

High Speed 2 Phase 1
London – West Midlands
Environmental Statement

London Borough of Camden
Comments on the Environmental
Statement

PART I SUMMARY
accompanied by
PART II SCHEDULE of
DETAILED COMMENTS

1. Introduction and Camden context

- 1.1 This Covering Response is Part I of London Borough of Camden's response to the consultation documents comprising HS2 Ltd.'s **London – West Midlands Environmental Statement** (ES). Part II is the accompanying detailed response set out in the table attached. Both documents should be read together as consisting of the London Borough of Camden's response to the ES.
- 1.2 In the time given to consider and respond to the ES, Camden has scrutinised the content of the ES as extensively as possible. It is the Council's opinion that, for the reasons set out below and detailed in Part II of this response, the ES is defective and fails to meet the requirements of both Standing Order 27A and the EIA Directive.
- 1.3 The London Borough of Camden (Camden) is the local authority for the area which includes Community Forum Areas 1, 2 and 3 (CFA1-3) within the HS2 Environmental Statement.
- 1.4 Camden contains, amongst other receptors (i.e. the reference group or physical resource in question): broadly 80% of all the properties directly affected by the HS2 route; the greater part of the HS1-HS2 Link above ground; the route's most complex pattern of interrelated impacted economic activities; the most dense and complex traffic and utility diversions; by far the highest density of construction works and work activities; and the London HS2 terminus of Euston Station. Because of the high density of our inner city population and the juxtaposition of the HS2 route the great majority of people directly and indirectly impacted along the entire route of the HS2 project are found here, in Camden.
- 1.5 Camden's views on the Environmental Statement therefore need to be specifically acknowledged and given very significant weight.
- 1.6 The Council evidences in its responses that the unprecedented enormity of the ES, said to be the largest ever undertaken in the UK, does not of itself make it complete, fit for purpose or compliant. It is not.
- 1.7 It is important not to be beguiled by its scale into thinking that that very scale infers that it must be of commensurate quality. It is not.
- 1.8 The sheer size and scale of the HS2 scheme means it is vital that an ES is undertaken to allow the decision-maker, in this case Parliament, the ability to understand the impacts of the scheme on the environment around it. These environmental impacts to be assessed relate to a myriad of influence the scheme will have on issues such as the built environment, social, financial, heritage, the ecological systems and many more. Its impact on people and communities will be severe, wide ranging and long lasting.
- 1.9 In Camden Council's opinion the ES does not adequately report or assess the true extent of the impacts of the scheme due to its failure to identify and

describe relevant baseline information, the wrong methodologies being used both leading to unsound and inadequate suggestions for mitigation (if made at all), and a failure to assess the likely significant effects and consequently a failure to propose effective mitigation measures. This results in a defective document that does not properly inform the decision-maker of all the relevant impacts caused as a result of the scheme. As far as Camden impacts are concerned the defects and deficiencies outlined in this Part I Summary Response result in its being an “unsafe” and inadequate basis for informing what are generationally important decisions by Parliament on the HS2 project.

- 1.10 As this is the substantive Environmental Statement and not now susceptible to external change, the Council has necessarily kept its focus on identifying the defects, deficiencies, errors and omissions within the ES. The scale and nature of its response clearly evidences that these are both significant and highly material.
- 1.11 The Council notes that other documents outside the ES, but pertinent to understanding and delivering mitigation and other aspects discussed in the ES (but not detailed), include but are not limited to the Planning, Transport and Heritage memoranda. The Council reserves its right to comment on these, both separately and in view of their links to/from the ES.
- 1.12 Importantly, Camden expects to retain its planning, heritage and transport powers to control both development and the details of the railway project (such as design of vent shafts, over station development integration and lorry routes and road closures) to the maximum extent possible should the HS2 Hybrid Bill be granted Royal Assent. It would expect to be involved as early as possible in all design and transport matters, whether or not it has approval powers. Camden does not accept any statements attributable in the ES which comment or appear premised on a different approach and it retains the right to comment further on detailed matters at the appropriate time.
- 1.13 Camden’s detailed responses in Part II all cross-reference to the ES documents and sections concerned. This Part I Response draws directly from the findings of the detailed sectional reviews. It outlines deficiencies and defects in the ES and its approach that Camden Council contends undermine significantly or fatally its purpose of meeting the requirements of House of Commons Standing Order 27A and thereby fails compliance with EU Directive 2011/92/EU. Camden Council submits that the Independent Assessor appointed by Parliament should conclude that the ES does not adequately meet the requirements of SO27A and should advise Parliament accordingly.
- 1.14 In addition, Camden notes that the Secretary of State intends to establish a set of controls known as Environmental Minimum Requirements (“EMR”). The EMR will include general principles by which a commitment is given that the environmental effects reported in the ES are not exceeded by application of the environmental mitigation assessed in the ES (paragraph 1.4.5 of Vol 1

of the ES). As the ES is defective, such a commitment will not secure adequate or appropriate mitigation measures.

2. Defects and deficiencies – general themes

- 2.1 This section outlines significant defects and deficiencies that Camden Council contends undermines the basis and appropriateness of the ES. Detailed comments on a very large number of such points, and the evidentiary basis for those comments, are included and highlighted within the accompanying Part II Response, to which reference must be made.
- 2.2 Camden Council considers that these defects and deficiencies can be described under the following headings:
- i) Baseline information
 - ii) Methodology (including standards applied when assessing significance)
 - iii) Assessment
 - iv) Mitigation
 - v) Residual effects

Baseline information

- 2.3 Inappropriate, inaccurate or inadequate (and sometimes no) baselines have been used in the ES for assessment purposes in several key topic areas or by their choice of apparently affected geographies.
- 2.4 Other than being defective in themselves, such defects also have significant knock-on or consequential effects for the identification and assessment of other relevant environmental indicators or effects. An example (amongst others) is that unreliable traffic assessments have given rise to unreliable congestion, air quality and noise outcome forecasts and therefore an unreliable baseline and assessed impact on human and other receptors. The consequential need for mitigation measures, and the nature of those measures, has then been inappropriately or inadequately proposed because the traffic baseline was unreliable.
- 2.5 Camden contends that the traffic and pedestrian baseline in the Environmental Statement is unreliable due to several deficiencies in the collation of data, incomplete demonstration of the derivation of estimates and inappropriate use of models that does not follow best practice. Surveys were taken at unrepresentative times of year and not at peak times, resulting in falsely under-estimated traffic and pedestrian volumes. These errors have then been compounded by the reliance on strategic traffic modelling which has not been adequately validated or compared with more detailed local traffic modelling data.
- 2.6 The result has been a significant under-estimation of impacts in areas such as Camden Town Centre where pedestrian flows have been surveyed outside the area's actual peak of activity (midday to 5pm) causing assumptions of peak flows many times below those from the Council's own surveys (HS2's data highlights 300 pedestrians per hour in the assumed morning peak according to the Environmental Statement, compared to 6,000

per hour in the area's actual peak as monitored by the Council). In addition HS2's traffic modelling significantly under-estimates the traffic impacts during and after construction. The levels of junction capacity, traffic queues and delays at key junctions in Euston, Camden Town and other areas are reported in the ES as operating well below capacity with limited queues. The Council's own traffic modelling (which has been approved by TfL) show that many of the junctions within the project area are operating close to capacity and further traffic would lead to increased queues and delays to all vehicles including buses.

Methodology

- 2.7 A fundamental overarching methodological defect is that the ES erroneously adopts a "one size fits all" approach to its various topic methodologies. The HS2 route of some 120+miles is characterised by very different types of places, settlement patterns, density of population, economic receptors, proximity to the railway line etc.
- 2.8 Methodologies that may be appropriate in rural areas where settlement may be sparse, countryside open, roads few and traffic light are inappropriate for dense inner city areas like Camden. Here our residential densities are high, business premises are many and complexly interrelated, the urban grain is fine and tightly meshed, open spaces are small (measured in square metres not hectares) and serve more complex social purposes. Roads are many, general traffic heavy and road-based public transport changes highly impactful and hugely important from both economic and social considerations. Camden Town, for example, which will be heavily impacted by road closures and traffic diversions, is a hub for many radial routes entering central London with numerous affected bus routes and mixed traffic delays and disruption caused by HS2 works on what is a key part of London's highway network.
- 2.9 Disruption and congestion has a wide reach, well outside the immediate area; the knock-on effects of closing an urban road or diverting a bus (usually, here, many bus routes) are legion.
- 2.10 Construction impacts and their cumulative effects of lorry movements, noise, air and light pollution etc. are in immediate proximity to houses, communities and individuals - and are also inescapable in Camden's dense urban area.
- 2.11 It is unreasonable and, frankly, wrong and misconceived, for similar methodologies to be used along such a diverse 120+ mile route without taking due and full account of the fundamental differences in the nature of places. It is inconceivable that, for example, a major planning application for commercial or infrastructure development in a rural area would be subject to the same environmental methodologies as would one in the heart of a city.
- 2.12 The ES, presumably in an attempt to be consistent along the route, utterly fails to recognise these fundamental differences in distinctiveness. It consequently "uses the wrong tools for the job"; at least as far as Camden's urban impacts are concerned.

- 2.13 This fundamental, overarching, methodological defect means that the resultant assessments, mitigation measures proposed, and residual effects anticipated are unsoundly premised and “unsafe”.
- 2.14 There are, in addition, other methodological defects. Inappropriate, outdated or other defective methodology has been used in some subject areas in the ES. Recognised “best practice” methodologies have not always been employed. These defects are discussed in the detailed comments in Part II.
- 2.15 The approach taken to using existing baseline information (whether or not that itself may be defective or unreliable) has in some key cases merely added an assessed incremental change caused by HS2 works onto the baseline. Assessment and mitigation needs have been based on that receptor increment. No account has been taken of the cumulative receptor impacts or the “straw to break the camel’s back” effect of such an increment.
- 2.16 An example (amongst others) is with air quality where given areas of Camden, e.g. Euston Road and Hampstead Road, are already more than double WHO standards of unacceptability. Yet the ES merely addresses the additional increment caused directly by the project and accordingly assesses the need for mitigation against only that incremental change. There is no assessment of the cumulative impact nor is mitigation proposed that takes this into account.
- 2.17 Another significant methodological defect is in the assessment of temporary impacts. The length of time adverse HS2 project impacts are experienced in Camden’s inner city context has very different physical, economic, psychological and health effects in such a dense areas than it might in one less dense. This is compounded in Camden by the sheer amount and widespread distribution of HS2 works places and with its works activities extending over more than a decade.
- 2.18 Works are needed for any project and a major project will inevitable be built over an extended period. The ES does not seem to recognise that whilst many works will be “temporary” in concept the length of time that “temporary” impacts will be experienced here is beyond normal expectations and beyond reasonableness. The methodology adopted should be suitable for recognising these exceptional impacts, but the ES methodology does not do this.
- 2.19 The ES widely asserts that a broad range of such acknowledged impacts will only be “temporary”. Being “temporary” seems, from the ES, to absolve the methodology from acknowledging, assessing and proposing specific remedies for them. In a number of cases “temporary” may be ten years with the cumulative construction period extending to 11 years. It is an inappropriate and unreasonable basis to apply an Environmental Assessment suite of methodologies to Camden circumstances without taking full account of this reality.

- 2.20 A further methodological defect is that much of the ES work is addressed and reported in a topic specific manner without a description of the interrelationship between the different factors, and without identification or assessment of secondary and indirect effects. An example was given above, when commenting on baseline defects.
- 2.21 By its nature an ES should effectively address inter-relationship impacts; the HS2 ES often significantly fails to do so.

Assessment

- 2.22 The assessments appear in some important (to Camden) matters, such as construction traffic and utilities works requirements, to significantly underestimate those impacts when they are considered against broadly comparable experience elsewhere. The ES assessment arithmetic seems to take little account of, for example, practical industry realities that several different agencies (e.g. HS2 project, water, gas, electricity and telecom undertakers etc.) will be involved in works activities of this nature, each with their contractors and sub-contractors, and many will not be under the direct control of HS2. The council believes that the consequential impacts and need for mitigation are therefore either not recognised or under assessed in the ES work.
- 2.23 Many impacts on receptors, especially on human receptors, are clearly stated in the ES as being “significant”, “severe” or otherwise recognisably detrimental. The ES is all too often entirely silent thereafter, with no link to or proposals for mitigation. With the quantum of people affected in this dense urban area, and with the railway and its works everywhere around them, this lack of comprehensively identified mitigation is entirely unacceptable.

Mitigation

- 2.24 The identification of mitigation need is directly influenced by the appropriateness, nature and quality of work done at the earlier baseline, methodological and assessment stages to which adverse comment, for example on traffic assessment, has already been made, above.
- 2.25 It follows that the quantum, nature and form of necessary mitigation identified in the ES is often grossly inadequate as a result of this defective baseline. The ES often seems rather to assume that the very identification of need for a mitigation solution would lead inexorably to its delivery. In most cases, however, the ES is essentially silent in identifying actual mechanisms for delivering mitigation or it presents mitigation possibilities without adequate qualifications on the probability of their achievement.
- 2.26 The ES gives the impression that effective consultation and engagement has been held with the Council such that various mitigation measures, especially in relation to housing and schools, are well on-track towards agreement. Whilst some discussions have been held the matters are yet far from agreement and the ES is presumptuous in implying otherwise.¹

¹ Please see Part II, for example CFA 01 – paragraph 2.4.21 & 5.4

- 2.27 One aspect upon which the ES is essentially silent is the timing for implementing mitigation measures, in general and in the particular. There is little acknowledgement or assessment of the lead-times necessary to put effective mitigation in place. An example is in replacement housing or schools where significant time is required to authorise, build and commission the new facilities before the previous sites can be released for HS2 project works. Without that dimension having been assessed there is a further lack of confidence that the ES is robust in terms of its mitigation needs provision.
- 2.28 Mitigation proposals without identification of potential, realistic, mechanisms for their implementation have little real worth; and have no worth in helping to build public confidence.
- 2.29 Mitigation in the ES is addressed in terms of direct cause and effect with the impact identified (albeit with the defects mentioned earlier in this response). In effect, a specific problem is proposed to be mitigated with a specific solution. This approach does not, however, address the *cause* of the problem; the ES does not look back to the cause, only at the effect. The result is that no challenge or evaluation is undertaken to identify events, proposals or designs that could generate different downstream impacts if they were reconsidered from that viewpoint. The Council considers this a fundamental deficiency in the ES approach.
- 2.30 An example (amongst many) is the impact of construction works sites in Camden which, especially in the Euston area are numerous, widespread and long-lived. The sum of these, their construction traffic, congestion, noise and other adverse impacts on a dense pattern of receptors will have a devastating impact on the locality and wider. Without a proper assessment of these cumulative impacts and a holistic mitigation strategy to deal with them, rather than the more simplistic approach taken by the ES to assess sites essentially separately, the ES fails adequately to address the requirements of the Directive.
- 2.31 The mitigation solutions do not even pose the question that a different approach to the nature and distribution of, for example, works compounds to reduce their number and direct effects, ameliorate their lorry impacts, facilitate community safety etc. might thereby be the better mitigation approach.
- 2.32 Issues such as the community safety consequences of so much work and so many works sites within a single neighbourhood are neither identified nor are mitigation solutions proposed.
- 2.33 This failure to provide an adequate description of the mitigation measures proposed is found widely throughout the ES and is a fundamental defect in how it addresses mitigation. It has an especially deleterious effect in Camden.

2.34 There is a further mitigation defect, being the matter of circular argument. Many of the specific mitigation requirements identified in the ES are then immediately cross-referred for their remedy to, for example, the draft Code of Construction Practice (CoCP). That draft Code is, though, fairly generic and conceptual, merely referring mitigation needs in individual cases back to their original context for detailed measures to be developed. Thus mitigation references which claim to rely on the provisions of the draft CoCP fail because that Code is, by its very nature, not the vehicle for addressing those individually detailed mitigation solutions. This gap is a significant defect in the ES approach.²

Residual effects

2.35 The identification of residual effects obviously and causally depends on the scope and quality of the preceding ES work stages; their defects have been discussed above.

2.36 Of especial significance in this regard is the ES's lack of identification of residual effects on human receptors; many people will remain adversely impacted even after mitigation measures have been applied. Living cheek by jowl for more than a decade with what is said to be the largest infrastructure works activity ever undertaken in Britain will take an individual and community toll. How could it be otherwise?

2.37 The consequential residual effects from such "nuisances" on all aspects of local peoples' quality of life, including community cohesion and community safety are not addressed in the ES; it is silent on this fundamental matter.

2.38 In like manner, residual effects on the economic and community facilities infrastructure are not addressed.

Alternatives

2.39 Camden Council notes that the content in the ES which claims to address potential "alternatives" to the various proposals and approaches adopted for HS2 is deficient in quantum, scope, analysis and justification.

2.40 The ES's "Alternatives" volume is very slim. It covers potentially different approaches to only a very few topic areas or aspects of the project. Other alternative approaches are mentioned within the body of the wider ES document suite. Individually and together, however, Camden considers that they are reported and analysed at a highly superficial level with inadequate evidence to justify why they have not been adopted. An example is the rejection of tunnelled options for the eastern part of the HS1-HS2 Link.³

2.41 It seems questionable and perplexing, however, why a complex national scale project like HS2 has only identified such a small number of areas and issues for which the identification of alternatives has been considered relevant. In this Covering Response document Camden Council identifies

² Please see the Council's response to the COCP in Part II, particularly Table 1 detailing technical comments in Chapter Order

³ See Volume1, paragraph 10.4.55 of the ES and Part II of the Council's response at Volume 1, paragraph 10

several areas where a different approach to aspects of the project might have good potential for changing its adverse impacts. An example is the way in which construction works activity in the Euston area is described in the ES as needing multiple works compounds in a close proximity. This is presumably based on a certain engineering approach to undertaking work from a technical efficiency viewpoint. It results, however, in a widespread and highly impacting series of adverse impacts on residents and businesses throughout a wide area for more than 10 years.

- 2.42 There would, surely, be other works approaches and working methods that would generate different patterns of compounds and impacts if the project had addressed, and assessed through the ES, the issue of how best construction impacts on the local community could be minimised if that point was afforded greater consideration and weight. Such alternative would undoubtedly generate different numbers, patterns of distribution and impacts arising from land-take, construction traffic, noise, changed air quality and disturbance, amongst other matters.
- 2.43 The ES fails adequately to address alternatives and fails to meet the requirements of the Directive in this respect.

3. Defects and deficiencies – topic specific examples

Euston Station and area

- 3.1 The ES does not analyse or explain the rationale behind the size proposed for Euston Station. The number of new platforms for HS2 and residually retained for “classic” services are not justified in the ES; the ability of the combined station proposal to actually “work” in terms of passenger demand and train operations is fundamental to the scheme but this is not adequately addressed.
- 3.2 The supporting station facilities of passenger concourse, servicing arrangements, the bus and taxi services needs etc. are also not justified.
- 3.3 The HS2 Phase 1 adopted line capacity of 18 trains per hour peak one way flow is shown in the ES as applying as far as and into Euston Station. That line capacity is, however, caveated that services to/from the HS1-HS2 Link or elsewhere (presumably potentially including Heathrow Spur) would need to be included within that overall 18 tph capacity. The ES does not address how this issue relates to the design capacity assumption for Euston Station which, taking account of those other routed services, would presumably not receive or dispatch the full 18tph in each direction. If so it would thus need fewer platforms and could be a smaller station. This is a material issue for station site footprint and the station facilities needed at Euston, one of the most significant issues in Camden, but the ES is silent on it and leaves the matter unclear.
- 3.4 The ES does not analyse or assess the demand for passenger movements entering and leaving the station on foot. No assessment is made for passenger demand between Euston station and the major St Pancras and

Kings Cross stations, all in close proximity and where interchange demand could be expected to be significant. There is no assessment of the capacity of connections to the tube railway network or whether that network has sufficient capacity to handle passenger demand. There is no means through the ES, because of the deficient assessment, of understanding when or whether additional supporting travel infrastructure such as Crossrail 2 may be required. There is no assessment of pedestrian or cycles movements generated in the wider area or the sufficiency of proposed changes in related infrastructure. As a result of these deficiencies, the ES does not assess the likely significant environmental effects that will arise as a consequence of passenger movements.

- 3.5 The ES does not address, other than highly superficially, the relationship between HS2 and classic rail at Euston despite their obvious interdependence in providing an integrated station⁴. This point crosses many areas of Camden's concerns and the lack of inclusion within the ES of the classic railway at Euston and environs is a fundamental deficiency.
- 3.6 The ES does not consider or assess whether the major construction stage impacts to the district arising from Euston Station might be alleviated by siting more works compound provision within the station site by adoption of alternative railway provisions to generate working space, such as by temporarily terminating HS2 services at Old Oak Common or diverting some classic train services. This could contain works rather than spread them more widely across the district. Such measures could mitigate the adverse impacts of work compounds, traffic etc. across the wider Euston area currently proposed by HS2. It could also help allow for more comprehensive development of Euston station to help mitigate the deficiencies of the proposed scheme.
- 3.7 The ES gives no consideration or makes any assessment of the use of rail haulage for the movement of works spoil or construction materials; rather it assumes road haulage. The point applies especially to Euston but also for other works generated by HS2. The failure to consider rail as an alternative means of transport constitutes a failure to consider alternatives and/or a failure to consider appropriate mitigation measures and represents a major deficiency in assessment. In any case HS2 is a railway project and turning its back or being silent on the use of the railway's intrinsic capabilities is inexplicable. The use of road transport alone would, of course, have a highly significant traffic and other impact across north London as well as locally.
- 3.8 The Council has consistently opposed the concept and design of the proposed Option 8 station (the basis of the ES scheme). It is clear from the ES that a holistic view has still not been taken of the HS2 and classic stations nor with proper account taken of the Euston Area Plan, despite the ES implying otherwise.

⁴ Please see the Council's response in Part II against Volume 1, paragraph 6.25

- 3.9 Without such a holistic assessment it is not possible to understand how suitable interfacing structures, services, access and other key matters would be accommodated to enable a fully integrated development to incorporate the major combined station. The ES is silent on these considerations for what is potentially one of the largest and most important sites in London.
- 3.10 The Council reserves its right to bring forward an alternative proposal/s for Euston Station that better addresses these deficiencies.
- 3.11 The totality of construction works generated by the termination of HS2 at Euston station have an especially severe and concentrated impact on those communities immediately north of the station, for example adjacent to the station “throat” on either side of Hampstead Road bridge and those adjacent or close to the cutting up to Parkway Tunnel. They will be subjected to multiple works extending over some of the longest periods of the project.
- 3.12 In addition to the quantum of works for this area described in the ES, the ES also alludes to the need, where necessary, for 24-hour working when particular complexities or issues require it. The interface with Network Rail’s infrastructure in a congested area and the necessary changes to its operation, caused by HS2 requirements and the imperative need to keep classic services running effectively during the HS2 works, seem to Camden Council likely candidates for triggering 24-hour works activities.
- 3.13 The need for engineering efficiencies and imperatives in boring the HS2 tunnel, building its portal and headhouse, rebuilding and enlarging two major bridges, major diversion of utility services and the wide range of other closely interrelated major works activities in this area, many of which interface in some way with the operating railway suggest further reasons why 24-hour working may be felt necessary to maintain the HS2 programme.
- 3.14 Camden Council’s inescapable conclusion is that the high percentage of the lengthy construction programme in this whole area will require 24 hour working, Major disruption and impacts on adjacent communities from this and from the quantum or works activity in general appears inescapable.
- 3.15 The ES does not adequately or openly acknowledge the likely realities of working patterns here, does not reflect their compound impacts, does not assess them in the round nor propose effective mitigation commensurate with the scale of impact. Importantly, it does not adequately recognise or address residual impacts on those communities.

Camden Town and HS2-HS1 Link

- 3.16 There is no reasoned justification or need assessment provided in the ES for the HS2-HS1 Link nor is there any effective assessment of alternatives to the viaduct route. Tunnel options are asserted to have been considered but no evidence, analysis or visibility is given to these in the ES. There has, in particular, been a failure to set out the main reasons for the choice of the viaduct route, and a failure to identify the environmental effects taken into account when making the choice. Several of the apparent reasons given in

the ES for the choice relate to asserted community impacts. These would undoubtedly be matters where the relevant local authority (here, Camden) and its representatives would be expected to have great knowledge, an opinion, give advice and generally be central to those community judgements at options appraisal stage. Unfortunately, HS2 did not engage with the Council and the ES report of alternatives fails to take account of this key dimension.

- 3.17 The viaduct widening and bridge replacement works will have a direct impact on the rapidly growing London Overground and freight rail services. The ES states that the viaduct lines will be frequently or continuously closed, requiring service cessations for passenger trains diversion of freight trains. 160 mid-week and a “small number” of weekend closures are cited, together with a “10-14 day closure”. Camden Council considers these to be significant on such a busy and growing route. The ES provides no recognition or assessment of these impacts or of the adverse social and economic impacts that they would cause. Passenger or freight diversion impacts are not considered; passengers having to find alternative routes would clearly impact on other parts of the transport network. As a consequence of the lack of assessment no mitigation measures are proposed. This is a significant deficiency of the ES.
- 3.18 The Link works, especially the many bridge replacements, will have major disruption consequences over an extended period for many businesses and communities and will affect a wide area of North London. The ES does not address this with appropriate baseline information or through appropriate methodologies; as discussed earlier, the traffic baseline information is unreliable. This means that the consequences for widespread traffic congestion, community impact and on the complex local economy are not adequately identified, assessed or appropriate proposals made for mitigation.
- 3.19 The fine grain of the local impact of these bridge works and resultant traffic diversions, congestion and disturbance will have widespread and deep impacts on peoples’ quality of life in the area and on businesses. The ES has not used methodologies or assessments that are appropriate for identifying or assessing these directly consequential wider impacts. They are either not assessed or under-assessed.
- 3.20 The ES does not recognise and takes no account of the cumulative impact of the Link proposals taken together with the major work to be undertaken in rebuilding the nearby Camden Town tube station. Its closure, the traffic diversions and related impacts have not been taken into account in the ES.
- 3.21 The ES identifies but offers no effective mitigation to local receptors for the proposed construction works for the Link tunnel portal, to be undertaken over an eight year period in an area close to residential properties, especially in Juniper Crescent.

Kilburn and Primrose Hill

- 3.22 The proposed route through this section of Camden is in tunnel but the ES inadequately addresses the potential environmental impacts of tunnelling work on properties above or adjacent the tunnel line. It does not assess the probability of adverse effects or the differences between different prospective tunnelling methods in respect of their impact, e.g. potential ground settlement, ground borne noise or vibration. A purpose of an ES is to identify potential effects from major works for purposes of both information and assurance to the community. The lack of a clear identification of potential effects, and their probability, in the ES causes it to be deficient and has caused community stress. An example of this deficiency can be found in the lack of assessment of impacts of tunnelling on the Grade II* listed Alexandra and Ainsworth Estate. The unusual structural design of this estate, comprising a monolithic mega-structure constructed from pre-cast concrete, should have been taken into consideration when assessing the potential impacts and effects from tunnelling, but hasn't.⁵
- 3.23 Two tunnel vent shafts are identified by the ES in this section of route, at Adelaide Road and Alexandra Place. These are large and intrusive structures with significant local permanent and construction stage impacts. The ES gives some recognition to this but its assessments and mitigation proposals for both stages in each place take insufficient account of the local impacts.
- 3.24 The ES assessment takes inadequate account of the road closures impacts of the works and does not consider effective mitigation. As an example there is an inadequate assessment of the effects arising as a result of the full and partial road closures of Adelaide Road proposed for several months. In particular there is no adequate assessment of the impact on buses and general traffic nor the consequential diversion congestion effects, and any consequential air quality, noise and other effects. This means that the ES has inadequately considered mitigation possibilities such as, for example, adjustments to the proposed construction working methods in order to retain some residual through traffic capacity in Adelaide Road during the works period.
- 3.25 The ES assesses no impacts and therefore proposes no mitigation measures for Adelaide Road Local Nature Reserve despite the vent shaft and construction compound being placed adjacent to the site. Camden Council considers that there will be significant impacts on ecological integrity and habitat quality at the LNR and that this will have significant consequences on its function; the ES approach is deficient.
- 3.26 The ES does not assess the cumulative community impacts at Alexandra Place, where the vent site is adjacent to high density housing and on a difficult to access site. The construction stage will greatly impact on residents in many ways but the ES fails adequately to assess this total impact or the permanent effect of the vent shaft at the entrance to the estate. As an example of the lack of detailed community consideration and understanding

⁵ See the Council's response in Part II in CFA 03 - Paragraph 6.3.51

evidenced in the ES, the demolition of the existing buildings for the vent shaft will result in the loss of a launderette – but this is vital to the entire estate which was built without provision for washing machines in the flats

Borough-wide construction impacts generally

- 3.27 Camden is widely and in major ways affected by the overall and continuous construction programme for HS2 of 10+ years. The ES fails to take adequate account of this systemic impact on a dense and complex urban area and does not address or assess it holistically. It fails to identify or assess what would be the beneficial mitigation achieved by a different, shorter, construction programme. Such an approach would have identified numerous changes that could have led to better mitigation and thereby less impact on Camden's beleaguered communities.
- 3.28 The ES does not clearly identify those areas which will likely suffer major and regular 24hour site working nor to address these impacts on sensitive receptors, including the many nearby residents who will be directly impacted. The ES asserts that there will generally be limited, defined, working hours across the project; this is however caveated to the effect that where circumstances require it longer, including 24hour, working can be expected. By the nature of the works and inter-related activities described in the ES it can be expected that many areas in Camden, especially but not limited to Euston, will be subjected to a 24hour work pattern. These even more adversely affected receptors are not identified, impacts not therefore assessed and mitigations measures not developed. This is completely unacceptable and a major deficiency of the ES.
- 3.29 The ES fails to assess construction impacts in a cumulative manner taking account of all aspects of the HS2 works activities. Cumulative impacts will be experienced especially severely in (but not limited to) Ampthill Estate, Park Village East and the other communities near Camden Cutting. Traffic generation from multiple works sites within fairly close proximity is also not considered cumulatively. Consequentially, receptor impacts are under-assessed and mitigation proposals inadequate. This is a major ES deficiency that has significant consequences for congestion, noise, air pollution and community disturbance.
- 3.30 It is unclear to Camden Council how the ES has derived levels of construction traffic in terms of matters such as numbers and types of vehicles and assumed loads. There is a lack of evidence to demonstrate the accuracy of estimated construction traffic levels, which appear to the Council as having been under-estimated⁶. The approach to minimising construction traffic (for example by recycling waste and using sustainable transport modes) is also inadequate.
- 3.31 Some of the construction routes proposed would use inappropriate roads, such as Drummond Street, which is a type 4 undesignated road, and others

⁶ See, for example, the Councils response in Part II to Transport Assessment (TR-001-000) Traffic and Transport Part 3: London assessment, paragraph 6.4.199

throughout the borough that are residential in nature⁷, which are also not suitable for construction vehicles or traffic diversions. The routes identified are frequently off the Strategic Road Network and would also impact on the road safety of vulnerable user groups such as pedestrians, cyclists and children. In many instances the traffic impacts of worksites would interact with each other creating larger more severe cumulative impacts for example road closures and diversions.

- 3.32 In addition to this, the under-estimation of the impacts and over-optimistic programming assumptions of construction-related activities such as utilities works and the under-estimation of the traffic baseline have the potential to compound impacts in a manner that has not been adequately assessed. This under-estimation of construction traffic impacts; their inter-play with other construction activities and the under-estimated baseline conditions have the significant potential to significantly worsen the construction impacts on sensitive business communities around Euston (such as at Drummond St, Chalton St and Eversholt St) and Camden Town Centre.
- 3.33 It also impacts more severely on residential areas such as the Regent's Park Estate with multiple impacts in terms of severance, noise, air quality and road safety and generally causes more severe impacts than set out in the ES, such as during the development phase scenarios set out in Section 12 of Volume 2 for CFA's 1, 2 and 3 beyond the impacts identified during peak/high levels of construction traffic generation at Euston, combining with road closures and diversions at Chalk Farm Road (and potentially Camden Road/Royal College St) and Adelaide Road across all three CFA's.
- 3.34 The ES also underestimates impacts on buses, pedestrians and cyclists and these are inadequately mitigated. The duration and impacts of utilities works, which will cause major and widespread disruption much more widely than the project's core works activities, are significantly underestimated. The *Framework Travel Plans* proposed in the ES are vague and fail to meet best practice.
- 3.35 The ES does not provide adequate details for programme planning and does not appear to assess the impact of potential works or other overruns. These are experienced in most large and complex projects like HS2. Impacts will probably be longer and more significant than indicated by the ES due to underestimated programming and cumulative impacts. The ES does not adequately assess or propose effective mitigation to these issues. As an example, where early works are proposed as a mitigation measure, such as with Hawley school, if the intended HS2 project programme is not achieved then the school lead time requirements would potentially delay the project works or alternatively necessitate an alternative solution to be found for the school.

Health

- 3.36 Construction impacts have direct health implications for individuals and communities affected by them. While it is acknowledged that the HS2 Ltd

⁷ See the Council's response in Part II to Transport Assessment (TR-001-000) Traffic and Transport Part 3: London assessment, at paragraph 6.4.203 for examples of inappropriate roads for construction traffic.

Health Impact Assessment (HIA) is not being consulted on as part of the wider Environmental Statement, the HIA should have a key role in informing the evidence, impacts and mitigation detailed in the ES. This is evidenced by the Gothenburg Consensus (1999) which decrees that HIA should be able to 'adjust the policy, programme or project in such a way as to maximise positive and minimise negative health impacts'. The ES fails adequately to take this into account through the means of assessment or mitigation.

- 3.37 The individual and cumulative impacts of such a long term and impactful construction project upon people and communities from various directly related physical and psychological impacts should not be underestimated. This will undoubtedly impact on community cohesion and perhaps community safety. The ES is silent on appropriate methodology, mitigation and ameliorative measures to address these. As an example, community use public spaces and community facilities are widely recognised as helpful in this respect but the ES is again silent on these as potential mitigation nor has it undertaken an assessment of their retention or re-provision in this regard.

Business and Socio-Economics

- 3.38 The ES fails to provide a comprehensive or adequate socio-economic baseline. Technical information is drawn from a limited number of sources including only basic employment/ business/ property data. The baseline assessment does not follow the approach set out in the Scope and Method report at Volume 5. In particular, the baseline has failed to consider stakeholder views, has failed to cover in adequate depth a range of socio-economic indicators such as ethnic composition of communities, vulnerable groups and local enterprise and has failed to take on board local information and intelligence. The baseline therefore fails to provide a discerning basis for the assessment of impacts of the scheme.
- 3.39 The methodology used by the ES to assess the socio-economic impact of the proposed scheme is not adequate and in some cases uses inappropriate assumptions and assessment methods. The result is a flawed assessment that fails accurately to demonstrate the scope and magnitude of socio-economic effects on the environment. Examples are with the relationship between local and wider scale assessments where local scale is given lower importance. The aggregation of impact data in the ES approach masks the real outcomes on individual business and their interrelationships which are central to a thriving local economy.
- 3.40 The Council considers that the socio-economic impacts will be much greater and more severe, affecting a considerably larger number of businesses than those outlined in the ES. The assessment fails to identify the full extent of socio-economic receptors and to effectively assess the magnitude or significance of effects. The result is that the limited mitigations proposed are inadequate.
- 3.41 The ES fails to recognise or assess the impact that HS2 will have on the borough's thriving visitor economy including its arts and tourism sector; Camden's total visitor spend in 2012 was an estimated £2.1 billion, attracting

over 18,000,000 visitors in 2012. The ES makes no attempt to identify baseline data, the scale of creative and cultural industries or assess the scale of cultural heritage and unique attributes within the affected area. It consequently makes no adequate assessment of likely significant effects and offers no mitigation solutions to the direct and indirect damage that the HS2 project will cause.

- 3.42 An example is for Camden Market/Camden Lock, the second most visited tourist attraction in London, which the ES does not recognise or assess holistically but which would, as a headline destination and “brand” be significantly affected by the sum of works and associated congestion and limited accessibility. The ES fails to take into account opportunity costs to businesses.
- 3.43 Residual effects have not been adequately assessed and are expected to be markedly greater than those outlined in the ES. An example is the significant construction related disruption to Drummond Street businesses. The ES fails to address potential mitigation measures such as reducing residual effects by a more comprehensive approach to mitigation, compensation and offsetting.
- 3.44 Camden Council is deeply concerned at the ES methodological approach that businesses have the onus of mitigating the detrimental impacts of HS2 on them rather than that being the responsibility of those that cause the problem, namely the HS2 project. This unacceptably places the burden of HS2 residual impacts on businesses when it should be for HS2 to put in place appropriate mitigation solutions.

Children’s Services

- 3.45 The Council is concerned to note from the Scope and Methodology Report (SMR) that there are no industry-wide accepted methods for assessing community effects for projects of this nature. We note that for the ES methods have therefore been developed for predicting and assessing effects which draw existing guidance, analysis and methods established for other railway and large infrastructure projects.
- 3.46 As the size of HS2 is unlike any other large infrastructure project undertaken in the country Camden considers, drawing on the work in the SMR, that the assessment methods of the community effects of the project are not adequate to assess the impact here. We consider that the particular sensitivities regarding works adjacent to or near children’s services have not been adequately considered within the ES
- 3.47 The ES does not explain what is considered a permanent and what is considered a temporary effect within the assessment methodology. The length of construction works means that school-generations of pupils stand to have their education disrupted as a direct result of the proposed HS2 works. Camden Council considers this likely to be a permanent effect on both those pupils and their need for children’s services support. The ES

does not recognise or assess that in such cases “temporary” does not, in practice, correctly characterise the impacts that will be experienced.

- 3.48 The Council has identified a further 12 schools and children’s centres where it is concerned that there will be a significant effect as a direct result of HS2⁸. Some of these sites are named in the ES, but as having ‘no significant effect’, however most are not mentioned at all. Camden considers that the ES has not adequately assessed the impacts on children’s services or how, particularly in the Euston area, they will be able to continue to provide a full offer to local communities whilst construction works are being undertaken and the impact that this will have on children, young people and their families).
- 3.49 In addition to the above, the Council has particular concerns regarding the ES approach over Maria Fidelis RC Convent School. The Council believes that the school must be relocated from North Gower Street as a direct result of the proposed scheme and disagrees with the assumption made within the ES that the school will not suffer significant effects. The ES states that significant construction noise or vibration effects have been identified for Maria Fidelis due to daytime noise effects over a period of up to 41 months due to a range of major works. However, we consider that the inherent flaws in the methodology used to identify community impacts has resulted in the lack of proper assessment of the impacts for the school within the ES. The school is clearly and severely affected by cumulative works impacts.
- 3.50 The ES acknowledges that, despite its conclusion (which the Council strongly disputes) that there will be no significant detrimental impact from the range of works, “HS2 Ltd will continue to work with Maria Fidelis Convent School and Camden Council to assist the school's plans to integrate their facilities onto a single site to the east of Euston station, as soon as is reasonably practicable”. Camden Council welcomes this but notes that no agreement has yet been reached to secure a viable future for this school.
- 3.51 A further school, Hawley Wharf, is assessed by the ES not to be significantly impacted by the project works to widen the HS1-HS2 Link viaduct which abuts and will take part of the school site. The Council firmly disagrees and considers that the ES has wrongly assessed both individual and cumulative impacts.
- 3.52 Although discussions have taken place with HS2 Ltd regarding mitigating against the impact of the temporary and permanent loss of land from the new school site, including the provision by HS2 Ltd of additional land for the school to offset that being taken, the Council is concerned that the detail of this is still not clear and that no agreements have yet been reached. Until they have the future physical and operational environment for the school and its children remain problematic and its relationship to the HS2 project programme is at large.

⁸ See the Council’s response to the ES Scope and methodology report (Ref: CT-001-000/1) at paragraph 7.1.7

- 3.53 Haverstock School is specifically mentioned within the ES as having significant effect as a result of construction traffic using Haverstock Hill (air quality and noise impacts) which will serve the Adelaide Road vent shaft compound. The combination of the effects is stated as having a major adverse effect on the amenity of the school. The ES states that “HS2 Ltd will work closely with Haverstock School and LBC to identify reasonable practicable measures to mitigate the residual significant amenity effects, including discretionary, measures identified in the draft CoCP”.
- 3.54 This is an impact of which the Council was not previously aware, despite numerous discussions with HS2 Ltd on other schools matters. Mitigation measures for Haverstock School have not yet been identified in the ES nor have discussions begun with the Council with a view to addressing this impact. This is a serious defect in the assessment.
- 3.55 The Council therefore remains very concerned at the impacts on the school, such as noise and dust pollution, which could impact adversely on the health and safety of children and their families, staff and the potential loss of school viability as a direct result of young people going to alternative secondary schools to avoid the prolonged disruption around the school.

Housing

- 3.56 The ES reveals many varied impacts on housing in the borough which link into most environmental topic areas (e.g. noise, construction impacts, traffic etc.), and this section should be read with this in mind.
- 3.57 The ES has serious omissions in baseline data as utility searches do not include Camden-owned gas infrastructure. As a major gas transporter in the borough Camden Council considers that HS2 have not made a full assessment and therefore have not considered the risk of loss of heating and hot water to large numbers of sensitive receptors. The baseline information on utility infrastructure is deficient. The Council discusses this in detail within the schedule in Part II of this document but it is important to emphasise the seriousness of this omission.
- 3.58 There are a number of regeneration proposals within the Borough which will be affected by the HS2 proposals; including Abbey Road, Alexandra and Ainsworth, Langtry Walk, Agar Grove, Adelaide Road, Hawley Wharf, and Maiden Lane regeneration schemes. They are planned to be implemented across 2014 - 2023 and are therefore within the same timescales as the HS2 proposed works. The effect of delaying much needed affordable homes or investment in community facilities has not been considered as a community impact by the ES. In omitting the regeneration projects from the baseline data the ES gives a favourable view of the interrelated effects which will be experienced by the communities in question, which is wrong and inaccurate. The ES is therefore defective in failing to recognise and address these impacts on the environment.
- 3.59 The draft Code of Construction Practice states (at paragraph 13.2.10) that a noise insulation and temporary rehousing policy will be implemented. The

methodology used to trigger mitigation is unclear. Some properties have been excluded from assessment of residual impact despite having close proximity and orientation to properties included in scope for mitigation.

- 3.60 Camden Council considers HS2's methodology in predicting cumulative effects to be limited and insufficient. The description of residential properties as sensitive receptors is insufficient and inconsistent. Therefore it is not possible to rely upon any of the assessments of impacts or residual effect.
- 3.61 There is no comment on social capital impacts and severance as a result of demolition and relocation of the community. There is limited assessment of the community as a whole or impacts on vulnerable members who should have been identified through datasets such as Indices of Multiple Deprivation or Joint Strategic Needs Assessment, and therefore should be considered for specific mitigation.
- 3.62 The ES fails to provide sufficient detail of the exact properties affected by the scheme and the precise nature of impacts. A proper assessment has not been undertaken of properties that will be adversely affected, particularly with regards to cumulative interrelated impacts. Mitigation measures are either inadequate or non-existent. Camden Council has commented on the Property Compensation Consultation and identified many deficiencies, shortcomings and lack of appropriateness for the borough's circumstances. Appropriate types and values of compensation may have a mitigation role in some circumstances.
- 3.63 An example of the unclear descriptions within the ES can be taken from Camden Road. Camden Road properties are included under different sections and are forecast to experience a number of adverse effects. However, from the descriptions in the ES and the ways the impact on properties is clustered with other roads, it's impossible to gather which and how many properties are affected. CFA 2 described individual dwellings as *"16 buildings (32 dwellings) on the A503 Camden Road that are forecast to experience noise levels higher than the noise insulation trigger levels."* Under community basis *"Approximately 60 dwellings on Camden Road: cause Camden Road North bridge site preparations and works"* are subject to adverse effects on a community basis and under the community impact assessment record sheet *"approximately 10 properties on A503 Camden Road and Royal College Street are predicted to experience in-combination effects arising from significant visual and noise effects during the construction works for the replacement of Camden Road Bridge."* As a result the following difficulties arise:-
- i. It is not clear if a total of 60 dwellings are affected or 60+32+10 resulting in a total of 102 properties. It's impossible for LBC to assess which properties (even approximately) will be affected by the scheme. The blue dot on the Volume 5 Community Data maps on Camden Road give no indication of which properties are approximately affected.

- ii. Grouping Roads together differently under different categories makes it even more difficult to identify approximate properties. In this case, it is not clear how many and where on Royal College Street the properties in question are located. LBC would expect a street by street, and block by block breakdown with addresses, especially under ‘individual dwellings’ where specific properties are in question. This is also true for many other sections, for example with Chalk Farm Road which is sometimes reported on its own and in another section reported together with Castlehaven Road
- 3.64 An example of the lack of detail within the ES can be given in relation to Adelaide Road and Loudon Road. The description of impacts in CFA 3 makes it particularly difficult for the reader to determine the areas affected. Adelaide Road and Loudon Road are major roads with hundreds of properties. The ES states that “*approximately 10 residential buildings on the B509 Adelaide Road and Loudoun Road (containing in total approximately 30 dwellings) are forecast to experience noise levels higher than the noise insulation trigger levels as defined in the draft Construction Code of Practice.*” This assessment is too broad and generic to allow the reader to understand the impact identified. Adelaide Road will be affected by the HS2-HS1 portal as well as construction activities at the Adelaide Road vent shaft and is mentioned under several under ‘community impact’ categories in other section of the ES. As there approx. 250 dwellings potentially affected within 10 buildings near the proposed Alexandra Road vent shaft, it is impossible to determine the definitive addresses for the 30 properties noted. Possible buildings are as follows: 26 units on Alexandra Place, 16 units on 152 Loudon Road, 33 units on 154 Loudon Road, 46 units at Robert Morton House, 102 units at 9 Langtry Walk Hostel, 7 units at 202 Regent’s Park Road, 3 units at 1 Bridge Approach, 11 units at 2 Bridge Approach, 12 units at 19 Adelaide Rd, Bridge House at 17 Adelaide Road.
- 3.65 An example of inconsistencies within the ES can be given in relation to Regent’s Park Road where the impact of the HS2 scheme on this road is inconsistently reported in CFA 02 and CFA 03 as well as poorly presented, which makes it difficult to understand the impact on properties. The impact of demolition of 200 Regent’s Park Road is reported in the Volume 5 CFA 2 Community Data community impact assessment record sheet section “2.15 Residential property on Regent’s Park Road”, however the loss of amenity on the wider community is reported in Volume 5 CFA 3 Community Data community impact assessment record sheet section 2.1 “Residential properties on B509 Adelaide Road and Regent’s Park Road” with regards to the construction works at the HS2-HS1 Link portal. The two types of impact from demolition and loss of amenity in a specific location should be reported together, and the impacts on surrounding properties properly identified and described.
- 3.66 Finally, an example of omissions can be given in relation to Eversholt Street. Volume 5 CFA 1 Community Data community impact assessment record

sheet 2.6 “Residential properties on A4200 Eversholt Street” states that residential properties on A4200 between A501 Euston Road and Barnby Street are predicted to experience in-combination effects arising from significant air quality, noise and construction traffic effects during the construction phase, resulting in loss of amenity.” However, reporting of ‘in-combination’ effects in Volume 5 is not always related to noise effects in CFA 2 as per the Eversholt Street example and there is no indication of how long these properties will be impacted. There is no mention of this in the Volume 2 CFA 1 report.

- 3.67 More detailed work will be required to assess those blocks which experience a number of cross cutting cumulative impacts for a long period of time. These should be assessed more fully using a habitability test. Two examples are:
- i. Gillfoot within the Ampthill estate; prolonged proximity to main works, construction works compound shown at block boundary with construction traffic route alongside and shorter term utility corridors set out to the North of the block.
 - ii. The Cartmel block in Regent’s Park estate is also significantly impacted for a prolonged period as there are two major construction elements running alongside the elevations adjacent to the block, in construction of the cutting and retaining wall and Hampstead road bridge rebuilding in addition to disturbance through demolition of the red blocks, and close proximity to a construction compound and construction traffic.
- 3.68 The methodology is not sufficiently clear in identifying why some blocks have been excluded. An example of this is within the Ampthill Estate; Gillfoot and Dalehead along with four other blocks have been identified as severely impacted but Oxenholme has been excluded despite a similar proximity and orientation to proposed works.
- 3.69 The Churchway Estate has been excluded from narrative assessment of impact despite a close proximity to a satellite construction compound, long term loss of amenity, construction vehicle routes on three elevations plus precautionary or planned utility works fully surrounding the estate
- 3.70 The assessment of impacts and effects of sounds, noise, and vibration includes reference to ‘Noise Insulation and Temporary Re-housing Policy’ which has not been published. The ES is therefore inadequate. Camden Council considers that significant impacts which trigger re-housing on several occasions or for prolonged durations across the ten year construction period trigger permanent displacement but is unable to comment meaningfully without reviewing the policy referred to.
- 3.71 Leaseholders have not been considered as a community demographic within the assessment of community impacts although they make up an important part of the sustainable communities, the effect of a reduction in mixed tenure communities has not been included in the assessment of impact. As a result

of this omission mitigation measures have not been included in scope for affordable housing solutions in the local area to maintain a mixed and balanced community.

- 3.72 The Draft Code of Construction Practice, which is a supporting document, provides a 6 month period for nominated undertakers and/or their contractors to undertake assessment of construction impacts and install mitigation. This would be insufficient time to determine and implement mitigation works given the scale, complexity, and volume of impact on properties effect.
- 3.73 The ES states that “the Secretary of State is working in partnership with LBC to agree arrangements for the replacement of social rented housing that will need to be demolished for the Proposed Scheme.” Whilst options for replacement housing are being explored, the Secretary of State and HS2 Ltd. have not met milestones or made formal commitments to ensure replacement housing is built in advance of the commence of HS2 proposed works.

Noise and Air Quality

- 3.74 Limited noise baseline monitoring was carried out for the ES which has led to figures being extrapolated which do not provide a robust basis for assessment for specific areas. The ES noise baseline is not reliable and therefore deficient in this regard.
- 3.75 The ES baseline transport information for predicted traffic impacts appears underestimated, affecting predicted impacts on noise, air quality and land contamination. No consideration has been given in the ES to the impact on pedestrians and cyclists who will be exposed to significantly increased pollution levels over a long period of time.
- 3.76 HS2 will lead to dramatic increases in two of the biggest problem air pollutants, Nitrogen Dioxide (NO₂) and Particulate Matter (PM₁₀ and PM_{2.5}). This is against a background of mounting the health impacts of air pollution, and it's links to heart disease asthma and cancer as well as the fact that London is failing binding EU legal limits for NO₂, and an facing an increasing likelihood of large fines for failing to meet these limits, which may be passed on to boroughs.
- 3.77 The ES air quality baseline does not consider the risk from PM_{2.5} despite the well documented health risks from this fraction of particulate matter. Camden Council is concerned about the air quality impacts of HS2 generated traffic on residents living close to proposed works and main routes, particularly residents in Regents Park ward (to the west of the Euston site) and St Pancras and Somers Town (to the east of the Euston site) where air pollutants already contribute to increased mortality. Camden notes that the ES describes increases in concentrations of PM₁₀ but has insufficient detail on the smaller PM_{2.5}. There is evidence that PM_{2.5} enters deeper into the airway, and is thus a more important risk factor when looking at air pollution compared with PM₁₀. Neither the ES nor the HIA have attempted

to quantify the effect on Camden residents living near to Euston, where the impact is likely to be particularly large, nor on the major roads which are likely to see an increase in PM2.5 as a result of HS2.

- 3.78 The ES baseline roundly dismisses, and does not assess, adverse environmental impacts from the trains and tunnel despite industry recognition of particulate and other emission pollutions arising from train wheels, brakes etc.
- 3.79 The ES does not adopt or reference new and emerging Government policies such as National Planning Policy Guidance on noise, relating particularly to ground borne noise, LAmax metrics and for sleep disturbance. For air quality the ES would have been expected to use the latest, 2012, IAQM guidance; the ES however references to 2011. Using DEFRA background maps for 2017 and 2026 does not represent a worst case scenario as the ES asserts; they include prospective improvements which have so far not been implemented. It is unsafe to assume that they will be carried out so their adoption within the ES gives a false basis for deriving what is, in fact, the worst case scenario.
- 3.80 These weaknesses in the ES approach lead inevitably to under-estimation (or over-estimation) of background noise and air quality levels, thereby affecting the reporting of significant impacts and having different residual impacts. This will impact on the mitigation measures proposed so additional or alternative measures may be needed.
- 3.81 The ES states that, in line with its adopted methodology, a single property cannot experience 'significant effects'. Camden Council disagrees with this view and is particularly concerned that this does not take account of the type of property that may be affected, for example children's services premises.
- 3.82 There is a lack of information in the ES on how in-combination effects of construction have been accounted for. The cumulative impact of construction issues has not been adequately assessed. In particular it cannot be identified whether the residential properties in the vicinity of construction works will remain habitable during the construction phase due to a combination of environmental effects. The ES adopted methodology is not persuasive in its ability to assess combination effects and the ES itself makes little attempt to take a pan-issues approach to assessment. This is a fundamental weakness.
- 3.83 Given the scale of the individual and cumulative air quality impact arising from the HS2 project Camden Council finds unacceptable that the ES does not suggest mitigation is necessary; no justification is given for this conclusion.

Open space and ecology

- 3.84 The methodologies in the Environmental Statement used to assess the impact of loss of open space on community and for assessment of ecology do not take into account the differences between urban and rural

environments. Urban green spaces have a different value compared to rural equivalents.

- 3.85 The value of urban green spaces such as those in Euston, Camden Town and Adelaide Road is derived from their ecological, social and community benefits and as a major contributing factor to residents' mental and physical wellbeing. They have a different value, as well as much smaller physical scale, to most rural equivalents. The ES does not recognise this important difference and applies a therefore inappropriate methodology to Camden.
- 3.86 A more appropriate methodology is that based on the extensive research and evidence collated by agencies such as Natural England, Forest Research and CABI. Camden recommended such approach to HS2 Ltd but it has not been adopted by the ES.
- 3.87 The ES is not clear on the number of trees removed or affected through the proposed scheme (for example see the Environmental Baselines in the Ecology section CFA01 (7.1.2) where it just says 'mature trees'), and there is also no indication that street trees have been included in the baseline data. Camden estimates that more than 440 trees are within the safeguarding area and may be at risk. Without information as to how many trees will be affected in each area, it is difficult to accurately assess the impact on these losses. The removal of large and mature trees will have a significant negative impact on air quality, community and ecology in the area, which cannot be mitigated by the replacement of immature trees post construction.
- 3.88 The ES does not take into account that in order to mitigate the loss of housing in the Euston Area caused by HS2, replacement homes are proposed to be built on open spaces. This results in a cumulative effect of an even greater reduction in open space that will need to be further mitigated by additional space provision, albeit recognisably difficult in urban areas. Creative approaches are necessary but the ES is silent on this so mitigation is not identified.
- 3.89 The ES does not assess or propose mitigation for the loss of open spaces during the construction stage although their loss would directly and adversely affect many local users, their health and well-being. The ES indicates that Euston Square Gardens, St James Gardens, Hampstead Open Space and the woodland adjacent to Adelaide Nature Reserve will not be re-provided until post construction. The loss over more than 10 years of these key community facilities without even consideration of mitigation is a significant weakness of the ES.
- 3.90 The ES makes no attempt to assess the impacts on the inter-relationships between urban green space as a community and ecological resource, a component of natural heritage and landscape and its role in regulating local air quality, temperature and surface flooding.

- 3.91 The ES baseline data for ecological and related sites and attributes in Camden is flawed; surveys were not completed in these spaces before the ES was published and nor were seasonally required surveys completed in a timely way. Without detailed, appropriate, surveys the environmental baseline cannot be established nor the impact sufficiently assessed. This is a basic ES weakness.

Cultural Heritage

- 3.92 The historical and contemporary culture of a borough such as Camden should be assessed differently to the culture within a rural environment in order to accurately assess impact; the ES fails to do this.
- 3.93 There are a high number of omissions and inaccuracies in the ES cultural heritage sections within Camden. For example, the number of grade II listed buildings affected by direct physical impacts route-wide should read as 19 in total (with the inclusion of the grade II listed drinking fountain in St James's Gardens, which is omitted from the ES), with nine to be removed and relocated. The ES appears to downplay the value of all types of heritage assets in Camden, including listed buildings (some scheduled for demolition) and conservation areas. Numerous examples are highlighted in Camden's detailed comments. The ES fails to include copies of historic maps and other details usually expected in archaeological and heritage statements. This is a shortcoming which makes understanding and reviewing the ES difficult.
- 3.94 The Council is concerned at what it perceives as a failure to appreciate and assess the significance of all types of heritage assets in Camden, and as result fails to adequately to assess the evidential, historical, aesthetic, and communal value of:-
- i. designated heritage assets comprising listed buildings, and in particular grade II listed buildings (some scheduled for demolition);
 - ii. designated heritage assets comprising conservation areas, including their setting;
 - iii. the downplaying of the heritage significance of the 19th century viaducts and bridges in Camden Town and the impacts on these structures from the proposed HS1 Link;
 - iv. the failure to categorise the dismantling of listed structures such as memorials and monuments as demolition when no strategy has been provided for their safeguarding, relocation and reconstruction;
 - v. the insensitive and large-scale construction works affecting Park Village East, particularly the impact on outstanding grade II* properties (including their setting) which could be put at risk due to severe access issues over a sizeable period of time (for as long as seven years), with no indication of mitigation measures; and
 - vi. no assessment has been made of impacts on non-designated heritage assets comprising positive contributors in conservation areas and no mention has been made of impacts on buildings and structures on Camden's draft Local List

- 3.95 A disproportionately high number of designated heritage assets in Camden will be significantly affected through direct physical impact, including demolition. 12 out of a total of 19 directly affected designated heritage assets (listing grades I, II* and II) assets along the whole HS2 route are in Camden (see para 3.77 above). A disproportionately high number of non-designated heritage assets will also be significantly affected through direct physical impact. This is an extreme and unprecedented loss of heritage for an area. The ES does not address or assess this cumulative impact.
- 3.96 The Council is further concerned at the number of omissions and inaccuracies in the Cultural heritage sections. Examples are with the Volume 2 CFA reports, discrepancies with the maps and photomontages in the Vol 2 CFA Map Books regarding permanent and temporary works (for instance, four residential terraced properties in Mornington Terrace are shown on Map CT-05-001 Construction Phase as being required during construction, but no written mention is made of them in any section of the Environmental Statement). Often information directly relevant to Cultural heritage is unhelpfully incorporated in other sections of the Vol 2 CFA reports such as in section 9 Landscape and visual impact (for example an assessment of the loss of a grade II* listed curtilage wall and planting bed at Alexandra Place, in Para 9.4.13). These matters, amongst others, fail to give confidence that heritage issues have been adequately assessed within the ES.
- 3.97 The main archaeological impact will be the loss of St. James's Gardens' 18th-19th century chapel and burial ground; securing appropriate mitigation provision is a significant concern. There is also a need for more specialist consideration of 18th and 19th century transport infrastructure which draws upon recent best practice work exemplified by Crossrail and King's Cross Central. The ES does not address either of these adequately.
- 3.98 Across the entire route of the Proposed Scheme, the ES states a number of designated heritage assets will be significantly affected through direct physical impact, including 18 grade II listed buildings comprising six to be demolished, four to be altered and eight to be removed and relocated (the total number affected is considered to be 19, not 18, with the additional grade II structure being in LB Camden, please refer to paragraph 3.93 above). A disproportionately high number of these route-wide designated heritage assets are located in LB Camden, where 11 grade II listed buildings and one grade II* curtilage structure will suffer direct physical impact, comprising two grade II listed buildings which will be demolished, two grade II listed buildings which will be altered, seven grade II listed buildings which will be removed and relocated, and one grade II* listed building curtilage structure which will be demolished. Ten of these listed buildings are situated in CFA 01 Euston Station and Approach alone, at the heart of LB Camden and central London. The impacts and effects will be irreversible; no mitigation measures will be able to compensate for the harm to Camden's built heritage, resulting in enormous residual effects.
- 3.99 In Camden, adding to the impacts outlined above there are also a disproportionately high number of non-designated heritage assets that will

be significantly affected through direct physical impact, comprising 23 existing entries or candidates for the draft Local List which will be demolished, three positive contributors in conservation areas which will be demolished, eight existing entries or candidates for the draft Local List which will be altered, and one positive contributor in a conservation area which will be altered. Several of these non-designated heritage assets have not been acknowledged anywhere in the Environmental Statement as having heritage significance (for instance the Baynes Street and Randolph Street railway bridges, and a 19th residential terrace at 67-79 Euston Street are overlooked) although they are recorded by LB Camden as positive contributors in conservation areas or feature on the Camden draft Local List. The failure to record these statistics plus the undervaluing of local heritage shows the Proposed Scheme's lack of recognition of the significance of non-designated heritage assets to the local community and the significant contribution such buildings and structures make to the environment as a whole.

Climate and water

- 3.100 Camden Council notes that there is a large difference in construction emissions estimate between the ES and its predecessor AoS due to change in methodology. This difference inevitably questions the assessment conclusions of the ES in terms of the project's carbon generating impacts. Camden Council does not consider the carbon mitigation assumption that 2,000,000 trees will be planted by 2017 as being realistic; the ES does not explain where or how this will be done.
- 3.101 In determining the impact of the scheme on drainage, the ES assessment has not considered the high pressure already being placed on the Thames Water drainage network nor the impact of climate change on future flood risk. By failing to consider these, and the impact of reduced green spaces in the area, the ES recommendations for mitigation have not highlighted the extent of SuDS required to tackle surface water flood risk.
- 3.102 The ES gives no assessment to the risk of 'perched' water i.e. water trapped between the surface and the impermeable London Clay despite this being a known risk for potential flooding in many of the areas involved.

Draft Code of Construction Practice (CoCP)

- 3.103 This document is separate from but central to the ES and the approach taken therein. It sets out the standards and procedures that contractors of the nominated undertaker are obliged to abide by. However, as evidenced by comments in the ES, the Council believes that there are so many exceptions to the standards, such as for works necessary to be carried out outside of core working hours, that the many areas in Camden are effectively susceptible to work on a 24/7 basis and the damaging impacts that would come with this.
- 3.104 Such an approach offers no comfort to residents, businesses, schools or those who need to travel throughout the borough during the minimum ten year construction period. The Council is concerned to note that the Environmental Statement makes much reference to mitigation measures

contained within the draft CoCP and yet, being a high level document, it does not provide the specific details of mitigation measures. The detail of how the CoCP would apply locally has been delegated to the Local Environmental Management Plans; however the Council has not yet had the chance to view an example of a LEMP and therefore cannot comment on their likely efficacy.

- 3.105 Camden Council is concerned that there are many references within the Environmental Statement on reliance on the CoCP for providing mitigation measures. Camden Council does not consider that the CoCP is providing the mitigation measures that the Environmental Statement suggests will be in place. Camden Council recognises that some mitigation measures have been noted within the CoCP but do not consider these to be exhaustive in scope. Camden Council therefore expects that the LEMPs will provide greater detail and emphasis on appropriate mitigation.
- 3.106 Camden Council consider that a Health & Safety Plan should be drafted, listing all potential risks associated with construction of the development and the necessary controls.

Equalities Impact Assessment (EqIA)

- 3.107 The Council is concerned that this document suggests that equality issues are embedded in a number of policies, frameworks etc., for example, the sustainability policy or procurement strategy. Yet without extensive cross checking of these documents it is not possible to understand whether the EqIA has been done adequately. The Council considers the EqIA to be defective in that it was not undertaken properly by HS2 Ltd. but was an exercise in their document checking. This is particularly the case for a number of communities in the borough directly affected by the proposed scheme and will highlight whether HS2 Ltd have understood our communities well enough to be able to effectively assess potential impacts on people with protected characteristics.
- 3.108 In general, HS2 Ltd identify potential equality impacts and point to mitigations, but the Council considers that the mitigation measures are often so high level that it is impossible to know if they will mitigate impacts effectively, e.g. Regents Park Estate/replacement housing. Whilst it is set out that they will work with the Council to secure replacement housing, as those plans are not yet in place/agreed then it can't be known if the plans will effectively mitigate against the impacts e.g. on BME communities.

4. Access

- 4.1 The Council is concerned to note several references in the ES⁹ of sites where access for habitat surveys were “not permitted”. The Council absolutely refutes this contention that access was not permitted onto its land for habitat nor any other type of survey required to be undertaken to fully understand the impacts of HS2. In fact the Council gave permission for

⁹ For example, Volume 5 – Ecology, CFAs 1-6, Paragraph 4.3.4

access some time ago, subject to the usual Access Licences being entered into by the promoter of the Bill.

- 4.2 The Council has been in discussions with HS2 Ltd. and their consultants since August 2012 about access, seeking to agree an appropriate form of legal Access Licence suitable for access. A draft template document prepared by the Council allowing access to Camden-owned housing, schools, open spaces and highways was first sent to HS2 Ltd. on 22 May 2013. Several iterations were sent by the Council in the following months in order to try and reach agreement and allow access for surveys to take place. To date HS2 Ltd. has not entered into these documents. Any fault due to lack of access can squarely be attributed to HS2 Ltd.'s own actions, not the Council's.

5. Timescales

- 5.1 A major concern for Camden in being able to respond to this document, as well as for every authority and every affected resident along the proposed route of Phase 1 of HS2, was that the original response time to a suite of documents stretching to 55,000 pages was only 59 days running over the Christmas and New Year period when many people have been away from their homes and/or offices, compressing an already unviable and unreasonable response timeframe. Camden Council did not consider this time period sufficient to allow the public time to consider and comprehensively respond to such a large, complex and technical document.
- 5.2 However, following scrutiny of the process once it became apparent that 877 pages from the ES was missing and not provided until just prior to Christmas, the House of Commons Standing Orders Committee extended the deadline to 10 February 2014, which was extended further by the House of Lords Standing Orders Committee to the 27th February 2014. While the extra time for responding has been much appreciated, most of work was already done by this Council at the time the extension was given.
- 5.3 On that basis, it must be pointed out that in light of the significant amount of information that had to be considered and assessed in such a contracted timeframe there is a considerable risk that the Council has inadvertently overlooked an important issue simply because it did not have sufficient time to properly consider the ES as thoroughly as such an important document needs to be assessed.
- 5.4 In addition, there has been insufficient time to consider the route-wide issues with other local authorities along the line in order to ensure those impacts are properly considered and assessed in the ES. Therefore Camden Council is of the view that the ES cannot be relied upon as an accurate record of the significant environmental impacts of the HS2 scheme.
- 5.5 In light of the very restrictive initial timeframe of 59 days that the Council worked to in responding to such a multifarious, highly technical document, the Council reserves the right to refer at a later date to any omission, fault,

defect or error contained within the ES that has not been referred to in the Council's consultation response to the ES.

6. Conclusion

- 6.1 For the reasons set out in this 'Covering Response' and the attached schedule the Council considers that the ES is deficient in that it does not contain the information specified in Annex IV to the EIA Directive (2011/92/EU). In particular the baseline information is inadequate, there has been a failure to outline the main alternatives studied, the assessment of likely significant effects is inadequate, insufficient mitigation is proposed, and the assessment of residual effects is deficient being based upon inadequate baseline material, and inadequate analysis.
- 6.2 The Bill should not be allowed to proceed until the deficiencies identified in this cover note and those detailed in Appendix 1 annexed hereto, have been remedied.