, but considers that it is for the Applicant to provide the evidence of the calculation of numbers.	

Question Reference:	Q1.7.7
Question:	
<p>In the Case for the Scheme it is stated that the proposed scheme is forecast to deliver significant economic benefits associated with reduced travel times together with greater journey time reliability and wider impacts associated with economic activity and business growth. Please comment on the construction and post construction effect of the proposal on the local economy in Cambridgeshire and linkages with neighbouring counties / regions.</p>	
Response:	
<p>The South Cambridgeshire Submission Local Plan seeks to deliver 19,000 homes and 22,000 jobs between 2011 and 2031. The A14 scheme provides a critical element of infrastructure needed to unlock and support growth. The Cambridge and South Cambridgeshire Infrastructure Delivery Study, part of the local plan evidence base, identifies the A14 as a critical element of infrastructure to enable growth.</p> <p>The A14 improvements are particularly important to the completion of Northstowe, a new town five miles northwest of Cambridge which will deliver up to 10,000 new homes. Delivery of Northstowe is dependent on sufficient capacity being available in the A14 corridor between Bar Hill and Cambridge. Highways England has confirmed that the first 1,500 homes can be developed prior to the A14 improvements, but future phases are reliant on completion of the scheme.</p> <p>The Cambridge area is home to the Cambridge Cluster, with particularly high concentrations of high technology and biotechnology firms, many with links to the University. Major employment growth is occurring on the northern and western fringes of the city, in the station area and on the Cambridge Biomedical Campus around Addenbrooke's Hospital. In late 2014 Astra-Zeneca announced that it would be locating its global headquarters in Cambridge at the Biomedical Campus. Delivery of infrastructure is of particular importance to the business community, and improvements to the A14 are important to local businesses and stakeholders. For many businesses in the Cambridge area the A14 is the single most important transport scheme and the main symbol of the infrastructure deficit the area faces.</p>	

Question Reference:	Q1.7.8
Question:	
Table 16.14 of the ES summarises the effect of the proposed scheme on community severance. To what extent have local authorities and Parish Councils been involved in such an assessment and are they in agreement with the applicant over the effects of the proposal? If not, why not?	
Response:	
South Cambridgeshire District Council has been consulted during development of the scheme, and agrees with the assessment. The Council supports efforts to maintain existing routes and reinstate routes previously severed by the original A14. In particular the Council supports the provision of two new bridges for NMU at the Swavesey and Bar Hill junctions.	

Question Reference:	Q1.8.1
Question:	
Discussions have taken place with CCC, HDC and SCDC about the developments to be included in the cumulative impact assessment. Was agreement reached on what is a reasonably foreseeable development and what are the developments that have been taken into account in the cumulative assessment? If agreement has not been reached, what are those areas of disagreement?	
Response:	
As indicated in the ES at paragraph 18.2.1 South Cambridgeshire District Council responded to the Scoping Report.	
<p>Whilst anticipated major developments have been included, it is unclear whether the assessment fully addresses the Darwin Green site. It includes reference to the site of 1,593 dwellings with planning permission within Cambridge City, and a development of 1000 dwellings. It should be clarified that the 1,000 dwellings is in South Cambridgeshire identified in the South Cambridgeshire LDF and Submitted Local Plan (referred to as Darwin Green 2/3). Table 18.4 appears to refer to both, but the map in figure 18.1 does not show the site in South Cambridgeshire.</p> <p>Reference is made to Cambridge Northern Fringe East, but it does not fully reflect the proposals in the Cambridge and South Cambridgeshire Submitted Local Plans. The maps in figure 18.1 also do not fully reflect the extent of the area.</p>	

Question Reference:	Q1.8.3
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Question:

The ES indicates that the urbanisation of the landscape character through the interaction of noise, lighting and visual intrusion from new infrastructure would be a major cumulative effect. Para 18.72 indicates that mitigation to reduce the cumulative effect on landscape character could not be identified and the mitigation for each effect would not fully mitigate the overall impacts. Has the mitigation of cumulative impacts been discussed with local authorities and Parish councils and if so what was the outcome. If this has not been discussed, why not?

Response:

Two areas to consider – the cumulative impacts of projects – where the proposed A14 works will combine with similar development – e.g. major access roads - brought forward as part of Northstowe and effect interactions (indirect effects?) where the mitigation of one effect has a knock-on impact on another element of design e.g. mitigation of noise levels results in the provision of sound barriers and adverse landscape and visual effects.

The ES at section 18.7 states that each infrastructure project adjacent to the A14 will have its own set of mitigation proposals, and given the scale of the work involved says mitigation to prevent cumulative impacts between developments could not be identified. The ES suggests that acknowledging the proposed adjacent developments and informing the contractors of their presence is sufficient.

Through the detailed Design Process and the CEMP, more discussions and co-ordination of design and mitigation proposals are needed on this point as in some cases (e.g. access road between Northstowe and the A14) developments will be experienced as a single unit. Depending on the timing of development, there will be opportunities for coordination of mitigation with developers. SCDC Written Representation highlights the particular opportunities at Darwin Green, which have been discussed with HE.

There have been meetings between the Local Authorities and the A14 design team regarding possible cumulative impacts and effect interactions and these will be discussed further at the detailed design stage and as details of development that could cause cumulative effects come forward.

The provision of off-site mitigation planting would provide further opportunities for mitigation.

Question Reference:	Q1.8.6
Question:	
<p>According to Chapter 9 of the ES, construction of the scheme would result in a number of adverse impacts on known archaeological remains, historic buildings and historic landscapes. What agreement, if any has been reached between the applicant, English Heritage and Cambridgeshire County Council regarding mitigation during construction and how is it proposed to secure this through the draft DCO with particular reference to Requirements 3 and 7? If agreement has not been reached, what are the outstanding matters?</p>	
Response:	
<p>South Cambridgeshire District Council is generally content with the way heritage has been assessed (Note that archaeology is being addressed by the County Council).</p> <p>Specific issues have been identified in the Council's Written Representation regarding the setting of Lolworth Church (paragraphs 62 to 68).</p>	

Question Reference:	Q1.9.2
Question:	
The vertical and horizontal limits of deviation provide a degree of flexibility for construction but also have the potential for differences in landscape and visual impacts. IPs have raised their concerns about this potential for differing impacts. How is the applicant addressing this issue?	
Response:	
As set out in Requirement 1, changes beyond the established limits requires consultation with the relevant planning authority over changes from the works plans, engineering drawings and sections.	
The horizontal and vertical limits proposed (the red line planning boundary horizontally and a maximum deviation of 500mm vertically) are fairly modest and within these limits matters will be considered through the detailed design process, in consultaion with the Local Authorities.	

Question Reference:	Q1.9.5
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Question:

The methodology for the assessment of landscape and visual effects is set out in the ES para 10.2 while para 10.2.9 states that the methodology for the LVIA was not questioned by local planning authority officers. Can the local authorities confirm they are in agreement with the LVIA methodology including the locations of viewpoints and photomontages?

Response:

The methodology was considered acceptable as IAN 135/10 Landscape and Visual Effects Assessment is specifically targeted at the assessment of highway projects, and it will be combined with advice Guidelines for Landscape and Visual Impact Assessment 3 which allows for a more subjective assessment.

There have been relatively few photomontages produced but these do provide reasonable examples of the type of Landscape and Visual receptors across the scheme.

The photomontages (particularly 'year 15') also demonstrate the importance of designing structural planting to fit with local landscape character, and demonstrate areas where off site mitigation could be useful.

Question Reference:	Q1.9.9
Question:	
Concerns have been raised by IPs about the visual effect of bridges, the elevation of the proposed road and the introduction of new highway infrastructure. Can the applicant please provide an explanation of the design approach to features which potentially would have significant visual impacts.	
Response:	
<p>South Cambridgeshire District Council has identified in its Written Statement (paragraphs 44 and 45) landscape measures that should be applied through the detailed design process. The Council has raised particular concerns with regard to the landscaping at Lolworth.</p> <p>Detailed landscape will be needed (e.g. at Lolworth over bridge) for example using the 'parkland and avenues' as a basis for planting structure, disguising obtrusive landform and planting large, filtering trees close to the highway to lessen the impact of gantries and lighting.</p>	

Question Reference:	Q1.10.1
Question:	
Does the assessment of noise effects in ES chapter 14 consider all appropriate residential receptors along the route, taking account of individual dwellings and communities?	
Response:	
<p>The ES in the main considers the majority of residential receptors both individual dwellings and communities within the study area defined by Highways England DMRB HD 213/11 Volume 1, Section 3, Part 7 Revision 1 Noise and Vibration, November 2011.</p> <p>Chapter 14 and associated appendices identifies specific properties, their name / addresses and likely noise impacts / effects. However the various appendices report various Assessment Location IDs (reference numbers) which represent certain general areas only and an estimation of the number of properties in that area that the impact assessment is applicable e.g. Appendix 14.6.</p> <p>It is assumed that the addresses have been obtained from a property database which does not wholly accord with SCDC's own GIS and specific property addresses. In addition to find exactly where the various Assessment Location ID are one has to search the various ES relevant figures e.g. Figure 14.7 Sheets 1 to 25.</p> <p>Therefore finding impact assessment for specific properties has not been straightforward. The information is not readily accessible and identifying exact properties has been cumbersome.</p> <p>There is concern that the assessment is not in accordance with DMRB reporting requirements to identify and report impacts at all individual sensitive receptors within the study area defined by DMRB.</p> <p>However SCDC officers are having ongoing discussions with HA and their noise consultants regarding any outstanding specific properties that have not been considered or to clarify property assessment location grouping etc.</p> <p>Some important locations and noise sensitive communities / uses where we are asking for additional noise impact assessment and mitigation as appropriate are Orchard Park Primary School Ring Fort Road, Orchard Park, Cambridge, Cambridgeshire, CB4 2GR and nearby Neighbourhood Equipped Area of Play / Recreational Area, Cambridge Regional College and Cambridge City Crematorium and Huntingdon Road Cemetery and in particular any impacts on the external Gardens of Remembrance which may be affected by the proposed new local access road.</p>	

Question Reference:	Q1.10.2
Question:	
Was the baseline data for the noise assessment agreed with local authorities? Please identify any matters where agreement was not reached and explain why.	
Response:	
<p>The baseline data and baseline monitoring locations were agreed with SCDC.</p> <p>However SCDC officers are having ongoing discussions with the HA and their noise consultants ongoing in relation to this matter. SCDC are requesting clarification on why only a predicted baseline calculation method was used for certain scheme sections within SCDC and their noise model validation / verification approach as there is some discrepancy with baseline noise levels as monitored and as predicted in the vicinity of Orchard Park on the Cambridge Northern Bypass.</p>	

Question Reference:	Q1.10.3
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Question:

Significant impacts from noise and vibration during construction are predicted to impact on both residential and non-residential receptors. How would site specific noise controls be agreed with the local authorities?

Response:

Any site specific construction significant effects or similar should be mitigated effectively by the implementation of a robust Code of Construction Practice (CoCP) and proposed Local Environmental Management Plans (LEMPs) as proposed by HE.

Construction noise mitigation measures should include the use of appropriate work practices including best available techniques to reduce noise and vibration and dust or similar impacts, environmental monitoring, and control of working hours.

The CoCP states that the main contractors will seek to obtain consents from the relevant local authority under *Section 61 of the Control of Pollution Act 1974* for the proposed construction works, excluding non-intrusive surveys.

SCDC are concerned that while there is a commitment to apply for such Section 61 prior consent notices relating to the control of demolition and construction site noise & vibration levels, there is no guarantee these will actually be submitted. Local Authorities cannot insist they are submitted, the onus is on contractors. Clarification is required from HE regarding how this will be secured.

There is also some confusion regarding the definition and purpose of various construction impacts / control document referred to in the ES e.g. the Code of Construct Practice (CoCP), the Construction Environmental Management Plan (CEMP) and Local Environmental Management Plan (LEMP).

SCDC have recommended that a requirement / condition is imposed requiring the CEMPs and LEMPs to be submitted for approval in consultation with SCDC and should include measures to address and monitor construction noise, vibration and other nuisances and to require adherence to set working hours for weekdays and Saturdays and night-time working.

This is paramount as the Planning Act 2008 appears to provide **a general absolute defence to action in respect of statutory nuisance**. Therefore LAs have little or no powers if annoyance or nuisance arises.

Further information is provided in the Council's Written Representation (see paragraphs 79-82).

Question Reference:	Q1.10.4
Question:	
IAN185/15 has been published since the submission of the DCO application. Could different outputs have occurred had the assessments been made on the basis of the new advice?	
Response:	
<p>This IAN provides supplementary advice to users of DMRB Volume 11, SECTION 3, PART 1 (HA207/07- Air Quality) and PART 7 (HD213/11- Noise). Advice is provided on the assessment of link speeds and generation of speed-band vehicle emissions to reflect fact that noise and air quality prediction models may under predict. This includes advice regarding the modelling speeds to be used in the vicinity of junctions experiencing varying degrees of congestion.</p> <p>This is a Highways England advice note and was only issued weeks after the submission of the DCO.</p> <p>Outputs for noise are likely to be higher but without undertaking detailed assessment and a noise model rerun it is not possible to conclude whether the outcomes of any impact assessment would be significantly different or would alter the significance already reported in the ES.</p> <p>In terms of noise an additional 1 to 3 dB can alter the significance of impact assessment outputs and may influence mitigation requirements.</p> <p>For completeness SCDC have asked Highways England and their noise consultants to update the ES or provide an addendum or similar. They should follow and incorporate the advice in IAN185/15 into the noise model and report the findings and any potential changes in the impact assessment for the proposed scheme to better represent the conditions likely to be experienced within the vicinity of various junctions.</p> <p>SCDC are awaiting a response from Highways England.</p>	

Question Reference:	Q1.10.5
Question:	
<p>The magnitude and duration of significant vibration effects is proposed to be included in the final Local Environmental Management Plan (LEMP) following engagement with owners and operators. Without this assessment, how have the likely significant effects from vibration been assessed?</p>	
Response:	
<p>This question relates specifically to construction vibration effects as there is reference to the Local Environmental Management Plan (LEMP).</p> <p>The significance criteria adopted to assess likely significant effects from noise or vibration are summarised in <i>section 14.2</i> of Chapter 14 with further supporting information in <i>Appendix 14.3</i>.</p> <p>The guidance in Design Manual for Roads and Bridges (DMRB) <i>Volume 11, Section 3, Part 7, HD213/11 – Revision 1 Noise and Vibration (HD213/11)</i> has also been followed.</p> <p>14.2.09 states that construction vibration calculations have been made based on the methods set out in <i>Transport Research Laboratory (TRL) Report 429 Ground vibration caused by mechanised construction works, (Hiller DM and Crabb GI 2000) and BS5228 Part 2 :2009+A1:2014 Code of Practice for Noise and Vibration Control on Construction and Open Sites: Vibration. (BSI, 2014)</i>.</p> <p>14.2.31 states that “<i>Where the predicted total noise or vibration (including noise from the scheme and taking account of the noise reduction measures), increases the baseline noise such that it exceeds the trigger value for onset of a significant observed adverse effect (refer to Table 14.1), then a likely significant noise or vibration effect has been identified on that individual receptor</i>”.</p> <p>The evidence used to inform the significance decisions reported in the assessment is presented in <i>Appendices 14.4, 14.5 and 14.6</i>.</p> <p>For residential premises, vibration from the operation of the scheme and all construction has been assessed using the criteria presented in <i>Table 14.3: Thresholds of likely effects of vibration for residential buildings (derived from BS 6472-1: 2008) BS 6472-1 Guide to evaluation of human exposure to vibration in buildings – Part 1: Vibration sources other than blasting 2008</i></p> <p>Risk of damage to buildings from groundborne vibration is assessed using the criteria in <i>Table 14.4</i>, which are based upon <i>BS7385: Part 2 1993 Evaluation and measurement for vibration in buildings. Guide to damage levels from groundborne vibration (BSI, 1993)</i>.</p> <p>In establishing criteria, controls and working methods the CoCP states that the main contractors will also take account of guidance in:</p> <ul style="list-style-type: none"> • <i>BS 6472-1 Guide to evaluation of human exposure to vibration in buildings – Part 1: Vibration sources other than blasting 2008:</i> • <i>BS 5228 – 1 and BS 5228 – 2 ,</i> • <i>ISO 4866: Mechanical vibration and shock, vibration of fixed structures.</i> 	

Guidelines for the measurement of vibrations and evaluation of their effects on structures and

- *BS 7385- 2 Evaluation and measurement for vibration in buildings – Part 2: Guide to damage levels from groundborne vibration 1993.*

The above is an overarching assessment approach and a more refined magnitude and duration of significant vibration effects assessment is proposed to be included in the final Local Environmental Management Plan (LEMP).

This is a common industry approach as it is usually not possible to calculate/predict the final site specific vibration levels until the detailed design is completed and construction programmes and activities / methods are finalised. This would include consideration of site specific geology / ground conditions as this will influence choice of construction methods/ techniques and vibration transfer. Such information is unlikely to be available at this stage and hence it is proposed to consider in the LEMP.

SCDC are in general agreement with this approach.

However it appears that it will be left to the main contractors to offer additional discretionary noise / vibration mitigation under Noise Insulation Regulations 1975 at receptors such as Noise insulation or ultimately Temporary re-housing.

This reinforces SCDC's recommendation that a requirement / condition is imposed requiring the CEMPs and LEMPs to be submitted for approval in consultation with SCDC and should include measures to address and monitor construction noise, vibration and other nuisances and to require adherence to set working hours for weekdays and Saturdays and night-time working.

Question Reference:	Q1.10.6
Question:	
Paragraph 14.2.91 of the ES notes that given the infrequent, irregular and short duration of maintenance work, this phase of the proposed development is unlikely to give rise to significant noise or vibration effects. What is the basis of this conclusion? How would any short term significant effects be mitigated?	
Response:	
<p>This appears to relate to post completion operations. This is likely to include any HE ongoing planned or routine maintenance as required when scheme is completed such as road resurfacing or replacement / repairs to structures, noise barriers or similar.</p> <p>SCDC would expect best practical means to be used to minimise noise and vibration impacts.</p>	

Question Reference:	Q1.10.7
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Question:

Paragraph 13.2.1 in Appendix 20.2 of the ES states that a noise and vibration management plan would be prepared as part of the main contractor's Construction Environmental Management Plan (CEMP). Can the applicant provide a draft of the CEMP, its relationship to the LEMP and confirm how these documents would be secured.

Response:

It is SCDC's view that there is also some confusion regarding the definition and purpose of various construction impacts / control document referred to in the ES e.g. the Code of Construct Practice (CoCP), the Construction Environmental Management Plan (CEMP) and Local Environmental Management Plan (LEMP).

For those properties identified in Chapter 14 as requiring discretionary noise insulation due to significant construction noise it appears that it will be left to the main contractors to offer any such additional discretionary noise / vibration mitigation under Noise Insulation Regulations 1975 such as Noise insulation or ultimately Temporary re-housing.

SCDC are also concerned that while there is a commitment to apply for such Section 61 prior consent notices relating to the control of demolition and construction site noise & vibration levels, there is no guarantee these will actually be submitted. Local Authorities cannot insist they are submitted, the onus is on contractors. Clarification is required from HE regarding how this will be secured.

This reinforces SCDC's recommendation that a requirement / condition is imposed requiring the CEMPs and LEMPs to be submitted for approval in consultation with SCDC and should include measures to address and monitor construction noise, vibration and other nuisances and to require adherence to set working hours for weekdays and Saturdays and night-time working.

Question Reference:	Q.1.10.8
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Question:

Noise mitigation during the operational phase of the scheme is proposed through various means, as described in Table 14.21 of the ES. How would the installation of noise barriers be secured through the draft DCO?

Response:

The Environmental Statement (ES) makes reference to a number of important issues being resolved at the detailed design stage. For example, with regard to noise barriers, the ES shows an indicative location for where noise barriers will be positioned and what length and height they will be. It does not, however, specify the style or materials of the barriers (see Table 14.21: Envisaged noise mitigation measures for operation of the scheme of Chapter 14 details typical barrier locations and **indicative lengths and Figures 14.7.1 sheet 25**).

The DCO does detail the process for agreeing detailed design matters and the involvement of the Local Authority in Table 20.1. There are a number of areas however the LPA wish to be consulted where there is no reference.

As per Para. 78 of SCDC Written Representation as the location of any environmental noise fence barriers or bunds both new and replacement as proposed are only indicative, their detailed design including the final location, length, height and technical details such as acoustic performance specifications in order to optimise mitigation should be secured and approved in consultation with SCDC through the requirements / conditions of the DCO.

There are also ongoing discussions with Highways England on some technical issues associated with noise assessment including proposed noise barriers or those not been proposed (as recorded in the Statement of Common Ground). It is envisaged that agreement and clarification will be reached on the majority of these matters and common ground can be agreed. However the Council reserves the right to raise any additional concerns and issues in relation to these items when additional information is provided.

Question Reference:	Q1.10.9
Question:	
Paragraph 18.1.4 of the ES indicates that the traffic model which underpins the noise assessment has been agreed with the local planning authorities. Can the local authorities confirm that this is correct?	
Response:	
<p>Operational noise predictions and calculations have been made using the <i>Calculation of Road Traffic Noise – CRTN (Department of Transport and Welsh Office, 1988)</i>.</p> <p>The additional advice given in <i>DMRB HD213/11</i> (Highways Agency et al., 2011) has been adopted in relation to <i>CRTN</i> procedures. These include revisions to vehicle classification, traffic data and corrections due to road surface.</p> <p>The effects of noise and vibration from the operation of the scheme have been assessed based on traffic modelling undertaken by transport consultants with the necessary traffic information being inputted to the model.</p> <p>It is understood that the County Council is broadly content with the traffic modelling work undertaken by the Applicant, and that the traffic modelling approach in general is sound and appropriate. However, the Applicant has, in the opinion of the County Council, given insufficient consideration in the traffic modelling to the impacts on local roads. At this time the traffic predictions for local roads are not the subject of agreement between Highways England and the County Council, but are the subject of ongoing discussion that is expected to lead to agreement.</p> <p>SCDC may also make further comment when additional work is completed as noise prediction and assessment outcome may need reviewing.</p>	

Question Reference:	Q1.10.10
Question:	
Paragraph 14.1.31 of the ES describes the consultation with local authorities regarding the approach to noise and vibration assessment, including the need to measure night time noise and suggested baseline noise measurement locations. Are these suggestions being taken on board?	
Response:	
<p>The Council is in general agreement regarding day time impact, however, there are in ongoing discussions with HE regarding night time impact assessment in accordance with <i>DMRB Volume 11, Section 3, Part 7, HD213/11 – Revision 1 Noise and Vibration (HD213/11)</i></p> <p>The ES does not adequately assess night time effect and receptors affected.</p> <p>In particular for night-time noise impacts, comparisons in the long term should be considered.</p> <p>SCDC are requesting information on the following assessment as recommended by <i>DMRB Volume 11, Section 3, Part 7, HD213/11</i>:</p> <p>Do-Minimum scenario in the baseline year against Do-Something scenario in the future assessment year (long term):</p> <ul style="list-style-type: none">• where the introduction of a project results in a sensitive receptor being exposed to night time noise levels in excess of 55 dB L_{night}, outside where it is currently below this level; and• where a receptor is exposed to pre-existing L_{night}, outside in excess of 55 dB and this is predicted to increase.	

Question Reference:	Q1.10.11
Question:	
What mitigation is proposed to address the construction and operational noise effects of the proposed scheme on the University of Cambridge, Sub Department of Animal Behaviour at Madingley? What agreement, if any has been reached?	
Response:	
None proposed.	
<p>The ES in the long term and an operational mitigated scheme year of Assessment Location 756 in The Avenue Area of Madingley (which is in fact Beck Brook Farm, The Avenue, Girton, Cambridge, CB23 8AD approximately 1,150 metres from the current Girton Cloverleaf Junction) reports changes in noise with and with the scheme of adverse +0.1dB Day and beneficial -1.8 at Night. Such changes are considered negligible.</p>	
<p>The University of Cambridge, Sub Department of Animal Behaviour at Madingley will be further away from the scheme than Beck Brook Farm and it is considered that noise impacts would be similar if not lower.</p>	
<p>Beyond 200-300m, the effects of and reductions provided by environmental noise barriers such as bunds and fences are often zero as ground attenuation becomes the most significant factor in noise reduction.</p>	
<p>Therefore no specific mitigation proposed.</p>	

Question Reference:	Q1.10.12
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Question:

ES section 14.15 makes reference to noise mitigation measures such as noise barriers and bunds. Please explain the design approach for both of these measures, with particular reference to their height.

Response:

Section 14.1.6 states:

“For the assessment of operational noise and vibration, two scenarios have been assessed:

- the base scheme, which is the scheme including mitigation measures integrated into the scheme, such as low-noise road surfacing and landscaping earthworks; and
- the mitigated scheme, which is as the base scheme plus any additional mitigation including new and enhanced noise barriers.”

Section 14.5.4 states that:

“To avoid significant observed adverse effects from the scheme, minimise as far as sustainable other likely significant adverse effects from the scheme and reduce existing and future significant observed adverse effects in a number of Important Area, the additional mitigation described in Table 14.21 is envisaged. This includes the replacements or upgrade of existing barriers in a number of locations. Equivalent or better mitigation would be developed during detailed design of the scheme.”

Table 14.21: Envisaged noise mitigation measures for operation of the scheme of Chapter 14 **details typical barrier locations and indicative lengths.**

As per Para. 78 of SCDC’s Written Representation as the location of any environmental noise fence barriers or bunds both new and replacement as proposed are only indicative, their detailed design including the final location, length, height and technical details such as acoustic performance specifications in order to optimise mitigation should be secured and approved in consultation with the Local Planning Authority through the requirements / conditions of the DCO.

There are also ongoing discussions with Highways England on some technical issues associated with noise assessment including proposed noise barriers or those not been proposed (as recorded in the Statement of Common Ground). It is envisaged that agreement and clarification will be reached on the majority of these matters and common ground can be agreed. However the Council reserves the right to raise any additional concerns and issues in relation to these items when additional information is provided.

Question Reference:	Q1.10.13
Question:	
The construction and operational effects of noise on commercial and residential properties in the vicinity of the Cambridge Northern Bypass has been assessed as significantly adverse without mitigation. Have the proposed mitigation measures and their effectiveness been discussed with IPs and if so, what was the outcome? If no discussions have taken place, why not?	
Response:	
South Cambridgeshire District Council officers are having ongoing discussions with Highways England on some technical issues associated with noise assessment including proposed noise barriers other proposed mitigation measures and their effectiveness.	
If any agreement is reached this will be reflected in the Council's Statement of Common Ground.	

Question Reference:	Q1.10.14
Question:	
In terms of noise, what effect would the construction of and future traffic on the A14 trunk road westbound link embankment have on residential properties in and around Madingley?	
Response:	
Construction impacts are predicted as no significant effects.	
<p>The ES in the long term and an operational mitigated scheme year of 2035 Assessment Location 756 in The Avenue Area of Madingley (which is in fact Beck Brook Farm, The Avenue, Girton, Cambridge, CB23 8AD approximately 1,150 metres from the current Girton Cloverleaf Junction) the ES reports changes in noise with and with the scheme of adverse +0.1dB Day and beneficial -1.8 at Night. Such changes are considered negligible.</p> <p>Madingley village will be further away from the scheme than Beck Brook Farm and it is considered that noise impacts would be similar if not lower in this area.</p> <p>Beyond 200-300m, the effects of and reductions provided by environmental noise barriers such as bunds and fences are often zero as ground attenuation becomes the most significant factor in noise reduction.</p> <p>Therefore no specific mitigation proposed.</p>	

Question Reference:	Q1.12.18
Question:	
Some IPs have asked what effect the guided busway between Cambridge and Huntingdon would have on reducing demand for travel by car between these locations. What are the current and forecast patronage forecasts for the busway and what effect has this had on current and future forecasts of demand for travel between Huntingdon and Cambridge?	
Response:	
This is a matter for the Local Highway Authority (Cambridgeshire County Council).	