

South Bucks District Council

WRITTEN REPRESENTATION

HIGHWAYS ENGLAND'S RESPONSE

ADDITIONAL COMMENTS FROM SOUTH BUCKS DISTRICT COUNCIL

- 1.1 *Thank you for the opportunity to discuss our thoughts at the above hearing. As requested below is a summary of what was said in relation to South Bucks District Council (SBDC). Additionally a separate document will be submitted on behalf of The London Borough of Hillingdon, SBDC, Slough Borough Council and Buckinghamshire County Council (BCC) in relation to Cumulative Impacts of the many Infrastructure proposals being considered in the region. These include HS2, SIFE, Western Rail Link to Heathrow, the possible Heathrow Expansion and the Heathrow Express ("HEX") Sidings.*
- 1.2 *SBDC would like to clarify that we are still positively engaged with Highways England (HE) and will continue discussions relating to the CEMP and CTMP. As of the 8th October 2015 SBDC and HE entered into a finalised Statement of Common Ground. We are under the assumption that HE will continue to stay in contact to discuss the outstanding Matters not Agreed.*

Highways England Comment

- 1.2.1 Highways England confirms that liaison with South Bucks District Council will continue in order to discuss the 'Matters not Agreed' section of the finalised Statement of Common Ground ("SoCG").
- 1.3 *In summary:*
- 1.3.1 *It was clarified that the Environmental Statement appendices were frozen in February 2014. This is of concern to SBDC with the renewal of approval for a major employment redevelopment at Huntercombe Lane employment site, Burnham and a number of Infrastructure Projects (please see separate report) being announced since then. SBDC therefore believe that this should be revisited.*

Highways England Comment

- 1.3.1.1 It should be noted that Highways England continued to update their register of planning applications for consideration in the cumulative effects for non-traffic related impacts up to January 2015. Those planning applications within 1km of the M4 which were considered in this assessment are presented in Appendix 16.1 of the Environmental Statement ("ES") (Application Document Reference 6-3, APP-356).
- 1.3.1.2 Regarding the redevelopment of the former Wyeth Pharmaceuticals site at Huntercombe Lane, Highways England acknowledges that consent was granted in July 2015. However, it is understood from the planning committee report (22 July 2015) that this is a re-submission

of application 11/01119/FUL which was granted planning permission but had since expired. The proposal is for 10,275m² of office space with 298 car parking spaces. When the uncertainty log for the M4 Junctions 3 to 12 Smart Motorway scheme (the “Scheme”) traffic model was being compiled in late 2013/early 2014, account was taken of the Huntercombe Lane site as it had the benefit of the earlier consent granted in 2011 and, accordingly, was afforded “near certain” status in the log, which meant it would be contained within the core scenario. The accompanying applicant’s Transport Assessment was used to provide the estimate of trip generation of 1158 trips per day for inclusion in the M4 traffic model. The proposed development is marginally smaller than the current building, use of which it is understood ceased on 15 October 2010. As such the applicant’s Transport Assessment has estimated that there will be a net 51 trips per day less than the existing floor space would generate.

1.3.1.3 As the site was in operation in 2010, the traffic associated with the previous use would have been accounted for in the base year (2009) model. More importantly, the core forecast scenario has taken account of the proposed development based on the figures provided with the 2011 consent. Accordingly, Highways England is not of the view that there is the need to revisit the forecasts in the light of this, more recent, planning decision.

1.3.1.4 With regards to the other Infrastructure Projects mentioned above, Highways England will respond separately on the cumulative developments joint statement submission made by South Bucks District council, London Borough of Hillingdon, Slough Borough Council and Buckinghamshire County Council.

1.3.2 *BCC is the Lead Highways and Flood Authority for the district and therefore they will cover these issues in their response. However SBDC requests more information on the impact of displacement traffic during construction, especially on Air Quality along the A412 where it is already on the borderline. Additionally the development will move the motorway closer to sensitive receptors so there will be a direct impact on the AQMA which spans the motorway corridors in the district (see Local Impact Report).*

Highways England Comment

1.3.2.1 Highways England confirm that responses will be provided to Buckinghamshire County Council regarding any queries raised in relation to their role as the Highways and Flood Authority for the district.

1.3.2.2 With regards to the displacement of traffic, following a meeting with Buckinghamshire County Council on 25 November 2015, it was agreed with Buckinghamshire County Council that no further assessment was required for the years 2017 and 2022. However, for the year 2020, during the second construction phase for the Scheme, the assessments had indicated some potential use of local roads including the A412 by traffic diverting from the M4 during

construction. Buckinghamshire County Council does not have traffic data for the majority of junctions on these routes with which to contradict the findings of Highways England's modelling and assessments. However, as a sensitivity test, it was agreed that Highways England would undertake traffic surveys during the first available neutral month for traffic flows, March 2016. These surveys will verify the modelling and assessment undertaken by Highways England of the effects of construction traffic on the A412, arising both from the Scheme and HS2 / HEx. The results will then be provided to South Bucks District Council's Officers for review with Highways England's specialists for the Scheme.

- 1.3.2.3 It should be noted that Highways England maintains that the assessments it has undertaken for the Scheme already amount to a reasonable worst case assessment and are conservative as to the severity of effects that they predict. The primary assessment, using the Highways England assessment program QUADRO (QUEUES AND DELAYS AT ROADWORKS) to assess the effects of the proposed traffic management regime during construction of the Scheme, indicated that there was sufficient capacity on the M4 to accommodate construction traffic with the exception of peak hours within the busier days of the week when some delay to traffic was predicted. These delays were, however, below the level at which the QUADRO program would suggest drivers may choose to divert to other routes.
- 1.3.2.4 The QUADRO model results were validated against traffic count data taken before and during road works with similar traffic management on the M4 in the Autumn of 2014 which confirmed the model results were realistic.
- 1.3.2.5 It was known from the traffic forecasting work that the M4 model was sensitive to small differences in travel costs between alternative routes and further that should drivers be minded to divert from the M4 during the peak periods, the model would indicate the likely diversion routes. Consequently to ensure that a reasonable approach had been undertaken to assess a potential worst case situation, the M4 traffic model was used to simulate the effects of the traffic management during each of the two phases of construction of the Scheme.
- 1.3.2.6 The results of those assessments are summarised in the QUADRO Technical Note in Appendix 6.3 of the ES (Application Document Reference 6-3, APP-306). The transport links and the level of predicted traffic have been considered as part of the assessment already carried out and Highways England is confident that there is no need to carry out works to any junctions as matters stand. Further, Highways England notes that there is no empirical data provided to contradict these existing assessments. Nevertheless, as a failsafe and to undertake sensitivity testing requested by South Bucks District Council and other authorities, surveys will be undertaken. Highways England expect that those surveys will demonstrate that there is no need for a further appraisal. However, should the surveys reveal the need for further modelling, a verification appraisal will be

undertaken. This will be secured by Section 7.4.5 of the updated Construction Traffic Management Plan ("CTMP"), which is provided with the Deadline V submission. Were that appraisal to predict capacity problems at a particular location, traffic management measures on the M4 will be reviewed to mitigate these issues. This will be carried out in conjunction with a review of temporary signage and traffic management measures on the local road network to be agreed through consultation with the relevant local authorities and emergency services.

1.3.2.7 The detailed modelling for the air quality assessment includes the new widths of the carriageways, with the use of the current hard shoulder bringing vehicles closer to sensitive receptors, therefore the effect of moving the M4 carriageway closer to these receptors is accounted for in the results presented in Chapter 6 of the Environmental Statement for air quality (Application Document Reference 6-1, APP-146).

1.3.3 *As stated in the Statement of Common Ground between HE and SBDC there is no disagreement over Air Quality. This is a matter that was agreed on the basis that HE would investigate appropriate ways to improve Air Quality in the district as part of the scheme. This was an aspect additionally brought up in the requirement to take opportunities for benefits to communities and the environment and a major Infrastructure scheme such as this should provide a platform for this. Possible schemes SBDC would suggest are managing the verges, paint surfaces and barrier design. SBDC is pleased that HE is currently considering a number of agreements with adjoining land owners for offset planning.*

Highways England Comment

1.3.3.1 Highways England has set out in its Delivery Plan and Strategic Business Plan a commitment to support improvements to the environment, including air quality, where it can. We recognise that whilst the Scheme is assessed as not having a significant air quality impact, it is likely to lead to some worsening at a small number of properties.

1.3.3.2 Highways England is looking to achieve improved air quality across the Strategic Road Network, and is exploring options and opportunities to do this, and recognises the importance of other key partners e.g. local authorities in delivering any intervention. The M4 in common with other sections of the strategic road network will be included in this work.

1.3.3.3 With regards to offsite planting, Highways England is presently investigating the possibility of carrying out off-site planting on land owned by Highways England outside the Scheme's Order limits. An example of where this could be considered is at Dorney Meadows off Amerden Lane to help mitigate the adverse effects of the Scheme on Amerden Caravan Park.

1.3.3.4 In relation to offsite planting on other areas of land outside the Scheme's Order limits, Highways England acknowledges that obtaining agreement with local stakeholders for offsite planting would require Section 253 (Highways Act 1980) Agreements to be drawn up. Highways England has outlined the following views to be considered before adopting this approach for the Scheme:

1. Section 253 ("s253") of the Highways Act 1980 is a power conferred upon highway authorities (including Highways England) and is permissive in nature. That is to say, it enables an agreement to be entered into and to have effect. It does not compel a highway authority to do anything in particular, although the agreement itself can have effect to confer obligations. It could be used where a highway authority wished to enter into an agreement with a landowner, without depriving the landowner of the land in its ownership, but wished to secure planting on, or use of, the land in question "either permanently or during such period as may be specified in the agreement" (s253(1)). The effect of the s253 Agreement (see subsection (4)) is to be a local land charge, which would run with the land, binding it as specified in the agreement. A s253 Agreement may be used in circumstances other than in relation to Highways Act 1980 schemes or where the Acquisition of Land Act 1981 applies. As such, it could be used in the context of a scheme under the Planning Act 2008 - nothing precludes such an application.
2. Highways England is subject to environmental duties under its licence, which in relation to mitigation entail that it should, "Consider the cumulative environmental impact of its activities across its network and identify holistic approaches to mitigate such impacts and improve environmental performance" (Para 5.23). The provisions of Paragraph 25 in Part 2 of Schedule 4 to the Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 require it to report "measures envisaged in order to avoid, reduce, and if possible, remedy significant adverse effects." As such, in the context of the Scheme, Highways England has undertaken an assessment of the environmental effects of the Scheme. This is reported in the ES, which accompanied the application for development consent in 2015.
3. Highways England has identified landscape and visual mitigation in each case, which is secured within the M4 corridor or, where not already in the highway corridor, would be within land subject to compulsory acquisition under the terms of the Application within the Order limits, as outlined in Table 8.2 of the ES (Application Document Reference 6-1, APP-148).
4. An agreement under s253 Highways Act 1980 would be applicable to the Scheme in two main circumstances:

- a) first, where land is subject to compulsory acquisition, but the owner does not wish to part with ownership of that land and Highways England agreed with the owner that the land could be retained subject to a s253 Agreement. No such circumstances have been identified in the context of this Scheme; and/or
 - b) where land outside the Order limits (and hence outside the land subject to an application for powers of compulsory acquisition) is identified in order to mitigate significant effects of the Scheme. In this case, the environmental impact assessment ("EIA") of the Scheme identified no such effects and none have been identified by Highways England subsequently. As such, it is not necessary to enter into s253 agreements in relation to any land.
5. As the Scheme is subject to examination, the assessment of its effects is subject to review by the Examining Authority. The Examining Authority will have regard to the submissions of statutory consultees and other interested parties, which may allege that planting or controls on the use of land is required to mitigate the effects of the Scheme. In such circumstances, it would be open to the Examining Authority to recommend to the Secretary of State that a finding be made that significant environmental effects were experienced by additional receptors, and so additional mitigation was required. In such a circumstance an agreement under s253 would provide on means of securing such additional mitigation. However, a number of important and relevant considerations must be applied to such a finding, including:
- a) the Examining Authority would need to find that the EIA of the Scheme was incorrect, relying upon the methodology that it contains, which is that prescribed by Highways England's Design Manual for Roads and Bridges, Volume 10, Section 4 (Volume 10, October 1994, as amended as at May 2014). In doing this, the Examining Authority would need to apply (or be satisfied that others had applied) the same rigour to assessment as that undertaken for the EIA for the Scheme since the expert evidence before the Examining Authority is that no such effects are experienced. The expert evidence is supported by site visits and the application of a detailed methodology.
 - b) in imposing a requirement that stated the need for additional, offsite mitigation, the Examining Authority would need to be content that the finding complied with Circular 11/95, which governs the imposition of planning conditions and is an important and relevant consideration in relation to the Scheme. The circular makes plain that "*it would be ultra vires, however, to require works which the developer has no power to carry out, or which would need the consent or authorisation of a third party...*" Thus,

requiring the completion of an agreement under s253 would not be acceptable, but the circular goes on to state that "*it may be possible to achieve a similar result by a condition worded in a negative form, prohibiting development until a specified action has been taken.*" However, in making such a finding, the likelihood of such a requirement being fulfilled is an important and relevant consideration, since if the completion of such an agreement would not be a reasonable prospect, bearing in mind that the owner of relevant land may seek a ransom payment from the public purse, the Examining Authority would need to find that to jeopardise the delivery of the Scheme in this way would be proportionate;

- c) Highways England has powers of compulsory acquisition that it can exercise by a compulsory purchase order under the Highways Act 1980 if acquisition or control of land is not possible by agreement. As such, compulsory acquisition is available to Highways England if an agreement cannot be secured. However, this has two effects: first, it would cause delay, and secondly it means that any acquisition of land or conclusion of a s253 Agreement takes place under the shadow of compulsion - it is not thereafter truly voluntary; and
- d) the ExA would also have to bear in mind that fulfilling a requirement to obtain a s253 Agreement may effectively be a compulsory acquisition of land or akin to such acquisition (i.e. under the shadow of compulsion), since the imposition of a restriction on its use (because planting was in place) would deprive its owner of its hitherto unrestricted use. This has a number of implications:
 - i. the compulsion inherent in the finding would not have been the subject of consultation in accordance with the Planning Act 2008;
 - ii. it would be necessary to make a finding that there was a compelling case in the public interest for the acquisition of the land (or imposition of a s253 Agreement) since that would be the last resort in delivering the mitigation;
 - iii. that would mean finding that the EIA of the Scheme was not correct, there were additional significant effects hitherto unreported; that the effects were so severe that they required mitigation in order to enable the Scheme to proceed; that the mitigation was appropriate and the land upon which it would have to be provided was the correct land, there being no alternatives; and that the private rights of the land owner (whoever that might be) were outweighed by the need to provide the

mitigation (the case for the Scheme otherwise being made out already) because there would be a compelling case in the public interest in respect of the mitigation; and

- iv. since the mitigation in question would unlock the delivery of the Scheme in the public interest, the payment of public money to a third party was justified in line with the obligations of Highways England in delivering "value for money".

- 6. As will be noted from the above, there are a great number of considerations which must be in mind in identifying a s253 Agreement as a solution in this context. Indeed, it would not be appropriate (even assuming it is a possibility or appropriate) to conclude that a s253 Agreement is a given solution to a given environmental effect. However, most importantly of all, in this context the evidence does not point to any requirement for additional offsite screening or planting necessary to secure delivery of the Scheme in the public interest. As such, there is no need for a s253 Agreement or the implicit interference with the rights of private parties in land that one would entail.

1.3.4 *The majority of the modelling conducted by HE assumes that there will be advancements in traffic pollution reduction in the future but developments, such as the recent Volkswagen Case, highlights that advancements in this sector may not even be as they should be today. SBDC requests that HE clarifies what will happen should the anticipated change in vehicle type not go ahead along with the scenario of there being more traffic than anticipated. Additionally SBDC is in support for a Continuous Air Quality monitoring station in an agreed location as discussed at the hearing.*

Highways England Comment

1.3.4.1 The approach utilised in the assessment of the air quality impacts as a result of the Scheme has been undertaken in accordance with best practice and current guidance. In relation to future projections of NO₂, future air quality has been considered through the updated air quality advice on the assessment of future NO_x and NO₂ projections known as long term trend ("LTT") analysis (Interim Advice Note ("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''). As a result Highways England has not assumed that in the future all improvements in air quality (i.e. rates of improvement in vehicle emissions etc.) will occur at the rate anticipated by Defra. This is described in paragraphs 6.2.57 to 6.2.60 of the ES. It is therefore agreed that there is uncertainty in future rates of improvement, and this is why Highways England has undertaken an air quality assessment for the Scheme using the long term trend profile ("LTT_{E6}") to account for uncertainty.

1.3.4.2 Separate to the Scheme, Highways England has developed a National Air Quality Monitoring Strategy and in the future is rolling out a

National Air Quality Monitoring Network ("NAQMN"). It is expected that the M4 will be included in the monitoring network. For any monitoring installed as part of the NAQMN in this area Highways England will engage with the local authorities.

- 1.3.5 *With the scheme not including any extra barrier protection due to the addition of Low Noise Surfacing' SBDC would like to query the likely lifespan of this surfacing and how regularly it will be updated.*

Highways England Comment

1.3.5.1 Highways England does not agree with the above statement. It should be noted that additional noise barriers will be included, where required, to mitigate the impacts of the Scheme. Furthermore, an enhanced noise mitigation study is ongoing to optimise the lengths and heights of proposed barriers.

1.3.5.2 With regards to the surfacing, as with all road surface types it is acknowledged that low noise surfacing will degrade over time. The life expectancy is determined by the specific constituents, such as quality of construction, amount of traffic using the carriageway and environmental conditions. The typical life expectancy on low noise surfacing is between 10 and 15 years (paragraph 6.20 of HD37/99 [Design Manual for Roads and Bridges - Volume 7, Section 5, Part 2, HD 37/99 Amendment No. 1 Bituminous surfacing materials and techniques]). It should be noted that research indicates that, when newly laid, low noise surfaces provided on average between 4 and 6 dB(A) benefit over tested hot road asphalt ("HRA") surfaces (the traditional type of asphalt surfacing used historically on UK roads). Furthermore, in spite of the better acoustic durability of the HRA surfaces, low noise surfaces still outperform HRA surfaces by 1 to 3 dB(A) after 10 years.

1.3.5.3 Highways England has a strategic network maintenance regime that will maintain the low noise surfacing. Following installation, the pavement is regularly monitored using a variety of tests (e.g. skid resistance) and will be maintained to a high standard. Replacement will be scheduled once its performance is no longer satisfactory. Highways England has a duty to maintain the strategic road network as outlined in 4.2(b) and 4.2(g) of its licence, submitted at Deadline IV (REP4-005, Appendix C), and section 41 of the Highways Act 1980. To this end, Highways England has in place a governance process for the identification, prioritisation and funding of maintenance schemes.

- 1.3.6 *Due to lack of time at the hearing the Visual Impact issues were not covered in detail. SBDC has concerns over visual aspects of the scheme especially at Oak Stubbs Lane. It was identified that an additional area of vegetation could be removed at this location as part of the scheme. Subsequently SBDC has written to HE for clarification and received a reply on the 24/11/15. This stated that the additional information would be submitted by HE by the 26/11/15 deadline to confirm that additional vegetation would be removed in the 'worst case' scenario and would raise the visual impact of the scheme to 'moderate adverse' (see*

below). Due to the significant potential worsening and that new vegetation would take some time to restore the location to present conditions: SBDC requests that a Green Barrier be provided to reduce this impact.



Additionally matter E4 of the Agenda refers to SBDCs concern to the applicant's response to FRQs rep2-002 based on gantry height and their visual impact. Our assumption is that they will be no higher than existing gantries along the motorway and if so then this is not of concern.

Highways England Comment

1.3.6.1 The moderate adverse effect now reported for residential properties along Oak Stubbs Lane (see Drawing 8.2 of the ES, Sheet 10, receptor ref 10.1.3) (Application Document Reference 6-2, APP-220) is based on a worst case scenario. It is considered that these effects are reversible and by the Design Year (2037), the new replacement planting on the new embankment will be established to achieve the baseline situation (that is similar to the condition today).

1.3.6.2 Sheet 19 of the Vegetation Clearance drawings, in Annex B of the Engineering and Design Report (Application Document Reference 7-4, APP-105), shows the indicative vegetation removal in the vicinity of Oak Stubbs Lane and Marsh Lane on land required for temporary access. The extent of the vegetation clearance will be confirmed once the detailed design of Marsh Lane overbridge has been finalised. The existing vegetation, which presently grows parallel to the footpath between Oak Stubbs Lane and the toe of the existing embankment for

Marsh Lane overbridge would be retained for the most part and would continue to form a visual barrier to the M4 and traffic during both the construction phase and Scheme operation. However, it is recognised that some of this vegetation in the vicinity of the Marsh Lane overbridge would be removed to necessitate the bridge works.

- 1.3.6.3 In relation to the request for a green barrier at this location, Highways England's preference for noise barriers is to use timber barriers which in terms of their colour, finish and weathering are considered to be appropriate to a vegetated 'rural settlement edge' setting and which have also been tried and tested on the motorway network in terms of their durability, effectiveness and low maintenance. Highways England considers that timber barriers, in association with existing and/or proposed road side vegetation, form relatively unobtrusive elements in the landscape. It is anticipated that at this location, new planting will be provided between the noise barrier and the adjacent receptors.
- 1.3.6.4 Highways England is aware of green/living acoustic barriers and their use on the local road network. Living barriers typically have a height limitation of 2.5m. They require some form of irrigation system to ensure their survival through dry periods, and require annual trimming. The maintenance commitments associated with a living barrier would potentially not be conducive to the operational requirements of the motorway. These barriers have not previously been used or tested on the motorway network and are expensive to install and maintain. From a safety point of view, they would require additional resources on the motorway network. On this basis, Highways England is of the opinion that green/living acoustic barriers are not a cost effective, sustainable or safe solution, and as such they will not be installed as part of the Scheme.
- 1.3.6.5 With regards to gantries, Highways England has undertaken a comparison of existing and proposed gantry heights within the two stretches of M4 within the jurisdiction of South Bucks District Council. The results are outlined below.
- 1.3.6.6 There are currently no existing gantries along the M4 between Thames Bray Bridge and junction 7 and the Scheme proposes to install ten new gantries. Two proposed gantries are 8.3m high (G6-05 and G6-08), five gantries are 9.2m high (G6-01, G6-03, G6-06, G6-07 and G6-09), one gantry is 10.4m high (G6-02) and two are 12.8m high (G5-11 and G6-04).
- 1.3.6.7 It is anticipated that Gantry G5-11 would result in a residual slight adverse visual effect on adjacent residential properties on the east side of the Hunterscombe Spur. With reference to paragraph 8.8.20 of the ES (Application Document Reference 6-1, APP-148), it is anticipated that three gantries (G6-07, G6-08 and G6-09) would result in a residual slight adverse visual effect on adjacent visual receptors along the westbound and eastbound carriageways respectively. With reference to Sheet 11 of Drawing 8.2 of the ES (Application Document Reference 6-2, APP-220) and Appendix 8.3 of the ES (Application Document Reference 6-3, APP-314)

(Receptor 10.1.6), Gantry G6-03 would result in a residual slight adverse effect on an adjacent residential property. The remaining five proposed gantries are considered to result in a neutral effect on views from high sensitivity visual receptors such as residential properties and Public Rights of Way.

1.3.6.8 There are two new gantries proposed within the jurisdiction of South Bucks District Council at junction 4b; both will be 9.2m high (G2-16 and G3-01). There are no existing gantries within this area. Both these gantries are contained within the wooded setting to the junction and are not visible from high sensitivity visual receptors such as residential properties and Public Rights of Way.

1.3.6.9 Further to the west and immediately adjacent to the South Bucks District Council boundary between junction 5 and junction 4, a further eight new gantries are proposed. One gantry will be 9.2m high (G3-03b), two gantries will be 9.9m high (G3-05 (eastbound span) and G3-08), one gantry will be 11.9m high (G3-12), one gantry will be 12.6m high (G3-03), one gantry will be 12.7m high (G3-09), one gantry will be 12.8m high (G3-05 (westbound span)), one full span gantry (G3-03a) will be 13.2m high (westbound span) and 13.4m high (eastbound span) and one gantry will be 13m high (G3-11). In comparison there are five existing gantries within this area. There is one existing gantry to be retained (G3-02) which has a height of 15.2m. The other four, of which three are full span gantries are proposed to be removed as part of the Scheme. These three gantries, at their highest point (East Bound), are considered to be similar in height to the retained Gantry G3-02. The fourth gantry (East Bound) is similar in height to the proposed Gantry G3-03b.

1.3.6.10 Therefore with reference to paragraph 8.11.25 of the ES (Application Document Reference 6-1, APP-148), it is anticipated that one gantry (G3-03) would result in a residual slight adverse visual effect on an adjacent residential property (eastbound) on Old Slade Lane and Public Right of Way. The other nine proposed gantries are considered to result in a neutral effects on views from high sensitivity visual receptors such as residential properties and Public Rights of Way.

1.3.7 *SBDC still has concerns over a number of locations and properties around the scheme. Detailed maps showing these properties will be supplied in due course. Of these, the sensitive locations are Dorney School Village Hall and Play Area, Amerden Caravan Park, the farm in Old Slade Lane, Richings Park and the Animal Sanctuary on Lake End Road. Additionally, residents of Dorney have voiced their concerns relating to the increase in noise and vibration from the Thames Bray Bridge at Maidenhead (it is unclear how the developers plan to reduce traffic noise here) and the level of fencing alongside the motorway abutting the public footpath between Trumpers field and the Thames Bray Bridge, with there being little protection from the Motorway at this location.*

Highways England Comment

- 1.3.7.1 Through a combination of mitigation measures such as the provision of low noise surfacing to all carriageways, the provision of additional noise barriers and the replacement of existing noise barriers, the magnitude of impact for the Scheme on noise levels is minor beneficial in the short term and negligible 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; this is reported in Chapter 12 of the ES (Application Document Reference 6-1, APP-152). This assessment includes the areas highlighted by South Bucks District Council; further more specific details are provided below.
- 1.3.7.2 Sheet 10 of Drawing 12.4 (Application Document Reference 6-2, APP-266) shows the noise impacts across Dorney School Village Hall and Play Area, Amerden Caravan Park, the Animal Sanctuary on Lake End Road and the public footpath adjacent to Trumpton's Field, resulting from the operation of the Scheme on opening. Sheet 10 of Drawing 12.5 (Application Document Reference 6-2, APP-270) shows the noise impacts across the same areas resulting from the operation of the Scheme in the long term.
- 1.3.7.3 In the short term, these areas will experience negligible (< 1 dB) or minor (1 to 3 dB) noise decreases with the Scheme in operation (i.e. on Scheme opening). In the long term, these areas will experience negligible noise decreases (negligible being defined as 0 to 3 dB change in the long term).
- 1.3.7.4 The short term noise impacts of the Scheme on opening for Richings Park and the farm on Old Slade Lane are presented on Sheet 13 of Drawing 12.4 (Application Document Reference 6-2, APP-266), whilst the long term impacts are captured on Sheet 13 of Drawing 12.5 (Application Document Reference 6-2, APP-270).
- 1.3.7.5 In the short term, these areas will experience negligible (< 1 dB) or minor (1 to 3 dB) noise decreases with the Scheme in operation (i.e. on Scheme opening). In the long term, these areas will experience negligible noise decreases (negligible being defined as 0 to 3 dB change in the long term).
- 1.3.7.6 In addition, it is noted in paragraph 12.4.112 of the ES (Application Document Reference 6-1, APP-152) that there is the potential to improve further the noise climate within the Scheme corridor. A qualitative appraisal of an enhanced noise mitigation study to achieve this is provided in Appendix 12.5 of the ES (Application Document Reference 6-3, APP-351). This enhanced noise mitigation study comprises the optimisation of the proposed noise barriers, including the possible provision of additional noise barriers and the possible replacement of some existing noise barriers with higher noise barriers.

- 1.3.7.7 The quantitative assessment for the enhanced noise mitigation study is based on a detailed cost/benefit analysis, the results of which are provided with the submission at Deadline V.
- 1.3.7.8 Highways England confirms that the areas highlighted by South Bucks District Council were subject to the assessment undertaken as part of the enhanced noise mitigation study. The confirmed barrier provision in these areas is detailed within Appendix E of the Enhanced Noise Mitigation Study Report (Ref 514451-MUH-00-ZZ-RP-EN-400158). Sheet 10 is relevant to Thames Bray Bridge, Amerden Caravan Park, Trumpeter's Field, Dorney School Village Hall and Play Area and the Animal Sanctuary. Sheet 13 is relevant to Old Slade Lane and Richings Park.
- 1.3.7.9 Sheet 10 shows that the results of the enhanced noise mitigation study, for the eastbound carriageway, are no barrier over Thames Bray Bridge, 280m of new 3m high noise barrier at Amerden Lane and 600m of 3m high noise barrier replacing the previously proposed 2m high noise barrier to the west and east of Marsh Lane Bridge. For the westbound carriageway, the results of the enhanced noise mitigation study show no change to the proposed noise barrier design at Lake End Road, 336m of 3m high noise barrier replacing the previously proposed 1.8m high noise barrier at Dorney Reach, 277m of new 3m high noise barrier along Trumpeter's Field and no barrier over Thames Bray Bridge. Sheet 13 shows no change to the proposed noise barrier design at Old Slade Lane.
- 1.3.7.10 With regards to the noise and vibration from Thames Bray Bridge, previously highlighted by residents, it is likely caused by vehicle interaction with the bridge expansion joints, loose drainage chamber covers and existing bridge surfacing. It should be noted that unusual, localised effects such as these are not covered in the method for the calculation of road traffic noise levels employed in the noise assessment for the Scheme as it would be extremely difficult, if not impossible, to accurately predict this type of noise.
- 1.3.7.11 Highways England acknowledge that these types of localised effects may never be entirely eliminated. However, consideration is being given to proposals to reduce the impact of these localised effects. For example the existing drainage system on the bridge includes chambers at the corners of the bridge the covers for these chambers are within the live traffic lanes of the motorway. The detailed design for the modified drainage system will relocate or remove these chamber covers to eliminate this source of noise, as secured by paragraph 12.3.9 of the updated Outline Construction Environmental Management Plan ("CEMP") which is provided as part of the Deadline V submission. As part of the bridge widening works, the Scheme will also replace the bridge expansion joints, as secured by Works Description Number 9b in Schedule I of the draft DCO which is also provided as part of the Deadline V submission. However, the function of these joints is to accommodate movement of the bridge deck and as such any replacement joint will always include a discontinuity in the motorway surface and therefore Highways

England cannot guarantee that the new joints will solve this localised noise issue.

1.3.8 *SBDC requests further clarification on the cumulative impact of the scheme on the District, especially in relation to spoil, likely traffic routes, additional time delay, bridge closures and work scheduling.*

Highways England Comment

1.3.8.1 An assessment of the potential overlap of the Scheme with other major schemes within the area has been detailed in the response to the Examining Authority's second written question 4.9.1.

1.3.8.2 In acknowledgement of any potential periods of conflict between the Scheme and other major schemes in the District, Highways England has included paragraph 13.5.2 in to the updated Outline Construction Environmental Management Plan ("CEMP"), which is provided with the Deadline V submission. This paragraph outlines appropriate actions that the contractor will undertake should a clash of construction programmes arise with another Scheme. Paragraph 13.5.2 states:

"The Contractor will take appropriate actions, including the design and installation of traffic management schemes:

- *to ensure safe passage of all traffic through the required road works;*
- *to reduce the likelihood of 'rat running' onto local roads, which may have result in adverse impacts upon the local community;*
- *to mitigate impacts on the local road network and communities and to keep delays and disruptions to traffic to a minimum; and*
- *to mitigate the effects of the authorised development on traffic in combination with the effects of the concurrent construction of any other major developments, including HS2 and HEX."*

1.3.8.3 The above actions are outlined to minimise the cumulative impact of the Scheme on the areas in which work is being carried out.

1.3.8.4 With regards to construction routing for the Scheme, an assessment is currently being undertaken to identify potential routes and the associated traffic impacts to the local network as a consequence of using those routes. This assessment will review each of the bridge sites and construction compounds separately and then cumulatively when based against the Outline Construction Programme Rev M submitted as Appendix 4.1 to the ES (Application Document Reference 6-3, APP-292).

1.3.8.5 Following the completion of the assessment, further clarification will be available on the issues raised above by South Bucks District Council.

1.3.9 *In relation to the updated DCO SBDC has no issue with the Secretary of State giving approval however we require that we are consulted on each issue prior to approval.*

Highways England Comment

1.3.9.1 Highways England confirms that an updated version of the draft DCO detailing the consultation under each requirement has been submitted at part of the Deadline V submission.