



SCOPING OPINION Proposed Silvertown Tunnel



July 2014



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EXECUTIVE SUMMARY

This is the Scoping Opinion (the Opinion) provided by the Secretary of State in respect of the content of the Environmental Statement for the Silvertown Tunnel.

This report sets out the Secretary of State's opinion on the basis of the information provided in the report prepared by Hyder Consulting (UK) Limited on behalf of Transport for London entitled Silvertown Tunnel, Environmental Impact Assessment – Scoping Report June 2014 ('the Scoping Report'). The Opinion can only reflect the proposals as currently described by Transport for London (TfL) ('the applicant').

The Secretary of State has consulted on the Scoping Report and the responses received have been taken into account in adopting this Opinion. The Secretary of State is satisfied that the topic areas identified in the Scoping Report encompass those matters identified in Schedule 4, Part 1, paragraph 19 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 (as amended).

The Secretary of State draws attention both to the general points and those made in respect of each of the specialist topic areas in this Opinion. The main potential issues identified are:

- Disruption during construction phase
- Disposal of spoil
- Potential deterioration of air quality
- Effects on people travelling in the area
- Potential contamination of soil

Matters are not scoped out unless specifically addressed and justified by the applicant, and confirmed as being scoped out by the Secretary of State.

The Secretary of State notes that applicant considers that no European sites will be affected by the proposed development and consequently there will be no need to carry out an assessment under the Habitats Regulations¹.

¹ The Conservation of Habitats and Species Regulations 2010 (as amended)

1.0 INTRODUCTION

Background

- 1.1 On 26 June 2014, the Secretary of State (SoS) received the Scoping Report submitted by Transport for London under Regulation 8 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 (SI 2263) (as amended) (the EIA Regulations) in order to request a scoping opinion for a proposed new road tunnel linking the areas north and south of the Thames between the Greenwich Peninsula and Silvertown to be known as the Silvertown Tunnel ('the Project'). This Opinion is made in response to this request and should be read in conjunction with the applicant's Scoping Report.
- 1.2 The applicant has formally provided notification under Regulation 6(1)(b) of the EIA Regulations received on the 12 May 2014 that it proposes to provide an ES in respect of the proposed development. Therefore, in accordance with Regulation 4(2)(a) of the EIA Regulations, the proposed development is determined to be EIA development.
- 1.3 The EIA Regulations enable an applicant, before making an application for an order granting development consent, to ask the SoS to state in writing their formal opinion (a 'scoping opinion') on the information to be provided in the environmental statement (ES).
- 1.4 Before adopting a scoping opinion the SoS must take into account:
 - (a) the specific characteristics of the particular development;
 - (b) the specific characteristics of the development of the type concerned; and
 - (c) environmental features likely to be affected by the development'.

(EIA Regulation 8 (9))
- 1.5 This Opinion sets out what information the SoS considers should be included in the ES for the proposed development. The Opinion has taken account of:
 - i the EIA Regulations
 - ii the nature and scale of the proposed development
 - iii the nature of the receiving environment, and

iv current best practice in the preparation of environmental statements.

1.6 The SoS has also taken account of the responses received from the statutory consultees (see Appendix 2 of this Opinion). The matters addressed by the applicant have been carefully considered and use has been made of professional judgement and experience in order to adopt this Opinion. It should be noted that when it comes to consider the ES, the SoS will take account of relevant legislation and guidelines (as appropriate). The SoS will not be precluded from requiring additional information if it is considered necessary in connection with the ES submitted with that application when considering the application for a development consent order (DCO).

1.7 This Opinion should not be construed as implying that the SoS agrees with the information or comments provided by the applicant in their request for an opinion from the SoS. In particular, comments from the SoS in this Opinion are without prejudice to any decision taken by the SoS (on submission of the application) that any development identified by the applicant is necessarily to be treated as part of a nationally significant infrastructure project (NSIP), or associated development, or development that does not require development consent.

1.8 Regulation 8(3) of the EIA Regulations states that a request for a scoping opinion must include:

- (a) 'a plan sufficient to identify the land;
- (b) a brief description of the nature and purpose of the development and of its possible effects on the environment; and
- (c) such other information or representations as the person making the request may wish to provide or make'.

(EIA Regulation 8 (3))

1.9 The SoS considers that this has been provided in the applicant's Scoping Report.

The Secretary of State's Consultation

1.10 The SoS has a duty under Regulation 8(6) of the EIA Regulations to consult widely before adopting a scoping opinion. A full list of the consultation bodies is provided at Appendix 1. The list has been compiled by the SoS under their duty to notify the consultees in accordance with Regulation 9(1)(a).

The applicant should note that whilst the SoS's list can inform their consultation, it should not be relied upon for that purpose.

- 1.11 The list of respondents who replied within the statutory timeframe and whose comments have been taken into account in the preparation of this Opinion is provided at Appendix 2 along with copies of their comments, to which the applicant should refer in undertaking the EIA.
- 1.12 The ES submitted by the applicant should demonstrate consideration of the points raised by the consultation bodies. It is recommended that a table is provided in the ES summarising the scoping responses from the consultation bodies and how they are, or are not, addressed in the ES.
- 1.13 Any consultation responses received after the statutory deadline for receipt of comments will not be taken into account within this Opinion. Late responses will be forwarded to the applicant and will be made available on the Planning Inspectorate's website. The applicant should also give due consideration to those comments in carrying out the EIA.

Structure of the Document

- 1.14 This Opinion is structured as follows:

Section 1	Introduction
Section 2	The proposed development
Section 3	EIA approach and topic areas
Section 4	Other information.

This Opinion is accompanied by the following Appendices:

Appendix 1	List of consultees
Appendix 2	Respondents to consultation and copies of replies
Appendix 3	Presentation of the environmental statement.

2.0 THE PROPOSED DEVELOPMENT

Introduction

- 2.1 The following is a summary of the information on the proposed development and its site and surroundings prepared by the applicant and included in their Scoping Report. The information has not been verified and it has been assumed that the information provided reflects the existing knowledge of the proposed development and the potential receptors/resources.

The Applicant's Information

Overview of the proposed development

- 2.2 The project will provide a dual two-lane connection between the A102 Blackwall Tunnel Approach on Greenwich Peninsula and the Tidal Basin roundabout junction on the A1020 Lower Lea Crossing/Silvertown Way by means of twin tunnels under the River Thames.
- 2.3 The project is needed because existing nearby Blackwall Tunnel does not meet current dimensional and geometrical design standards; this contributes to incidents that cause the temporary closure of one or both bores, leading to traffic congestion.

Description of the site and surrounding area

The Application Site

- 2.4 The location of the project is set-out in section 1.2 of the Scoping Report. Plate 1-1 of the Scoping Report illustrates the proposed location of the Silvertown Tunnel. The application site boundary and project infrastructure is shown in more detail on drawing STWTN-ATK-GEN-XXXX-DR-Z-00002 in Appendix A of the Scoping Report.
- 2.5 The tunnel would link areas immediately to the north and south of the Thames between Silvertown and the Greenwich Peninsula.
- 2.6 The northern portal of the proposed tunnel lies in the London Borough of Newham. This portal lies close to the Silvertown Quays which lie to the east of Silvertown Way where mixed use residential and commercial development is proposed. The surrounding area, around the perimeter of the Royal Victoria Docks, comprises mixed residential and recreational uses.

Light commercial uses dominate to the south of the elevated Silvertown Way and the Docklands Light Railway (DLR).

- 2.7 The north junction tunnel approach roads would impact on a small area of derelict land that is entirely surrounded by the cement works and the embankments of the DLR.
- 2.8 The southern tunnel portal lies on the Greenwich Peninsula in the Royal Borough of Greenwich. The current land use in this area is predominantly car parking, together with the O2 arena and commercial buildings located to the north-west and a leisure facility to the south-east.
- 2.9 A gas holder (approximately 75m in diameter) is located close to the highway realignment works on the western boundary of the project.

The Surrounding Area

- 2.10 The surrounding area encompasses several industrial buildings on both sides of the Thames, it is anticipated that these buildings will not be affected. The area is currently classified as relatively deprived, but this is predicted to improve as a result of new development in the area.
- 2.11 The World Heritage Sites of Maritime Greenwich and the Scheduled Greenwich Palace lie approximately 1.5 km to the south west of the proposed site.
- 2.12 The number of routes available allowing vehicles to cross the Thames in this area are limited as there is a width restriction at the Rotherhithe Tunnel and a height restriction at the Blackwall Tunnel. These restrictions can lead to tunnel closures and delays. The existing road network in the area is struggling to keep up with increasing demand.
- 2.13 The Woolwich Ferry provides an alternative option to the tunnel for vehicles, however there are only a limited number of crossings per day and the ferry may not be ideally located for both current and future needs in the area. The lack of alternatives means that whenever there is a problem with any of the existing road crossings, traffic is forced to make long diversions in order to cross the Thames.

Alternatives

2.14 Section 3 of the Scoping Report identifies the four main options which were initially identified for assessment:

- Option A Do nothing
- Option B Demand management and maximise public transport
- Option C Lower cost road options (ferry crossings)
- Option D Higher cost road options (road tunnels and bridges).

2.15 These options were then subdivided into more specific options, from which the following schemes were shortlisted for further assessment:

- User charging at the Blackwall Tunnel (in conjunction with new infrastructure)
- A bored tunnel at Silvertown
- A new vehicle ferry at Gallions Reach
- A new vehicle ferry at Woolwich; and
- A new local road bridge or tunnel at Gallions Reach (in conjunction with Silvertown tunnel).

2.16 The above options were appraised to determine whether or not they would meet the defined investment criteria. This appraisal demonstrated that a combination of measures would be required to meet the criteria. The package identified as most closely meeting the Mayor's policies and the investment criteria was the one comprising: Silvertown Bored Tunnel; Gallions Reach Ferry; and User Charging at the Blackwall Tunnel (only with new infrastructure).

Description of the proposed development

2.17 The proposed Silvertown Tunnel would provide a dual two-lane connection between the A102 Blackwall Tunnel Approach on Greenwich Peninsula and the Tidal Basin roundabout junction on the A1020 Lower Lea Crossing/Silvertown Way by means of twin tunnels under the River Thames. The twin bored tunnels (11.0m internal diameter and 1.0km long) would be designed with a circular cross section with cross passages for evacuation at maximum 350m centres. The tunnel approaches would be cut and cover. The speed limit within the tunnel and on the approach roads would be 30mph.

- 2.18 The project would pass under the River Thames, inside an area of land that has been safeguarded for this purpose; the applicant must ensure that the boundaries of the safeguarded land are clearly identified within a plan included within the ES.
- 2.19 The Blackwall Tunnel does not meet current dimensional and geometrical design standards contributing to a high number of traffic incidents that necessitate temporary closure of one or other bore (there were circa 1400 closures in 2012). The new tunnel would be built to modern standards and would be large enough to carry vehicles of all sizes.
- 2.20 Pedestrians and cyclists would not be able to use the Silvertown Tunnel for safety reasons, but could use the existing nearby Emirates Air Line.
- 2.21 The project design and alignment provides for:
- A grade-separated, free-flow link from the A102 Blackwall Tunnel approach, to the south of Blackwall Tunnel, to the Silvertown Tunnel south portal
 - An at-grade interchange with the Tidal Basin Roundabout providing a link from the Silvertown Tunnel north portal to the local road network with direct access to the A1020 Lower Lea Crossing/Silvertown Way
 - Reconnection of Tunnel Avenue to the west of the A102 on the Greenwich Peninsula to improve local accessibility
 - Public Transport and non-motorised user links to improve accessibility and safety
 - Consideration of emergency/contingency planning including impacts on the wider network; and
 - Integration with land development proposals (e.g. Greenwich Peninsula Masterplan).
- 2.22 The northern highway arrangement is shown on Drawing STWTN-ATK-GEN-ANXX-DR-Z-00001 in Appendix A of the Scoping Report.
- 2.23 The northern arrangement would require the elongation of the existing Tidal Basin roundabout to provide a suitable tie-in for the tunnel approach road.

This modification incorporates a cut-through for southbound traffic approaching the tunnel from the Lower Lea Crossing providing a direct route through the signalised roundabout. This design would ensure that full access is maintained at the junction with all traffic navigating the signalised roundabout conventionally, apart from the aforementioned traffic flow that would cut-through the centre.

- 2.24 The southern highway arrangement is shown on Drawing STWTN-ATK-GEN-ANXX-DR-Z-00001 of Appendix A of the Scoping Report.
- 2.25 The southern section would create a free-flow connection between the tunnel and the A102 from the south only. This would be achieved by raising the vertical alignment of the A102 southbound carriageway such that it spans over the new northbound tunnel approach road, by means of a new bridge, as it diverges from the A102 northbound carriageway.
- 2.26 The southbound exit from the tunnel would join the A102 southbound carriageway as a lane gain, with a suitable weaving length, before the nearside lane tapers down.
- 2.27 Extensive retaining walls would be utilised to accommodate the significant level differences between carriageways around the southern section and thereby reduce overall landtake.

Proposed access

- 2.28 The Silvertown Tunnel would connect with the existing road network from the north portal to the A1020 Lower Lea Crossing/Silvertown Way and from the south portal to the south of the Blackwall Tunnel and via a grade-separated, free-flow link from the A102 Blackwall Tunnel approach.
- 2.29 River facilities are currently being considered for delivery of tunnel segments and other bulk materials to the site and removal of spoil via Thames Wharf.

Construction

- 2.30 An indicative construction programme has been developed which indicates that the construction period would be approximately 206 weeks. The current construction programme assumes some enabling works would commence during 2016/2017. The programme assumes that the tunnel would be bored seven days a week.

- 2.31 The main bores would be constructed by a tunnel boring machine and would have a lining of reinforced pre-cast concrete segments. The segments would be bolted longitudinally and radially and would be fitted with gaskets to render the lining watertight.
- 2.32 Excavated material from tunnelling activity, the construction of the portals and general construction waste would be removed from the site where the tunnel boring machine enters the ground and from the area of the cut and cover and open cut portals located at the northern and southern ends of the tunnel at Silvertown and the Greenwich Peninsula respectively.
- 2.33 To minimise disruption to the highway network, and reduce carbon emissions, river facilities are currently being considered for delivery of tunnel segments and other bulk materials to the site and the removal of spoil via Thames Wharf.
- 2.34 Spoil would travel by conveyer from the tunnel to a storage site and would then transfer through a loading bunker and conveyer to a barge at Thames Wharf.
- 2.35 The tunnel segments would be off-loaded from the barge by a crawler crane and placed in a designated segment storage stack area. Segments would be moved from the storage area by a gantry crane to the tunnel.
- 2.36 Whilst the proximity to the River Thames provides the opportunity to remove waste by barge and thereby reduce adverse impacts on local roads, disposal by road transport remains an option at this stage. As the reference design develops there consideration would be given to the potential re-use and disposal options for the excavated material, in particular re-use options for London Clay.
- 2.37 The Scoping Report highlights that based upon the current project design it is not anticipated that there would be a requirement for any property demolition. However, this would be reviewed as the reference design is completed.
- 2.38 The extent of the permanent and temporary works and associated land take for the project is shown on Drawing STWTN-ATK-GEN-XXXX-DR-Z-00002 in Appendix A of the Scoping Report.
- 2.39 As part of the development of the project design an Outline Site Waste Management Plan has been prepared that will continue to be updated as the reference design is produced.

Operation and maintenance

- 2.40 The Scoping Report provides limited information in regard to the operational and maintenance requirements of the proposed development.

The Secretary of State's Comments

Description of the application site and surrounding area

- 2.41 The SoS notes that there is no clear section in the report setting out the description of the site and its surroundings, rather is dispersed throughout the report. The SoS recommends that a clear description is set out in the ES.
- 2.42 The SoS welcomes the use of figures to support the description of the application site. In the ES it should be ensured that the figures are of high quality and relate closely to the main text. It is recommended that:
- all features referenced in the main text of the ES should be shown and named on a relevant figure
 - all figures should be clear and legible, and where there is a lot of environmental information to present, consideration should be given for this to be arranged over a number of figures to limit the amount of overlaid information and avoid confusion; and
 - all features on figures should be clearly labelled, identifying not only the presence of certain designations, but also the name of that specific feature.
- 2.43 It would be helpful for the description of the location of receptors to be provided by reference to the direction and distance from the main site.

Description of the proposed development

- 2.44 The applicant should ensure that the description of the proposed development that is being applied for is as accurate and firm as possible as this will form the basis of the environmental impact assessment. It is understood that at this stage in the evolution of the project the description of the proposals and even the location of the site may not be confirmed. It is noted at paragraph 2.5.2 of the Scoping Report that an 'early concept design' is presented.

The applicant should be aware however, that the description of the development in the ES must be sufficiently certain to meet the requirements of paragraph 17 of Schedule 4 Part 1 of the EIA Regulations and there should therefore be more certainty by the time the ES is submitted with the DCO.

- 2.45 If a draft DCO is to be submitted, the applicant should clearly define what elements of the proposed development are integral to the NSIP and which are 'associated development' under the Planning Act 2008 (PA 2008) or are an ancillary matter.
- 2.46 Any proposed works and/or infrastructure required as associated development, or as an ancillary matter, (whether on or off-site) should be considered as part of an integrated approach to environmental assessment.
- 2.47 The SoS recommends that the ES should include a clear description of all aspects of the proposed development, at the construction, operation and decommissioning stages, and include:
- Land-use requirements
 - Site preparation
 - Construction processes and methods
 - Transport routes
 - Operational requirements
 - Maintenance activities
 - Emissions: water, air and soil pollution, noise, vibration, light, heat, radiation.
- 2.48 The environmental effects of all wastes to be processed and removed from the site should be addressed. The ES will need to identify and describe the control processes and mitigation procedures for storing and transporting waste off site. All waste types should be quantified and classified.

Alternatives

- 2.49 The ES requires that the applicant provide 'An outline of the main alternatives studied by the applicant and an indication of the main *reasons for the applicant's choice, taking into account the environmental effects*' (See Appendix 3).

- 2.50 The SoS welcomes the discussion of the alternative options in section 3 of the scoping report. However the SoS draws the applicant's attention to the response from the London Borough of Tower Hamlets (LBTH), at Appendix 2 of this Opinion, regarding multi-modal tunnels, when addressing alternatives within the ES.
- 2.51 The SoS considers that a decision should be reached regarding the selection of river or road transport for the removal of waste as soon as possible, if this is not possible it must be ensured that the worst case scenario is assessed within the ES.

Flexibility

- 2.52 The SoS notes the reference (para 2.5.1 in the Scoping Report) to the 'Rochdale Envelope' but directs attention to the 'Flexibility' section in Appendix 3 of this Opinion which provides additional comment on the recommended approach.
- 2.53 If river transport is to be utilised in the removal of waste the ES will need to capture the potential cumulative impact of additional barge use along this stretch of the Thames in combination with that required in association with other development along the Thames.
- 2.54 It should be noted that if the proposed development changes substantially during the EIA process, prior to application submission, the applicant may wish to consider the need to request a new scoping opinion.

Proposed access

- 2.55 The Scoping Report provides little detail on site access arrangements during the construction phase. The SoS expects to see a detailed description of access arrangements in the ES, accompanied by figures where appropriate.
- 2.56 The ES should identify proposed routes to and from the construction sites for both construction vehicles and workers.

Construction

- 2.57 The SoS considers that information on construction including: phasing of programme; construction methods and activities associated with each phase; siting of construction compounds (including on and off site); lighting equipment/requirements; and number, movements and parking of construction vehicles (both HGVs and staff) should be clearly indicated in the ES.
- 2.58 The SoS recommends that potential off-site implications of the disposal of waste are also considered in the ES.

Operation and maintenance

- 2.59 Information on the operation and maintenance of the proposed development should be included in the ES and should cover but not be limited to such matters as the number of full/part-time jobs; shift patterns; the number and types of vehicle movements generated during the operational stage.

3.0 EIA APPROACH AND TOPIC AREAS

Introduction

- 3.1 This section contains the SoS's specific comments on the approach to the ES and topic areas as set out in the Scoping Report. General advice on the presentation of an ES is provided at Appendix 3 of this Opinion and should be read in conjunction with this Section.
- 3.2 Applicants are advised that the scope of the DCO application should be clearly addressed and assessed consistently within the ES.
- 3.3 The ES should not be a series of separate reports collated into one document, but rather a comprehensive assessment drawing together the environmental impacts of the project.
- 3.4 Attention is drawn to the recommendation in Appendix 3 to provide a series of Summary Tables. As well as assisting the decision making process these may also help to ensure impacts have been fully assessed and to ensure that mitigation relied upon in the ES is included on the draft DCO.

Environmental Statement (ES) - approach

- 3.5 The information provided in the Scoping Report sets out the proposed approach to the preparation of the ES. Whilst early engagement on the scope of the ES is to be welcomed, the SoS notes that the level of information provided at this stage is not always sufficient to allow for detailed comments from either the SoS or the consultees.
- 3.6 The SoS would suggest that the applicant ensures that appropriate consultation is undertaken with the relevant consultees in order to agree wherever possible the timing and relevance of survey work as well as the methodologies to be used. The SoS notes and welcomes the intention to finalise the scope of investigations in conjunction with ongoing stakeholder liaison and consultation with the relevant regulatory authorities and their advisors.
- 3.7 The SoS recommends that the physical scope of the study areas should be identified under all the environmental topics and should be sufficiently robust in order to undertake the assessment. The extent of the study areas should be on the basis of recognised professional guidance, whenever such guidance is available.

The study areas should also be agreed with the relevant consultees and, where this is not possible, this should be stated clearly in the ES and a reasoned justification given. The scope should also cover the breadth of the topic area and the temporal scope, and these aspects should be described and justified.

- 3.8 The Scoping Report sets out the specific topic sections as a series of Tables. This is not helpful when needing to identify and cross refer to text. Therefore the SoS recommends that the ES should be set out in report format with all paragraphs clearly numbered.

Matters to be scoped out

- 3.9 The applicant has identified in the section 6.2 of the Scoping Report the matters proposed to be 'scoped out'. These include:
- Air Quality:
 - Odour assessment
 - Community and Private Assets:
 - Effects on Agricultural Land
 - Impacts on Waterway Restoration Projects
 - Effects on all Travellers:
 - Bridleways and Equestrian Travellers
 - Geology and Soils:
 - Effects on Agricultural Soils
 - Effects on Geologically Designated Sites
 - Materials:
 - Impacts due to extraction and transport of raw materials
 - Impacts from the manufacture of products and subsequent transport; and
 - Townscape and Visual Assessment:
 - Impacts on landscape.
- 3.10 Matters are not scoped out unless specifically addressed and justified by the applicant, and confirmed as being scoped out by the SoS.
- 3.11 It is proposed that odour will be scoped out of the air quality assessment as an odour assessment is largely not relevant to a highways scheme.

Any potential odour impacts generated through the movement of contaminated materials during construction would be managed through the use of a Construction Environmental Management Plan (CEMP) and adherence to task specific method statements. The SoS agrees that this is an acceptable approach and that odour may be scoped out of the assessment.

- 3.12 Effects on agricultural land are to be scoped out of the assessment on community and private assets as there is no agricultural land within the vicinity of the project. The SoS agrees that impacts on agricultural land may be scoped out of the assessment at the tunnel location, but not in terms of where any sites are identified for the disposal of excavated material.
- 3.13 It is proposed that impacts on Waterway Restoration Projects will be scoped out of the assessment as the tunnel will be constructed at such a depth that it would not impact directly upon the River Thames. The SoS agrees that impacts on Waterway Restoration Projects may be scoped out of the assessment.
- 3.14 It is proposed that effects on equestrian travellers be scoped out of the assessment as there are no bridleways in the study area and there is a lack of evidence of equestrian use, the SoS agrees that effects on equestrian travellers can be scoped out of the assessment.
- 3.15 It is proposed that effects on agricultural soils can be scoped out at the tunnel location only. Effects on geologically designated sites are proposed to be scoped out of the assessment as there are no geological sites within the study area. The SoS agrees that effects on geologically designated sites at the tunnel location can be scoped out of the assessment, if following consultation (as set out on page 69 of the Scoping Report), this confirms there are no statutory or non-statutory geologically designated sites in the vicinity likely to be significantly affected.
- 3.16 It is proposed that the environmental effects associated with the extraction and transportation of primary raw materials and manufacture of products will be scoped out of the assessment as these processes are already likely to have been subject to environmental assessment. The SoS agrees that extraction of raw materials and manufacture of products may be scoped out of the assessment. However the SoS considers that the transport of materials and manufactured products both to and from the proposed site should be assessed.

The SoS notes the comments of the LBTH that also request that impacts associated with the transport of materials are assessed.

- 3.17 Townscape and visual assessment is proposed to be considered due to the urban location of the proposed tunnel. The SoS agrees that landscape character may be scoped out of the assessment.
- 3.18 The SoS notes that in addition to the points specifically identified in section 6.2 of the Scoping Report, other matters are identified in the Scoping Report that are proposed to be scoped out. The SoS does not agree to the following matters to be scoped out: surveys for fish or other features of the River Thames (page 58 of the Scoping Report); ground-borne vibration during the construction phase (page 77 of the Scoping Report); and night-time lighting (page 79 of the Scoping Report). Specific comments on these aspects are given in the relevant sections below.
- 3.19 Whilst the SoS has not agreed to scope out certain topic or matters within the Opinion on the basis of the information available at the time, this does not prevent the applicant from subsequently agreeing with the relevant consultees to scope matters out of the ES, where further evidence has been provided to justify this approach. This approach should be explained fully in the ES.
- 3.20 In order to demonstrate that topics have not simply been overlooked, where topics are scoped out prior to submission of the DCO application, the ES should still explain the reasoning and justify the approach taken.

National Policy Statements (NPSs)

- 3.21 Sector specific NPSs are produced by the relevant Government Departments and set out national policy for nationally significant infrastructure projects (NSIPs). They provide the framework within which the Examining Authority will make their recommendations to the Secretary of State and include the Government's objectives for the development of NSIPs.
- 3.22 The relevant NPS is the National Road and Rail Networks NPS which is currently in draft. This draft NPS sets out assessment principles that should be considered in the EIA for the proposed development. When undertaking the EIA, the applicant must have regard to this draft NPS and identify how principles these have been assessed in the ES.

- 3.23 The SoS must have regard to any matter that the SoS thinks is important and relevant to the SoS's decision. This can include the draft NPS where the relevant NPS has not been formally designated.

Environmental Statement - Structure

- 3.24 Section 7 of the Scoping Report sets out the outline structure of the ES on which the applicant seeks the opinion of the SoS.
- 3.25 The SoS notes from paragraph 7.1.3 that the EIA would cover a number of assessments under the broad headings of:
- Air Quality
 - Community and Private Assets
 - Cultural Heritage
 - Ecology and Nature Conservation
 - Effects on all Travellers
 - Geology and Soils
 - Materials
 - Noise and Vibration
 - Townscape and Visual
 - Water Environment; and
 - Cumulative Effects.

Topic Areas

Air Quality (see Scoping Report Section 6.3)

- 3.26 The SoS notes that the assessment will be undertaken in accordance with DMRB HA 207/07 and the latest Interim Advice Notes (IAN): 170/12 and 174/13. The assessment will consider worst case sensitive receptor locations within 200m of affected routes. Modelled predictions will be compared against the UK Air Quality Objectives / EU Limit Values as appropriate. The SoS welcomes this approach to the assessment of air quality impacts for this project.
- 3.27 There are a number of declared Air Quality Management Areas (AQMA) close to the proposed tunnel; the site itself is almost surrounded by declared AQMAs with the southern end of the tunnel entirely contained within an AQMA.

The majority of these AQMA's have been declared in relation to measured or predicted exceedances of the nitrogen dioxide (NO₂) air quality objectives, a number have also been declared in relation to exceedances of the particulate matter (PM₁₀) objectives. It should be made clear in the ES whether the declarations relate to a measured or predicted breach of the annual mean objectives for each pollutant and/or the shorter term objectives for each pollutant.

- 3.28 A total of 23 AQMA's have been identified within the East London Highway Assignment Model (ELHAM) though the applicant has indicated that it is unlikely that all of these AQMA's would be affected by the proposed project.
- 3.29 Consultations will be held with the officers responsible for air quality in those local authorities which may be affected by the project. The SoS recommends that the applicant seeks agreement with the relevant local authority officers over the size of the air quality study area and the selection of receptor locations to be assessed and that this is reported in the ES.
- 3.30 The SoS recommends that dispersion modelling considers a range of possibilities and seeks to ensure that the 'worst case' scenario is assessed, for example congestion associated with the construction phase.
- 3.31 The SoS welcomes that the applicant intends to consult Natural England (NE) regarding the location of any designated nitrogen sensitive sites that could be affected by the project.
- 3.32 The SoS recommends that the applicant gives due consideration to potential mitigation measures in the ES and set these out clearly in the ES. The applicant should also consult the relevant local authority officers regarding locations where additional air quality monitoring would be appropriate.
- 3.33 The SoS notes the concerns of the LBTH regarding the classification of air quality impacts within AQMA's, it is recommended that any increase (even if very small) of pollutant concentrations within an AQMA should not be categorised as having a negligible impact.
- 3.34 The SoS recommends that the assumptions relating to the future air quality baseline should be set out clearly in the ES. The SoS notes the comments of the LBTH that a conservative approach to the future baseline should be taken.

- 3.35 The SoS recommends that it is ensured that all cross referencing is correct in the ES.

Community and Private Assets (see Scoping Report Section 6.4)

- 3.36 The SoS notes that the study area is crossed by road and rail infrastructure and there is not currently expected to be any loss of open space or any need to demolish any existing properties.
- 3.37 The SoS notes the comments of the Canal and River Trust regarding the selection of a tunnel crossing being of benefit as it would not result in further restrictions on larger vessels using this stretch of the Thames.
- 3.38 The SoS notes the comments of the Health and Safety Executive (HSE) concerning the proposed application surface development being within the inner zone consultation distance of two major hazard sites which include the east Greenwich gasholder station and Brenntag UK. Additionally the new grade separated junction will be within the inner zone of one of the sites. HSE advises against dual carriageways within the inner consultation zones.
- 3.39 The SoS draws the attention of the applicant to the HSE comments in relation to explosive sites. During the construction phase of the development land controlled by General Marine (Tugs and Barges) Ltd would be included in the temporary land take for temporary work or site compounds, consequently General Marine would not be able to handle any explosives at their premises during the construction phase, HSE intend to contact the company regarding this matter.

Cultural Heritage (see Scoping Report Section 6.5)

- 3.40 The SoS notes that the methodology for the assessment will follow that set out in DMRB Volume II Section 3, HA208/07 Cultural Heritage. The assessment will accord with the 'Code of Conduct and Standards Guidance for Archaeological Desk Based Assessments' of the Institute of Archaeologists. The study will also conform to the requirements of the National Planning Policy Framework. The SoS notes the comments by English Heritage that the methodology will need to extend beyond desk-based assessment and the recommendation that a comprehensive 3D geoarchaeological deposit model of the site and its surroundings based on existing and new boreholes be utilised in carrying out the assessment.

The SoS recommends further discussion takes place between the applicant, English Heritage and other relevant consultees to agree the detailed methodology including the need for any intrusive investigative work.

- 3.41 The SoS notes the response from English Heritage highlighting the extensive existing data available in the Greater London Historic Environment Record (GLHER) and other data held by Crossrail. The SoS agrees that the assessment should take all relevant information into account.
- 3.42 The SoS notes that the Heritage List for England identifies 14 listed buildings within 1.5km of the application site; these include a number of structures associated with the Royal Victoria Docks such as warehouses and grain silos. The World Heritage Sites of Maritime Greenwich and the Scheduled Greenwich Palace lie approximately 1.5 km to the south west of the proposed site. The SoS notes the findings of previous archaeological investigations in the study area which indicate there is potential for the application site to contain remains relating to flood events and human activity in the prehistoric period and the industrial development of the area from the post-medieval period onwards. English Heritage have indicated that to the north of the river impacts are expected to be in relation to industrial archaeology and deeply buried prehistoric remains, whereas impacts to the south of the river are expected to be related to deeply buried prehistoric remains only.
- 3.43 The SoS notes that the entire tunnel site lies within Archaeological Priority Areas (APAs), it is recommended that this is taken into consideration within the ES.
- 3.44 The proposed study area will cover 500m from the application site boundary for undesignated assets and 1 km from the application site boundary for designated assets. The SoS welcomes that assets of particular significance highlighted by consultees falling outside of the defined study area will also be considered by the applicant.
- 3.45 The applicant has identified potential mitigation measures including intrusive and non-intrusive surveys of archaeological, built heritage and historic landscape assets, which might include: archaeological excavation; archaeological watching brief; photographic survey; measured survey; building recording including internal and external inspection; remote sensing and diver survey of the riverbed. The SoS welcomes that the applicant will consider a broad range of potential mitigation.

- 3.46 The SoS recommends that English Heritage's Inspector of Ancient Monuments is consulted in relation to effects within the river such as scour from barge traffic.

Ecology and Nature Conservation (see Scoping Report Section 6.6)

- 3.47 The SoS notes that the CIEEM Guidelines in combination with DMRB Volume 11 Section 2, Part 5, Volume 11, Section 3 Part 4 (Highways Agency, 1993) and Interim Advice Note 130/10 (Highways Agency, 2010) will form the basis of the ecological assessment methodology. This approach to the assessment is accepted by the SoS.
- 3.48 The SoS recommends that surveys should be thorough up to date and should take account of other development proposed in the vicinity.
- 3.49 The SoS recommends that the proposals should address fully the needs of protecting and enhancing biodiversity. The assessment should cover habitats species and processes within the study site and its surroundings.
- 3.50 The SoS notes that the applicant considers that no European sites would be affected by the proposals; the closest European site is the Lee Valley SPA and Ramsar site which is approximately 8 km north west of the application boundary.
- 3.51 The SoS notes that the key ecological receptors have been identified as:
- River Thames and Tidal Tributaries SINC (including mudflats and wetland birds)
 - Deciduous/scrubby woodland (including, potentially nesting birds)
 - Scrub and bare ground mosaic habitat (including potentially, reptiles, nesting birds and notable invertebrates)
 - Black Redstart *Phoenicurus ochruros*; and
 - Common species of reptiles.
- 3.52 The assessment should take account of impacts on noise, vibration and air quality and cross reference should be made to these specialist reports.
- 3.53 The SoS recommends that the ES assesses the impact of all phases of the proposal on protected species.

- 3.54 The SoS notes the advice of NE regarding consideration of the potential impacts on non statutory sites such as Local Wildlife Sites, local Nature Reserves and Regionally Important Geological and Geomorphological Sites within the ES.
- 3.55 The SoS notes the concerns of the Marine Management Organisation (MMO) regarding the scoping out of surveys of fish or other features of the River Thames. The proposed works have the potential for noise and vibration from boring activities to impact upon migratory fish, however the Environment Agency have accepted the scoping out of fish surveys due to the selection of the long bored option for tunnel construction. The SoS recommends that clear justification is provided within the ES if these surveys are to be scoped out of the assessment.

Effects on All Travellers (see Scoping Report Section 6.7)

- 3.56 The SoS notes that the applicant intends to consult the London Boroughs of Newham, Tower Hamlets and Greenwich regarding rights of way and usage where appropriate. The SoS welcomes both this local authority consultation and the applicant's proposed consultation with the users of key community facilities to characterise usage, travel patterns and catchment areas.
- 3.57 The SoS recommends that the Transport Assessment is completed as soon as possible as the findings will be needed to inform other relevant ES chapters. The SoS recommends that the applicant consults the Highways Agency regarding the scope of the transport assessment.
- 3.58 The SoS recommends that the applicant gains agreement from the relevant local authorities regarding the total area to be considered within the transport assessment.
- 3.59 The SoS notes that user charging on both Silvertown and Blackwall Tunnel's is being proposed as a means to manage traffic levels and reduce congestion on the surrounding network. The ES assessment should consider the delivery mechanism and long term effectiveness of this mitigation proposal. The SoS reminds the applicant that mitigation relied upon for the purposes of the assessment but which is outside of the DCO's effective control will need to be appropriately secured.
- 3.60 The SoS notes the comments of LBTH in regard to the need for the construction traffic assessment to incorporate construction staff movements. It is recommended that likely construction traffic routes are established as early as possible to aid in the identification of relevant receptors.

- 3.61 The SoS notes the comments of LBTH in regard to the consideration of multi-modal tunnel options and recommends that clarification around why the tunnel will not be multi-modal is provided in the ES.

Geology and Soils (see Scoping Report Section 6.8)

- 3.62 The SoS notes that the proposed study area for the assessment will comprise the project footprint including the construction compound and storage areas and an area 500m around the project; it is recommended that the proposed area is agreed with the relevant stakeholders.
- 3.63 The SoS notes that the mobilisation of contaminants in the soil that would otherwise be immobile will be considered in the assessment, it is recommended that appropriate cross-reference is made to the chapter on Water Environment. The SoS notes and welcomes that mitigation measures will be implemented. Reference is also made to disposal sites; these should be taken into account in the assessment.
- 3.64 The SoS notes the comments of the Environment Agency in regard to the Greenwich Peninsula Environmental Method Statement which details how projects on the peninsula can be developed to prevent the mobilisation of existing contaminants, the applicant should take this document into account in making their assessment and developing the project design.
- 3.65 The SoS notes the comments of National Grid Gas Plc in regard to the existing gas pipelines which lie close to the order limits. The applicant should remain aware that National Grid has a Deed of Grant of Easement for each pipeline, preventing the erection of permanent or temporary buildings or structures, changes to existing ground levels, storage of materials etc.
- 3.66 The SoS recommends that where construction traffic cannot use existing roads it is agreed with National Grid at which locations construction traffic would cross any pipelines. The applicant should also note that written permission is required from National Grid before any works can commence in the National Grid easement strip.
- 3.67 The SoS recommends that the applicant takes note of National Grid's requirements regarding the laying of cables across any pipeline as appropriate.

- 3.68 The SoS recommends that the applicant has an awareness of the Health and Safety Executive's guidance document HS(G) 47 'Avoiding Danger from Underground Services' and National Grid's specification for Safe Working in the vicinity of National Grid High Pressure gas pipelines and associated installations – requirements for third parties T/SP/SSW22.
- 3.69 The SoS notes that any excavations within 3m of a National Grid High Pressure Pipeline or within 10m of an above ground installation the exact depth and position of the pipeline will need to be confirmed on site under the supervision of a National Grid representative.
- 3.70 The SoS notes the assessment will focus on construction effects but advises that operational effects should also be assessed.

Materials (see Scoping Report Section 6.9)

- 3.71 The SoS welcomes the applicant's intention that consultation will take place with the relevant London Boroughs and the Environment Agency to obtain information about waste management facilities that could be utilised during the proposed developments construction.
- 3.72 The SoS notes that the proposed study area for the materials assessment will be limited to the boundaries of the construction site within which materials will be used and wastes generated and managed however the SoS recommends that detailed information is provided within the ES regarding the transport of materials to the proposed site and the disposal of spoil from the site. This should detail where spoil will be temporarily stored and how spoil will be disposed of.
- 3.73 The SoS notes the concerns of the MMO regarding the lack of information provided in relation to the use of the spoil. It is recommended that information regarding the use of the spoil be provided within the ES and that consideration be given to the Waste Framework Directive.
- 3.74 The SoS notes that should barges be used to deliver materials and remove spoil the impact of such barge movements upon marine ecology and navigation should be assessed in the ES.
- 3.75 The SoS notes the comments of the Port of London Authority (PLA) in relation to the potential to use ships to transport materials instead of barges depending on the wharves to be used. The SoS requests that the applicant consider this option.

- 3.76 The SoS notes that the assessment will be undertaken in accordance with HA205/08 Assessment and Management of Environmental Effects. This approach to the assessment is welcomed by the SoS.
- 3.77 The SoS notes the uncertainty regarding materials and the maintenance regime once the proposals are operational. Any assessment will need to ensure that it has considered the worst case.
- 3.78 The SoS notes that the applicant may require a permit or exemption from the Environment Agency for the treatment, disposal or storage of waste associated with the proposed development. The applicant's attention is drawn to Annex D (relating to the Environment Agency) of the Planning Inspectorate's Advice Note 'Working with public bodies in the infrastructure planning process' which is available on the Advice Note's page of the National Infrastructure Planning website.

Noise and Vibration (see Scoping Report Section 6.10)

- 3.79 The SoS welcomes that the applicant has stated that consultation will take place with the Environmental Health Departments of the London Boroughs of Greenwich, Tower Hamlets and Newham in regard to the noise and vibration assessment.
- 3.80 Information should be provided on the types of vehicles and plant to be used during the construction phase. Once operational, noise sources generated should be identified and assessed. Where appropriate, effective measures should be provided to mitigate against noise nuisance.
- 3.81 The SoS welcomes that noise mitigation measures through the construction phase will be incorporated in the Construction Environmental Management Plan (CEMP). It is recommended that consideration should be given to identifying a means of communicating any particularly noisy activities to people using the area nearby and to providing a means of receiving and addressing complaints and concerns.
- 3.82 Noise and vibration impacts on people should be specifically addressed and particularly any potential noise and vibration disturbance at night and other unsocial hours such as weekends and public holidays. Ground-borne vibration during the construction phase should not be scoped out of the assessment.

Townscape and Visual (see Scoping Report Section 6.11)

- 3.83 The SoS welcomes that both the Royal Borough of Greenwich and the London Borough of Newham Councils will be consulted regarding the methodology for the assessment.
- 3.84 The SoS welcomes that IAN 135/10 criteria will be applied to the assessment.
- 3.85 The SoS recommends that any temporary storage of spoil in the vicinity of the proposed development site should be taken into consideration within the assessment of the potential short-term impact on townscape.
- 3.86 The SoS notes the comments of National Grid Electricity Transmission Plc in regard to the high voltage electricity overhead transmission line which lies close to the proposed order limits. The applicant should note National Grid's right of access to maintain, repair and inspect their asset, the need to maintain the statutory electrical safety clearances at all times and the requirement that no permanent structures are built directly beneath overhead lines.
- 3.87 The SoS recommends that site staff should have an awareness of the Health and Safety Executive's guidance in relation to working safely near existing overhead lines Guidance Note GS 6 'Avoidance of Danger from Overhead Electric Lines'. Plant, machinery, equipment, buildings or scaffolding should not encroach within 5.3 metres of any high voltage conductors when those conductors are in their worst conditions of maximum 'sag' and 'swing'.
- 3.88 The SoS recommends that where landscape mitigation is proposed, only slow or low growing species of trees and scrubs should be planted beneath and adjacent to the existing transmission line. The applicant should note that drilling and excavation work should not be undertaken if it has the potential to disturb or adversely affect the foundations of an existing tower.
- 3.89 The SoS notes the comments of ES Pipelines indicating that though they are not directly affected by the works they would draw the applicants attention to the fact that part of their electricity network is within the 500m study area marked in Figure 6.5 of the Scoping Report which illustrates townscape and visual considerations.
- 3.90 The SoS notes the comments of the Civil Aviation Authority (CAA) regarding the need for the applicant to consider any potential concerns of any relevant aerodrome licence holders/operators.

- 3.91 Night-time lighting should be included in the assessment, including taking into account the design of lighting to minimise any adverse effects notably on local sensitive receptors.
- 3.92 The SoS notes the concerns of the LBTH in regard to viewpoint selection. It is recommended that LBTH are consulted to agree the viewpoints from the LBTH.

Water Environment (see Scoping Report Section 6.12)

- 3.93 The SoS welcomes that the Flood Risk Assessment (FRA) will be developed in consultation with key bodies including the Environment Agency (EA). The SoS notes the comments of the EA regarding the need for the FRA to consider impacts caused by and upon all sources of flooding, the current state of the tidal flood defences and the projects possible impacts on them and possible impacts on the development of predicted sea level rise. The assessment should demonstrate that flood defences will be fit for purpose for the lifetime of the development.
- 3.94 The SoS notes that the applicant will require Flood Defence Consent from the EA for any works within 16m of the landward side of the flood defence.
- 3.95 The SoS notes that the applicant intends to reference the Thames Estuary 2100 (TE2100) Plan (which outlines how the Thames tidal defences will need to be managed to combat predicted sea level rises over the next 100 years) within the FRA.
- 3.96 The SoS notes the comments of the LBTH in regard to the need to consider climate change impacts where appropriate in the ES. It is recommended that the development should be assessed against future climate change scenarios as identified in the Mayor of London's Climate Change Adaptation Strategy.
- 3.97 The SoS recommends that the assessment takes into consideration both the construction and the operational phases of the development. The potential for accidents should also be addressed.
- 3.98 The SoS welcomes that the potential of the proposed project to impact on the water quality of receiving waters from routine runoff will be assessed in accordance with DMRB methodologies for assessing both pollution from routine runoff and the risk of pollution due to accidental spillage.

- 3.99 The SoS notes that the study area has been defined, in accordance with DMRB guidelines, to include the application site, downstream reaches of the Rivers Thames and Lea, the Royal Victoria Dock and any other surface or groundwater receptor identified within 500m of the application boundary.
- 3.100 The SoS recommends that the section considering the water environment be cross referenced to other topic chapters in the ES as appropriate.
- 3.101 The SoS notes the comments of the PLA requiring that the ES include information regarding the depth of the tunnel under the River Thames.
- 3.102 The SoS recommends that the ES outlines whether or not the applicant would need to temporarily suspend the public right of navigation along sections of the River Thames.
- 3.103 The SoS notes that the tunnel would involve permanent land take of the PLA's land and recommends that the applicant consults the PLA regarding the need for a River Works Licence.
- 3.104 The SoS notes that the Scoping Report refers to the proposed highway drainage scheme in paragraphs 2.3.18 and 2.3.20 and that new surface run-off will be gravity drained to an outfall but it is not stated whether or not this this will be via the use of an existing outfall or a new outfall, any works below Mean High Water Spring (MHWS) would require a marine licence from the Marine Management Organisation (MMO).
- 3.105 The SoS recommends that the applicant provides clarification around whether or not in-river structures will be required. If additional works or activities are identified that may require a Marine Licence it is recommended that the MMO are notified at the earliest opportunity.
- 3.106 The SoS notes that the applicant will need to identify whether any water resources will be required during the construction phase and where this water will be sourced as this will determine whether any permits will be required from the EA.
- 3.107 The SoS recommends that the applicant refers to the Environment Agency Guiding Principles for Land Contamination to inform the assessment of risk to controlled waters from the development.

Cumulative Effects (see Scoping Report Section 6.13)

- 3.108 The SoS refers the applicant to the additional information in Appendix 3 of the Scoping Opinion regarding inter-relationships between environmental factors and cumulative impacts.
- 3.109 The SoS notes that the traffic model will take into account other transportation schemes as well as future predicted traffic growth as a result of new development. The SoS recommends that, if the River Thames is to be used for the transport of materials to and from the site, that the assessment should ensure it has taken full account of the volume of river traffic arising from other projects, in particular the availability of barges and wharfs as well as suitably qualified staff.
- 3.110 The SoS recommends that the applicant consults all the relevant local authorities to ensure all proposed and consented developments relevant to the project are included within the cumulative assessment.
- 3.111 The SoS welcomes that the interactive cumulative effects with other schemes will be reported in each of the individual environmental topic chapters and the use to be made to Advice Note 9 in terms of identifying other major developments in the area.
- 3.112 The SoS notes that the proposed study area for the cumulative assessment will be based on the scope of each of the individual environmental topic chapters. Justification should be provided for the final study area selected.
- 3.113 The SoS notes the comments of the PLA regarding the inclusion of the Thames Tideway Tunnel within the cumulative assessment.

4.0 OTHER INFORMATION

- 4.1 This section does not form part of the SoS's Opinion as to the information to be provided in the environmental statement. However, it does respond to other issues that the SoS has identified which may help to inform the preparation of the application for the DCO.

European Protected Species (EPS)

- 4.2 Applicants should be aware that the decision maker under the Planning Act 2008 (PA 2008) has, as the CA, a duty to engage with the Habitats Directive. Where a potential risk to an EPS is identified, and before making a decision to grant development consent, the CA must, amongst other things, address the derogation tests² in Regulation 53 of the Habitats Regulations. Therefore the applicant may wish to provide information which will assist the decision maker to meet this duty.
- 4.3 If an applicant has concluded that an EPS licence is required the ExA will need to understand whether there is any impediment to the licence being granted. The decision to apply for a licence or not will rest with the applicant as the person responsible for commissioning the proposed activity by taking into account the advice of their consultant ecologist.
- 4.4 Applicants are encouraged to consult with NE and, where required, to agree appropriate requirements to secure necessary mitigation. It would assist the examination if applicants could provide, with the application documents, confirmation from NE whether any issues have been identified which would prevent the EPS licence being granted.
- 4.5 Generally, NE are unable to grant an EPS licence in respect of any development until all the necessary consents required have been secured in order to proceed. For NSIPs, NE will assess a draft licence application in order to ensure that all the relevant issues have been addressed. Within 30 working days of receipt, NE will either issue 'a letter of no impediment' stating that it is satisfied, insofar as it can make a judgement, that the proposals presented comply with the regulations or will issue a letter outlining why NE consider the proposals do not meet licensing requirements and what further information is required before a 'letter of no impediment' can be issued.

² Key case law re need to consider Article 16 of the Habitats Directive: Woolley vs East Cheshire County Council 2009 and Morge v Hampshire County Council 2010.

The applicant is responsible for ensure draft licence applications are satisfactory for the purposes of informing formal pre-application assessment by NE.

- 4.6 Ecological conditions on the site may change over time. It will be the applicant's responsibility to ensure information is satisfactory for the purposes of informing the assessment of no detriment to the maintenance of favourable conservation status (FCS) of the population of EPS affected by the proposals³. Applicants are advised that current conservation status of populations may or may not be favourable. Demonstration of no detriment to favourable populations may require further survey and/or submission of revised short or long term mitigation or compensation proposals. In England the focus concerns the provision of up to date survey information which is then made available to NE (along with any resulting amendments to the draft licence application). This approach will help to ensure no delay in issuing the licence should the DCO application be successful. Applicants with projects in England or English waters can find further information on NE's protected species licensing procedures in relation to NSIP's by clicking on the following link:

http://www.naturalengland.org.uk/Images/wml-g36_tcm6-28566.pdf

- 4.7 In England or English Waters, assistance may be obtained from the Consents Service Unit. The Unit works with applicants to coordinate key non-planning consents associated with nationally significant infrastructure projects. The Unit's remit includes EPS licences. The service is free of charge and entirely voluntary. Further information is available from the following link:

<http://infrastructure.planningportal.gov.uk/legislation-and-advice/consents-service-unit/>

³ Key case law in respect of the application of the FCS test at a site level: Hafod Quarry Land Tribunal (Mersey Waste (Holdings) Limited v Wrexham County Borough Council) 2012, and Court of Appeal 2012.

Health Impact Assessment

- 4.8 The SoS notes that the applicant intends to submit a stand-alone Health Impact Assessment (HIA) and recommends that the applicant should have regard to the responses received from the relevant consultees regarding health, and in particular to the comments from the Health and Safety Executive in relation to major hazard sites and Public Health England in relation to emissions to air (see Appendix 2).
- 4.9 The methodology for the HIA should be agreed with the relevant statutory consultees and take into account mitigation measures for acute risks.

Other regulatory regimes

- 4.10 The SoS recommends that the applicant should state clearly what regulatory areas are addressed in the ES and that the applicant should ensure that all relevant authorisations, licences, permits and consents that are necessary to enable operations to proceed are described in the ES. Also it should be clear that any likely significant effects of the proposed development which may be regulated by other statutory regimes have been properly taken into account in the ES.
- 4.11 It will not necessarily follow that the granting of consent under one regime will ensure consent under another regime. For those consents not capable of being included in an application for consent under the PA 2008, the SoS will require a level of assurance or comfort from the relevant regulatory authorities that the proposal is acceptable and likely to be approved, before they make a recommendation or decision on an application. The applicant is encouraged to make early contact with other regulators. Information from the applicant about progress in obtaining other permits, licences or consents, including any confirmation that there is no obvious reason why these will not subsequently be granted, will be helpful in supporting an application for development consent to the SoS.

Transboundary Impacts

- 4.12 The SoS notes that the applicant has indicated (Table 6-18 of the Scoping Report) that the development is not likely to have significant impacts on another European Economic Area (EEA) State.

- 4.13 Regulation 24 of the EIA Regulations, which *inter alia* require the SoS to publicise a DCO application if the SoS is of the view that the proposal is likely to have significant effects on the environment of another EEA state and where relevant to consult with the EEA state affected. The SoS considers that where Regulation 24 applies, this is likely to have implications for the examination of a DCO application.
- 4.14 The SoS recommends that the ES should identify whether the proposed development has the potential for significant transboundary impacts and if so, what these are and which EEA States would be affected.

APPENDIX 1

List of Consultees

APPENDIX 1

LIST OF BODIES FORMALLY CONSULTED DURING THE SCOPING EXERCISE

CONSULTEE	ORGANISATION
SCHEDULE 1	
The Health and Safety Executive	Health and Safety Executive
The National Health Service Commissioning Board	NHS England
The relevant clinical commissioning group	NHS Newham Clinical Commissioning Group
The relevant clinical commissioning group	NHS Greenwich Clinical Commissioning Group
Natural England	Natural England
The Historic Buildings and Monuments Commission for England	English Heritage
The Relevant Fire and Rescue Authority	London Fire Brigade
The Relevant Police and Crime Commissioner	Metropolitan Police Service
The Environment Agency	The Environment Agency
The Maritime and Coastguard Agency	Maritime & Coastguard Agency
The Maritime and Coastguard Agency	Maritime and Coastguard Agency
The Marine Management Organisation	Marine Management Organisation (MMO)
The Civil Aviation Authority	Civil Aviation Authority
The Highways Agency	The Highways Agency
Transport for London	Transport for London
The Canal and River Trust	The Canal and River Trust
Trinity House	Trinity House
Public Health England, an executive agency to the Department of Health	Public Health England
The Crown Estate Commissioners	The Crown Estate
The Forestry Commission	Forestry Commission
The Natural Resources Body for Wales	Natural Resources Wales
RELEVANT STATUTORY UNDERTAKERS	
Health Bodies (s.16 of the Acquisition of Land Act (ALA) 1981)	
The National Health Service Commissioning Board	NHS England
Local Area Team	NHS Area Team North East London
Local Area Team	NHS Area Team South London

Ambulance Trusts	London Ambulance Service NHS Trust
Relevant Statutory Undertakers (s.8 ALA 1981)	
Railway (England only)	Network Rail Infrastructure Ltd
	Network Rail (CTRL) Ltd
	Highways Agency Historical Railways Estate
Road Transport	Transport for London
Water Transport	The Canal and River Trust
Canal or Inland Navigation Authorities	Environment Agency Thames
Dock	Port of London Authority
Lighthouse	Trinity House
Civil Aviation Authority	Civil Aviation Authority
Licence Holder (Chapter 1 Of Part 1 Of Transport Act 2000)	NATS En-Route (NERL) Safeguarding
Universal Service Provider	Royal Mail Group
Water and Sewage Undertakers	Thames Water
Public Gas Transporter	Energetics Gas Limited ES Pipelines Ltd ESP Connections Ltd ESP Networks Ltd ESP Pipelines Ltd Fulcrum Pipelines Limited GTC Pipelines Limited Independent Pipelines Limited LNG Portable Pipeline Services Limited National Grid Gas Plc National Grid Plc Quadrant Pipelines Limited SSE Pipelines Ltd Scotland Gas Networks Plc Southern Gas Networks Plc Wales and West Utilities Ltd
The relevant electricity licence holder with CPO Powers (electricity distributors)	Energetics Electricity Limited ESP Electricity Limited Independent Power Networks Limited The Electricity Network Company Limited UK Power Networks Limited
The relevant electricity licence holder with CPO Powers (electricity transmitters)	National Grid Electricity Transmission Plc
	National Grid Plc
The relevant electricity licence holder with CPO Powers (electricity interconnectors)	National Grid Interconnectors Limited

LOCAL AUTHORITIES (SECTION 43)

A London borough council	Newham London Borough Council Royal Borough of Greenwich Council Waltham Forest Council London Borough of Redbridge Council London Borough of Barking and Dagenham London Borough of Bexley London Borough of Bromley London Borough of Lewisham London Borough of Hackney Tower Hamlets Council
Greater London Authority	Greater London Authority
Marine Management Organisation (English Waters)	Marine Management Organisation (MMO)

APPENDIX 2

Respondents to Consultation and Copies of Replies

APPENDIX 2

LIST OF BODIES WHO REPLIED BY THE STATUTORY DEADLINE

Civil Aviation Authority
Energetics
English Heritage
Environment Agency
E S Pipelines Ltd, ESP Electricity Ltd, ESP Pipelines Ltd, ESP Connections Ltd and ESP Networks Ltd
Fulcrum Pipelines
Health and Safety Executive
Highways Agency
London Borough of Bexley
London Borough of Tower Hamlets
Marine Management Organisation
NATS
National Grid Electricity Transmission Plc
National Grid Gas Plc
Natural England
Port of London Authority
Public Health England
The Canal and River Trust

Hannah Nelson

From: Smailes Baggy <Baggy.Smailes@caa.co.uk>
Sent: 30 June 2014 09:13
To: Environmental Services
Subject: FW: TR010021 Silvertown Tunnel Scoping Consultation
Attachments: Letter_to_stat_cons_Scoping_AND_Reg_9_Notification_English.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Dear Sirs,

Proposed Silvertown Tunnel – Scoping Comment

Thank you for The Planning Inspectorate's recent correspondence relating to the subject development. The Inspectorate sought related Civil Aviation Authority (CAA) scoping comment. Given that by definition the tunnel would be below the surface and on the assumption that any associated above surface development would extend to a height of only a few meters, it will come as no surprise for the CAA to record no related interest beyond highlighting that:

- **Aerodromes.** In respect of any potential aerodrome related issue, I should highlight the need to check any safeguarding maps lodged with relevant planning authorities to identify any aerodrome specific safeguarding issues. To that effect, I note the close proximity of London City Airport to the development site. Noting that aerodrome safeguarding responsibility rests in all cases with the relevant aerodrome operator / licensee, not the CAA, it is important that the related viewpoints of any relevant aerodrome license holders / operators is established and any concerns expressed appropriately mitigated.

Pending any specific civil aviation regulatory query, the CAA does not wish to be further involved with this consultation.

Mark Smailes

Airspace Regulator
Safety and Airspace Regulation Group
Civil Aviation Authority
CAA House
45-59 Kingsway
London WC2B 6TE

Tel: 0207 453 6545

From: Environmental Services [mailto:EnvironmentalServices@infrastructure.gsi.gov.uk]
Sent: 27 June 2014 11:03
To: NSIP.applications@hse.gsi.gov.uk; shane.gould@english-heritage.org.uk; margaret.kowalewska@mcga.gov.uk; marine.consent@marinemanagement.org.uk; Smailes Baggy; NSIPconsultations@PHE.gov.uk; southeast.fce@forestry.gsi.gov.uk; NERLsafeguarding@nats.co.uk; alans@espipelines.com; FPLplantprotection@fulcrum.co.uk
Subject: TR010021 Silvertown Tunnel Scoping Consultation

Dear Sir or Madam

Hannah Nelson

From: Claire McLean <Claire.McLean@canalrivertrust.org.uk>
Sent: 22 July 2014 14:53
To: Environmental Services
Cc: Gareth Stephens
Subject: TR010021 Silvertown Tunnel

Follow Up Flag: Follow up
Flag Status: Flagged

FAO Jenny Colfer

Dear Mrs Colfer,

Thank you for this recent consultation.

We have just one comment to make regarding the proposal that we would like taken into account. The Canal & River Trust acknowledges the need to provide additional crossings in East London, but these proposed crossings should not interfere with navigation or place an additional restrictions greater than that imposed by the QE2 bridge or the Emirates Cable Car.

A tunnel would be acceptable, or a bridge which has a lifting section to accommodate large vessels with a high air draft, navigating to and from West India Dock.

We would be pleased to be kept updated on the progress of this proposal.

Kind regards,

Claire M^cLean

Area Planner – Canal & River Trust London

The Toll House, Little Venice, Delamere Terrace, London W2 6ND

0203 204 4409

07917 616 832

Please be aware that I will be on maternity leave from 23rd July 2014. After that date, please contact Russell Butchers, who will be covering my position, at russell.butchers@canalrivertrust.org.uk or on the numbers above.

Please visit www.canalrivertrust.org.uk to find out more about the Canal & River Trust
Follow [@canalrivertrust](https://twitter.com/canalrivertrust) from the Canal & River Trust on Twitter.

The Canal & River Trust is a new charity entrusted with the care of 2,000 miles of waterways in England and Wales. Get involved, join us - Visit / Donate / Volunteer at www.canalrivertrust.org.uk

Canal & River Trust is a charitable company limited by guarantee registered in England & Wales with company number 7807276 and charity number 1146792. Registered office address First Floor North, Station House, 500 Elder Gate, Milton Keynes MK9 1BB.

Elusen newydd yw Glandŵr Cymru sy'n gofalu am 2,000 o filltiroedd o ddyfrffyrdd yng Nghymru a Lloegr. Cymerwch ran, ymunwch â ni - Ewch i Rhoddion a Gwirfoddoli yn www.glandwrcymru.org.uk

Hannah Nelson

From: Alan Slee <alans@espipelines.com>
Sent: 28 July 2014 16:01
To: Environmental Services
Subject: RE: Reference: PE126438. Plant Not Affected Notice from ES Pipelines

Dear Jenny,

Thanks for your call and this often raises some confusion. ESP Gas Group has been renamed ESP Utilities Group Limited and this standard response template is embedded in our database and is subject to revision at some stage soon on the next update tranche. The company status has not changed in as much that ESP Utilities Group Ltd consists of the 5 licensed companies (referred to as 'subsidiary brands' on our website) consisting E S Pipelines Ltd, ESP Electricity Ltd, ESP Pipelines Ltd, ESP Connections Ltd and ESP Networks Ltd. They are all operated from our offices in Leatherhead and to avoid confusion and multiple and voluminous copies prefer to respond in 'bulk'. All our asset data is held at one location and the response is based upon a companywide search incorporating all gas and electricity assets that we own and manage and that fall under our statutory undertakers obligations.

Regards,

Alan Slee
Operations Manager

DD 01372 227567
Mobile 07766 802070
Fax 01372 386203
www.esputilities.com

From: Environmental Services [mailto:EnvironmentalServices@infrastructure.gsi.gov.uk]
Sent: 28 July 2014 15:56
To: Alan Slee
Subject: RE: Reference: PE126438. Plant Not Affected Notice from ES Pipelines

Dear Mr Slee

Thank you for your response to the scoping consultation in relation to the Silvertown Tunnel. Please can you confirm by reply to this email that you are responding on behalf of E S Pipelines Ltd, ESP Electricity Ltd, ESP Pipelines Ltd, ESP Connections Ltd and ESP Networks Ltd.

Kind Regards

Jenny

Jenny Colfer
Senior EIA and Land Rights Advisor
Major Applications and Plans

The Planning Inspectorate, 3/18 Eagle Wing, Temple Quay House, Temple Quay,
Bristol BS1 6PN

Direct Line: 0303 444 5532
Helpline: 0303 444 5000
Email: jenny.colfer@pins.gsi.gov.uk

Web: www.planningportal.gov.uk/planninginspectorate (Planning Inspectorate casework and appeals)

Web: www.planningportal.gov.uk/infrastructure (Planning Inspectorate's National Infrastructure Planning portal)

Twitter: [@PINSgov](https://twitter.com/PINSgov)

This communication does not constitute legal advice.

Please view our [Information Charter](#) before sending information to the Planning Inspectorate.

From: ES Pipelines [<mailto:email@espipelines.com>]

Sent: 01 July 2014 12:18

To: Environmental Services

Subject: Reference: PE126438. Plant Not Affected Notice from ES Pipelines

Environmental Services
The Planning Inspectorate

1 July 2014

Reference: Silvertown Tunnel - TR010021

Dear Sir/Madam,

Thank you for your recent plant enquiry at: Silvertown Tunnel

We are not directly affected by your works, however our electricity network (ref **ESPE0258**, drawing attached) is in the 500m Study Area as shown on your drawing, ref **Fig 6.5**.

Yours faithfully,

Alan Slee
Operations Manager

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PRECAUTIONS TO BE TAKEN WHEN CARRYING OUT WORK IN THE VICINITY OF UNDERGROUND GAS PIPES

ADVICE TO SITE PERSONNEL

MANAGEMENT NOTE

Please ensure that a copy of this note is read by your site management and to your site operatives.

Early consultation with ESP Utilities Group prior to excavation is recommended to obtain the location of plant and precautions to be taken when working nearby.

This Guidance Note should be read in conjunction with the Health and Safety Executive guidance HSG47 "Avoiding danger from underground services".

Introduction

Damage to ESP Utilities Group's plant can result in uncontrolled gas escapes which may be dangerous. In addition these occurrences can cause expense, disruption of work and inconvenience to the public.

Various materials are used for gas mains and services. Cast Iron, Ductile Iron, Steel and Plastic pipes are the most widely found. Modern Plastic pipes are either bright yellow or orange in colour.

Cast Iron and Ductile Iron water pipes are very similar in appearance to Cast Iron and Ductile Iron gas pipes and if any Cast Iron or Ductile Iron pipe is uncovered, it should be treated as a gas pipe. ESP Utilities Group do not own any metallic gas pipes but their gas network infrastructures may be connected to Cast Iron, Ductile Iron or Steel pipes owned by Transco.

The following general precautions apply to Intermediate Pressure (2-7barg MOP), Medium Pressure (75mbarg-2barg MOP), Low Pressure (up to 75mbarg MOP) and other gas mains and services likely to be encountered in general site works and are referred to within this document as '**pipes**'.

Locating Gas Pipes

It should be assumed when working in urban and residential areas that gas mains and services are likely to be present. On request, ESP Utilities Group will give approximate locations of pipes derived from their records. The records do not normally show the position of service pipes but their probable line can be deducted from the gas meter position. ESP Utilities Group's staff will be pleased to assist in the location of gas plant and provide advice on any precautions that may be required. The records and advice are given in good faith but cannot be guaranteed until hand excavation has taken place. Proprietary pipe and cable locators are available although generally these will not locate plastic pipes.

Safe working Practices

To achieve safe working conditions adjacent to gas plant the following must be observed:

Observe any specific request made by ESP Utilities Group's staff.

Gas pipes must be located by hand digging before mechanical excavation. Once a gas pipe has been located, mechanical excavation must proceed **with care**. A mechanical excavator must not in any case be used within 0.5 metre of a gas pipe and greater safety distances may be advised by ESP Utilities Group depending on the mains maximum operating pressure (MOP).

Where heavy plant may have to cross the line of a gas pipe during construction work, the number of crossing points should be kept to a minimum. Crossing points should be clearly indicated and crossings at other places along the line of the pipe should be prevented.

Where the pipe is not adequately protected by an existing road, crossing points should be suitably reinforced with sleepers, steel plates or a specially constructed reinforced concrete raft as necessary. ESP Utilities Group staff will advise on the type of reinforcement necessary.

No explosives should be used within 30 metres of any gas pipe without prior consultation with ESP Utilities Group.

ESP Utilities Group must be consulted prior to carrying out excavation work within 10 metres of any above ground gas installation.

Where it is proposed to carry out piling or boring within 15 metres of any gas pipe, ESP Utilities Group should be consulted prior to the commencement of the works.

Access to gas plant must be maintained at all times during on site works.

Proximity of Other Plant

A minimum clearance of 300 millimetres (mm) should be allowed between any plant being installed and an existing gas main to facilitate repair, whether the adjacent plant be parallel to or crossing the gas pipe. No apparatus should be laid over and along the line of a gas pipe irrespective of clearance.

No manhole or chambers shall be built over or around a gas pipe and no work should be carried out which results in a reduction of cover or protection over a pipe, without consultation with ESP Utilities Group.

Support and Backfill

Where excavation of trenches adjacent to any pipe affects its support, the pipe must be supported to the satisfaction of ESP Utilities Group and must not be used as an anchor or support in any way. In some cases, it may be necessary to divert the gas pipe before work commences.

Where a trench is excavated crossing or parallel to the line of the gas pipe, the backfill should be adequately compacted, particularly beneath the pipe, to prevent any settlement which could subsequently cause damage to the pipe.

In special cases it may be necessary to provide permanent support to the gas pipe, before backfilling and reinstatement is carried out. Backfill material adjacent to gas plant must be selected fine material or sand, containing no stones, bricks or lumps of concrete, etc., placed to a minimum depth of 150mm around the pipes and well compacted by hand. No power compaction should take place until 300 mm of selected fine fill has been suitably compacted.

If the road construction is in close proximity to the top of the gas pipe, a "cushion" of selected fine material such as sand must be used to prevent the traffic shock being transmitted to the gas pipe. The road construction depth must not be reduced without permission from the local Highway Authority.

No concrete or other hard material must be placed or left under or adjacent to any Cast Iron pipe as this may cause fracture of the pipe at a later date.

Concrete backfill should not be used closer than 300 mm to the pipe.

Damage to Coating

Where a gas pipe is coated with special wrapping and this is damaged, even to a minor extent ESP Utilities Group must be notified so that repairs can be made to prevent future corrosion and subsequent leakage.

Welding or "Hot Works"

When welding or other "hot works" involving naked flames are to be carried out in close proximity to gas plant and the presence of gas is suspected, ESP Utilities Group must be contacted before work commences to check the atmosphere. Even when a gas free atmosphere exists care must be taken when carrying out hot works in close proximity to gas plant in order to ensure that no damage occurs.

Particular care must be taken to avoid damage by heat or naked flame to plastic gas pipes or to the protective coating on other gas pipes. **Leakage from Gas Mains or Services**

If damage or leakage is caused or an escape of gas is smelt or suspected the following action should be taken at once:

- ❖ Remove all personnel from the immediate vicinity of the escape;
- ❖ Contact Transco's National Gas Escape Call Centre, on: **0800 111 999**;
- ❖ Prevent any approach by the public, prohibit smoking, extinguish all naked flames or other source of ignition for at least 15 metres from the leakage;
- ❖ Assist gas personnel, Police or Fire Service as requested.

REMEMBER – IF IN DOUBT, SEEK ADVICE FROM ESP UTILITIES GROUP.

ESP Utilities Group can be contacted at:

Office Address: Hazeldean, Station Road, Leatherhead, Surrey, KT22 7AA

Office Tel: 01372 227560; **Fax:** 01372 377996

Hannah Nelson

From: Claire Ferguson <claire.ferguson@energetics-uk.com>
Sent: 30 June 2014 15:23
To: Environmental Services
Subject: tr010021

Follow Up Flag: Follow up
Flag Status: Flagged

Dear Sir/Madam,

Thank you for submitting your recent plant enquiry.

Based on the information provided, I can confirm that Energetics **does not** have any plant within the area(s) specified in your request.

Please be advised that it may take around 10 working days to process enquiries. In the unlikely event that you have been waiting longer than 10 working days, or require further assistance with outstanding enquiries, please call 01698 404945.

Please ensure all plant enquiries are sent to plantenquiries@energetics-uk.com

Regards

Claire Ferguson

Technical Clerical Team

Energetics Design & Build
International House
Stanley Boulevard
Hamilton International Technology Park
Glasgow
G72 0BN

t: 01698 404979

f: 01698 404940

e: claire.ferguson@energetics-uk.com

w: www.energetics-uk.com

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ENGLISH HERITAGE

Silvertown Tunnel Scoping Consultation
Major Applications and Plans
The Planning Inspectorate

Our ref:
Your ref:

Telephone
Fax

BY E-MAIL:

EnvironmentalServices@infrastructure.gsi.gov.uk

25 July 2014

Dear Sir/Madam

Silvertown Tunnel Nationally Significant Infrastructure Project – Scoping Request

Thank you for the opportunity to respond to the Scoping Request for the Silvertown Tunnel Nationally Significant Infrastructure Project (NSIP). As the Government's adviser on all matters pertaining to the historic environment and a consultation body for the purposes of Regulation 10(4) of the Town and Country (Environmental Impact Assessment) (England and Wales) Regulations 1999 ("the EIA Regulations"), English Heritage is pleased to inform consideration of the historic environment at all stages of the NSIP procedure.

Accordingly, we have reviewed this consultation in the context of the *National Planning Policy Framework* (NPPF) and its core principle that heritage assets be conserved in a manner appropriate to their significance, so that they can be enjoyed for their contribution to the quality of life of this and future generations. Having done this, English Heritage considers that the treatment of non-archaeological heritage is generally acceptable, and, on behalf of the Greater London Archaeological Advisory Service (GLAAS), makes the following observations in respect of archaeological heritage:

- The indication of consultation with GLAAS made in the Scoping Request is welcomed but GLAAS wishes to note that it will identify a single point of contact for its engagement with this NSIP in due course;
- English Heritage's Inspector of Ancient Monuments should be consulted in relation to effects within the river, such as scour from barge traffic;
- The entire tunnel site falls with Archaeological Priority Areas (APAs) that are defined in the Greenwich and Newham Local Plans and this needs to be recognised together with the relevant statements of significance referred to (it is noted that Newham is a draft);
- The main impacts on the north of the river are expected to be in relation to industrial archaeology and deeply buried early prehistoric remains;
- The main impacts south of the river are expected to be in relation to deeply buried prehistoric remains only;

1 WATERHOUSE SQUARE, 138-142 HOLBORN, LONDON EC1N 2ST

Telephone 020 7973 3000 Facsimile 020 7973 3001

www.english-heritage.org.uk

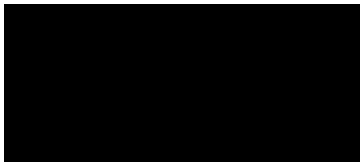
Please note that English Heritage operates an access to information policy.
Correspondence or information which you send us may therefore become publicly available



- Extensive data is available in the Greater London Historic Environment Record (GLHER) (including recent reports not yet fully incorporated) and other data is held by Crossrail;
- A comprehensive 3D geoaerchaeological deposit model of the site and its surroundings based on existing and new boreholes (for which there is much existing data as stated above) will be of critical importance as a Detailed Survey element of the assessment, as this will model the sub-surface topography and enable assessment and further evaluation/mitigation measures to be properly defined and targeted;
- Specialist assessment may also be required of scour or other impacts on the river foreshore;
- As key environmental receptors, the significance of the two APAs should be identified;
- Methodology will need to extend beyond desk-based assessment as indicated above; and
- Options for reducing impact should be preferred for mitigation, with investigation where that is not possible, and a report and archive will be expected.

It should be noted that this advice is based upon information provided by Transport for London. We trust this advice is of assistance in the development of the Silvertown NSIP and we would be glad to discuss any element of it with the Applicant should this be deemed to be of assistance to the process.

Yours sincerely



Claire Craig

Principal Adviser – Historic Places Team: London

Claire.Craig@english-heritage.org.uk



1 WATERHOUSE SQUARE, 138-142 HOLBORN, LONDON EC1N 2ST

Telephone 020 7973 3000 Facsimile 020 7973 3001

www.english-heritage.org.uk

Please note that English Heritage operates an access to information policy.
Correspondence or information which you send us may therefore become publicly available

Ms Jenny Colfer
The Planning Inspectorate
3/18 Eagle Wing
Temple Quay House
2 The Square
Bristol
BS1 6PN

Our ref: SL/2014/113018/01-L02
Your ref: TR010021

Date: 24 July 2014

Dear Ms Colfer

**SCOPING CONSULTATION FOR THE SILVERTOWN TUNNEL SILVERTOWN
TUNNEL CROSSING**

Thank you for your EIA Scoping consultation letter of 27 June 2014. The letter was received on 27 June 2014.

We have reviewed the scoping report submitted and have comments to make in respect of flood risk, climate change, contamination and water quality, water resources, waste, fisheries, river transport and passive recreation, to ensure that the Environmental Statement will appropriately address the environmental issues we consider are of most importance for this proposal.

We met with Transport for London (TfL) on 8 and 10 April to discuss initial investigative works and on 21 July to talk about the Scoping Report. We have also discussed future liaison, with a view to organising a productive pre-application consultation process.

Please find our technical comments in the Appendix.

If you have any queries please do not hesitate to contact me.

Yours sincerely,

Mr Steve Swain
Major Projects Officer
Direct dial 0203 263 8085
Direct fax 0203 263 8020
Direct e-mail steve.swain@environment-agency.gov.uk



Appendix - Technical Comments and Advice

We have previously provided advice to TfL on the various alternative schemes that were considered. The decision to progress with the long bored option has removed biodiversity and fisheries concerns for the inter-tidal and estuarine habitats that would have been present for an immersed tunnel option.

6.6 Ecology and Nature Conservation

We do not anticipate that fish will be affected by this proposal. Any impacts to fish during construction have been removed through the choice to progress the long bored option, which involves no marine works. We do not envisage vibrations from the boring machine will have an impact on fish. Therefore, we accept the scoping out of fish surveys.

6.9 Materials

The use, treatment, disposal or storage of waste could require an Environmental Permit or exemption. For more information please see the link below;

<https://www.gov.uk/environmental-permit-check-if-you-need-one/overview>

Use of river transport options

We support the consideration to remove waste by river, which we consider to be a sustainable option that also will help the Thames continue to act a functioning river, in line with the London Plan.

Re-use of waste

We support the intention to re-use waste where possible.

6.8 Geology and Soils

The baseline information does not reference the Greenwich Peninsula Environmental Method Statement, which details how any scheme on the peninsula should be developed to stop the mobilisation of existing contaminants. It is important that this document is considered. We understand that TfL will now include this method statement within their EIA, including any post-construction monitoring requirements.

This section does include the descriptions of the possible significant effects on receptors that we are concerned about. However, the effects of them on surface and groundwater receptors will be covered in Water Environment Assessment. We believe reference to 'Table 6-10' should read 'Table 6-16. It is important that this important subject is strongly cross-referenced between these two sections, should it be decided that the section headings remain as they are.

6.11 Townscape and Visual

We are pleased that pedestrian impacts and mitigation measures will be considered. We support the principles of the Thames Path because of the passive recreation of the river it provides to the public. It is important that impacts on public access to and public enjoyment of the river are considered.

6.12 Water Environment

The Design Manual for Roads and Bridges contains suggested categories for use for EIA scoping. The Water Environment section provided in the Scoping Report will need to contain a wide variety of issues, some of which overlap with other sections, such as Geology and Soils, as mentioned in the Report.

Flood risk

We understand from TfL that a full Flood Risk Assessment (FRA) will be provided as an Appendix to the Environmental Statement. This is important to ensure that flood risk is adequately considered and represented. The FRA will need to consider impacts by and on all sources of flooding, the current state of the tidal flood defences and the project's possible impacts on them and possible impacts on the development of predicted sea level rise. It should be demonstrated that flood defences will be fit for purpose for the lifetime of the development.

Flood Defence Consent will be needed from the Environment Agency for any works within 16 m of the landward side of the flood defence.

Climate change, predicted sea level rise and flood defences

There is currently no reference to the Thames Estuary 2100 (TE2100) Plan, which outlines how the Thames tidal defences will need to be managed to combat predicted rises in sea level over the next 100 years. The TE2100 Plan was published in November 2012 and includes anticipated future requirements for the raising of defences that will likely be included in the red line boundary for this development. There is reference in the Scoping report to a possible need to raise defences in the future but this is not linked to climate change or to the TE2100 Plan. The need to plan for future defence raisings is an important issue that, we advise, must be considered within the FRA within the Environmental Statement. We understand, following our meeting, that TfL will include the TE2100 Plan in their EIA.

Surface water drainage

Highway drainage proposals should refer to sustainable drainage principles, which we understand TfL will do.

Water quality

The Water Framework Directive (WFD) classification information on the Greenwich Tertiaries Groundwater Body has not been included in the Scoping Report. We understand that TfL will now include this information. WFD objectives for all of the water bodies should be considered.

The EIA should assess the hydrogeological impacts of the development.

There is a need to assess and understand the potential impacts of carrying out dewatering works during the operational lifetime of the scheme. We strongly advise that possibilities of, and mitigation measures against, contaminant mobilisation are assessed.

There is also a risk of saline intrusion during dewatering activities. There is already a rising trend of water salinity in Greenwich Tertiaries. Hence, dewatering works should be designed and carried out in a way that will reduce the risk of increased saline intrusion. In addition, relevant monitoring should be put in place to enable the observation of and mitigation against any negative impacts.

The use of certain grouts/drilling fluids may be prohibited if they contain hazardous pollutants which may pose unacceptable risk to groundwater.

An Environmental Permit or registered exemption are needed from us to discharge anything other than clean, uncontaminated water to inland freshwaters (eg rivers, lakes and streams), groundwater (eg boreholes), estuaries and coastal waters.

Water resources

TfL should identify early on if water resources will be required during the construction phase and where this water will be sourced. This will also help inform whether any permits are required from the Environment Agency. TfL have confirmed to us that they will identify water requirements for construction and consider potential sources and capacities.

Dewatering activity that will be carried out during the construction period is exempt from the abstraction licensing regime at present. However, any secondary uses of water (obtained through dewatering activity), that are not directly related to the operations, will be licensable.

We advise that TfL refer to the Environment Agency Guiding Principles for Land Contamination (please find the link below) for the type of information that we require in order to assess risks to controlled waters from the site. Local Authorities advise on risk to other receptors, such as human health.

<https://www.gov.uk/government/publications/managing-and-reducing-land-contamination>.

Environment Agency, Ergon House, Horseferry Road, London SW1P 2AL
Telephone: 03708 506 506
Email: enquiries@environment-agency.gov.uk
Website: www.environment-agency.gov.uk

Hannah Nelson

From: Penlington, Graham <Graham.Penlington@fulcrum.co.uk> on behalf of &box_FPLplantprotection_conx, <FPLplantprotection@fulcrum.co.uk>
Sent: 03 July 2014 16:09
To: Environmental Services
Subject: RE: TR010021 Silvertown Tunnel Scoping Consultation

Follow Up Flag: Follow up
Flag Status: Flagged

Thank you for asking Fulcrum Pipelines Limited to examine your consultation document for the above project.

We can confirm that Fulcrum Pipelines Limited have no comments to make on this scoping report. Please note that we are constantly adding to our underground assets and would strongly advise that you consult us again prior to undertaking any excavations.

Please note that other gas transporters may have plant in this locality which could be affected.

We will always make every effort to help you where we can, but Fulcrum Pipelines Limited will not be held responsible for any incident or accident arising from the use of the information associated with this search. The details provided are given in good faith, but no liability whatsoever can be accepted in respect thereof.

If you need any help or information simply contact Fulcrum on 0845 641 3060

To save you time, any future requests for information about our plant, can be emailed to FPLplantprotection@fulcrum.co.uk

GRAHAM PENLINGTON
Process Assistant



Tel: 0845 641 3060
Direct Dial: 01142 804 175
Email: Graham.Penlington@fulcrum.co.uk
Web: www.fulcrum.co.uk



FULCRUM NEWS

FULCRUM ENGINEER SCOOPS TOP GAS INDUSTRY AWARD

Fulcrum's Paul Leighton named as the UK gas industry's 2014 Engineer of The Year. [Learn more.](#)

FULCRUM TOASTS SUCCESSFUL COMPLETION OF HISTORIC £7.6MILLION, 16 MILE GAS PIPELINE

16-mile link to Scotland's main gas network completed six-months ahead of schedule despite winter temperatures of -12°C. [Learn more.](#)

HID Policy - Land Use Planning
NSIP Consultations
Building 5.S.2, Redgrave Court
Merton Road, Bootle
Merseyside, L20 7HS

Your ref: TR10021
Our ref: 4.2.1.4173

HSE email: NSIP.applications@hse.gsi.gov.uk

FAO Jenny Colfer
The Planning Inspectorate
3/18 Eagle Wing,
Temple Quay House
2 The Square, Bristol
BS1 6PN

Dear Ms Colfer

24 July 2014

**PROPOSED SILVERTOWN TUNNEL (the project)
PROPOSAL BY TRANSPORT FOR LONDON (the applicant)
INFRASTRUCTURE PLANNING (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS 2009 (as amended) – Regulations 8 and 9**

Thank you for your letter of 27th June 2014 regarding the information to be provided in an environmental statement relating to the above project. HSE does not comment on EIA Scoping Reports but the following information is likely to be useful to the applicant.

HSE's land use planning advice

Will the proposed development fall within any of HSE's consultation distances?

This application falls within the consultation distance of two major hazard sites, the east Greenwich gasholder station and Brenntag UK.

The consultation distance of each site is divided into zones based on the Hazardous Substances Consent held by the site. Any change to the consent may result in a change to the zones.

Based on the existing granted consents, the surface development is within the inner zone of both sites with the new grade separated junction in the inner zone of one site.

In line with PADHI+ guidance (<http://www.hse.gsi.gov.uk/landuseplanning/index.htm>). HSE would advise against dual carriageways within the HSE inner consultation zone. This would apply even though there is an existing dual carriageway.

Hazardous Substances Consent

The presence on, over or above land of certain hazardous substances, at or above set threshold quantities (Controlled Quantities), may require Hazardous Substances Consent (HSC) under the Planning (Hazardous Substances) Act 1990 as amended. The substances, alone or when aggregated with others, for which HSC is required, and the associated Controlled Quantities, are set out in The Planning (Hazardous Substances) Regulations 1992 as amended particularly by The Planning (Hazardous Substances) (Amendment) (England) Regulations 2009 and 2010, as well as Planning (Control of Major Accident Hazards) Regulations 1999.

Hazardous Substances consent would be required if the site is intending to store or use any of the Named Hazardous Substances or Categories of Substances and Preparations at or above the controlled quantities set out in schedule 1 of these Regulations.

Further information on HSC should be sought from the relevant Hazardous Substances authority who should be aware of any pending consent applications.

Explosives sites

After completion, HSE will have no objection to the tunnel development, as it will not impinge upon any of our licensed explosive sites.

However, during the construction phase, it appears that land controlled by General Marine (Tugs and Barges) Ltd is to be included in the "temporary land take for temporary works or site compounds". Therefore, during the construction phase, General Marine would be unable to handle any explosives at their premises. HSE will be contacting the company regarding this matter.

Please send any further electronic communication on this project directly to the HSE's designated e-mail account for NSIP applications. Alternatively any hard copy correspondence should be sent to:

Miss Laura Evans
NSIP Consultations
5.S.2 Redgrave Court
Merton Road
Bootle
Merseyside
L20 7HS

Yours sincerely,



Laura Evans
HID Policy - Land Use Planning

Our ref:
Your ref: TR010021

The Planning Inspectorate
3/18 Eagle Wing
Temple Quay House
The Square
Bristol
BS1 6PN

For the Attention of Jenny Colfer

Tommy Whittingham

3B
Federated House
London Road
Dorking RH4 1SZ

Direct Line: 01306 878113

3 July 2014

Dear Ms Colfer

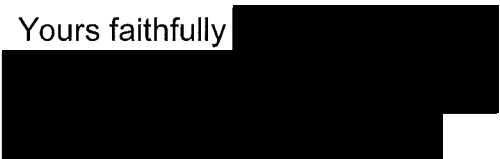
**PLANNING ACT 2008 (AS AMENDED) AND THE INFRASTRUCTURE PLANNING
(ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS 2009 (AS AMENDED)
REGULATIONS 8 AND 9
APPLICATION BY TRANSPORT FOR LONDON FOR AN ORDER GRANTING
DEVELOPMENT CONSENT FOR THE SILVERTOWN TUNNEL – SCOPING
CONSULTATION**

Thank you for your letter of 27th June 2014, consulting on The EIA Scoping Report associated with the proposed Silvertown Tunnel.

The Highways Agency (HA) is an executive agency of the Department for Transport (DfT). We are responsible for operating, maintaining and improving England's Strategic Road Network (SRN) on behalf of the Secretary of State for Transport. We will be concerned with proposals that have the potential to impact on the safe and efficient operation of the SRN, which in this case is the M25 and any road on the SRN between the M25 and the Greater London Boundary that may be affected by increasing the capacity of the river crossings.

The Scoping Report contains little detail on the intended scope of traffic modelling and in this respect it is assumed that a separate Transport Assessment will be prepared as part of the full submission. If this is not the case and the Transport Assessment is to be included within the scope of the EIA then we would wish to have further input into the scope of the section of the EIA covering transport issues. If a separate Transport Assessment is to be prepared, we wish to be consulted on its content, and early involvement in the process would be welcomed.

Yours faithfully



Tommy Whittingham
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LONDON BOROUGH OF
BEXLEY

m/r SMB/14/01207/ALA

Direct Dial 020 3045 5764

y/r TR010021

Date 25th July 2014

The person dealing with this matter is

Mr S Bell

steve.bell@bexley.gov.uk

The Planning Inspectorate
3/18 Eagle Wing
Temple Quay House
2 The Square
Bristol
BS1 6PN

Dear Sir/Madam,

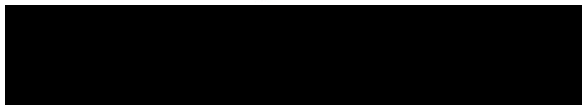
Application by Transport for London for an Order Granting Development Consent for the Silvertown Tunnel

I refer to your letter dated 27th June 2014 that was received on 30th June 2014 in relation to the above development.

Following an assessment I can confirm that no objection is raised to the EIA scoping report submitted in respect of the above proposal. Please note that the Council do wish to be consulted at all further stages of this proposal.

Please advise if you have any queries.

Yours faithfully,



Head of Development Control



Jenny Colfer
The Planning Inspectorate
3/18 Eagle Wing
Temple Quay House
2 The Square
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Development & Renewal

Planning and Building Control
Town Hall
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www.towerhamlets.gov.uk

Our ref: PA/14/1971
Your ref: TR010021
Date: 25th July 2014

Enquiries to: Harriet Peacock
Tel: 020 7364 3620
E-mail: harriet.peacock@towerhamlets.gov.uk

Dear Jenny Colfer,

THE TOWN AND COUNTRY PLANNING (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS 2011 EIA Scoping Report – Silvertown Tunnel London Borough of Tower Hamlets Consultation Response

The London Borough of Tower Hamlets (LBTH) understands that Transport for London (TfL) is proposing a new road tunnel linking the areas north and south of the Thames between the Greenwich Peninsula and Silvertown, hereinafter referred to as the 'Silvertown Tunnel'. The purpose of the Scheme is to reduce delays and closures at the Blackwall Tunnel by improving connections and offering alternative crossing options.

LBTH received the EIA Scoping Report for the Silvertown Tunnel on 30th June 2014. Please accept this letter and its contents as LBTH's formal consultation response on the Silvertown Tunnel EIA Scoping Report.

Please note, this letter relates only to the EIA Scoping Report and does not prejudice the Council from providing any subsequent comments, representations and/ or decisions of the Council on the proposed Silvertown Tunnel.

Previous Consultation

In February 2013 LBTH provided comments on the Mayor of London's TfL River Crossings Consultation.

The previous consultation response recognised the predicted growth in traffic associated with new development and population forecasts for East London which will inevitably impact on demand for cross river movement. The Council also recognised the existing problems of extremely poor air quality, congestion and resilience of the existing Blackwall Tunnels to incidents. It was agreed that action needed to be taken, but officers were concerned that the proposals set out in the consultation did not deliver sufficient benefits.

This previous response should read alongside this latest consultation response.

Potential Significant Effects on LBTH

LBTH have reviewed the EIA Scoping Report, and due to its proximity to the LBTH, it is considered that the proposed development has the potential to affect environmental receptors within the Borough. Of particular concern to LBTH are those that have the potential to lead to significant environmental effects, including:

- increase in traffic on LBTH road network;
- changes to noise and vibration as a result of construction work and once operational;
- changes to air quality as a result of construction work and once operational;
- changes to socio-economic as a result of changes to employment;
- disturbance and mobilisation of any historic contamination;
- changes to flood risk and surface drainage;
- visual effects and effects on townscape character resulting from the development
- the generation and disposal of waste; and
- potentially significant cumulative effects with other committed developments near the LBTH and London Borough of Newham (LBN) boundaries.

The Council would seek environmental, social and economic mitigation measures to reduce any adverse effects of the proposed Silvertown Tunnel.

Scope of the EIA

Scoped in

The following environmental topics are proposed to be included in the ES:

- Air Quality;
- Community and Private Assets;
- Cultural Heritage;
- Ecology and Nature Conservation;
- Effects on All Travellers;
- Geology and Soils;
- Materials;
- Noise and Vibration;
- Townscape and Visual;
- Water Environment; and
- Cumulative.

The Council welcomes further detailed consultation on these topics.

It may be useful to refer to LBTH's EIA Scoping Guidance which provides information on assessment methodologies and key issues for LBTH, please see the following, which can be assessed through our pre-application planning web pages:

http://www.towerhamlets.gov.uk/lqsl/601-650/608_development_control/pre-application_advice/eia_scoping_guidance.aspx

Scoped out

No information is provided on why wind microclimate or daylight and sunlight have been scoped out of the EIA. This may be because there are no likely significant effects, but this has not been explained in the EIA Scoping Report. The ES should provide clarification as to

why these disciplines are not considered likely to generate significant effects and therefore have been scoped out of the EIA.

The EIA Scoping Report states that '*The potential environmental effects associated with the extraction and transport of primary raw materials, the manufacture of products and their subsequent transport to and use on construction sites will be scoped out of the assessment*'. The Council does not agree that the transport of materials to site should be scoped out of the ES, as this has the potential to generate construction traffic movements which may lead to significant effects, over a prolonged period.

The EIA Scoping Report states that '*The ES will assess the construction and operational effects of the Scheme... In view of the long design life, it is not considered appropriate for this to form part of each environmental topic assessment, rather the focus will be upon seeking to minimise disruption and to re-use materials that will also form part of the Materials assessment*'. It is unclear why the EIA is not assessing the decommissioning of the Silvertown Tunnel as part of the ES, as this is commonplace with large infrastructure projects.

Climate change should be considered as part of the EIA, where appropriate. This does not need to be as a standalone assessment, but can be incorporated into the relevant discipline assessments e.g. increased risk of flooding. The UK Climate Projections 2009 should be utilised and potential ways to mitigate the development's impact on climate change should be highlighted as detailed in the LBTH EIA Scoping Guidance (e.g. reduced energy usage, minimising CO₂ emissions during construction). The development should be assessed against future climate change scenarios as identified in the Mayors Climate Change Adaptation Strategy which are the same as recommended in LBTH's EIA Scoping Guidance.

General

Tables 5.3 to 5.6 and Appendix B of the EIA Scoping Report sets out the terminology to be used in the ES - the Council notes is very helpful.

The ES should clearly illustrate the effects identified. For example, highlighting the effect in bold can assist the reader in identifying the effects of the proposed development quickly and easily e.g. **slight adverse**.

Environmental Disciplines

Traffic and Transport

The construction traffic assessment should consider both vehicles bringing material/ equipment to/ from the site, as well as construction staff movements i.e. the ES needs to consider how the workers will get to site (e.g. by car (parking on/ off site) and/ or via public transport) and the effects that this will have on the network capacity.

Likely construction traffic routes should be established, so that receptors can be appropriately assessed.

The EIA Scoping Report identifies the potential to utilise water transport as a mode during construction. Consideration should be given to the effect that an increase in river-borne traffic may have on the estuary, specifically in relation to both commercial and recreational navigation.

The EIA Scoping Report states that '*Traffic data will be obtained for the base year of 2012, 2021, 2031 and 2041*' – it is unclear why data from 2012 is being utilised as the baseline data, rather than more up to date data given that it is now mid-way through 2014.

The Council is disappointed to see that the proposed Silvertown Tunnel will not be designed to accommodate pedestrians and cyclists. The Council believes that there should be more emphasis on sustainable means of transport, as well as improving connectivity by walking, cycling and public transport to assist the regeneration of this part of London.

TfL should consider multi-modal double-deck tunnels which would help provide a more long-term sustainable transport solution e.g. integrating DLR route within the Silvertown Tunnel. This approach would greatly improve the reach of the DLR network for passengers in east and south-east London. It would increase rail capacity (and provide for better walking and cycling connectivity), as well as reduce pressure on the existing limited rail river crossings in this part of London.

Consideration needs to be given to road users using local residential roads as cut through routes to and from the Silvertown Tunnel, A13 and Blackwall Tunnel, and the effects that this may have on local residents. Receptors of specific concern are Aberfeldy Estate, Virginia Quay and south Poplar.

LBTH is currently working with TfL and the London Legacy Development Corporation (LLDC) on improvements to the A12, including public realm and potential new crossings. The proposed Silvertown Tunnel should not compromise these improvements.

Predicted changes to traffic levels and flows may require mitigation measures will be on the A12 and A13.

Air Quality

As noted in the EIA Scoping Report, the whole of the LBTH has been designated as an Air Quality Management Area (AQMA). This means that even small increases in emissions can lead to significant effects. It is therefore not considered appropriate for an increase in emissions, however small, to be categorised as negligible.

The ES should set out the proposed approach to defining the future baseline. Current thinking is that the anticipated improvement in background air quality resulting from vehicle emission controls is not now likely to occur. When predicting future air quality a conservative approach should be taken.

Community and Private Assets

Item 4 of Table 6.8 sets out the 'significance of the receptors' – it is assumed that this should in fact referred to as the 'sensitivity of receptors'.

Cultural Heritage

With respect to Item 4 of Table 6.9, reference should also be given to Conservation Areas and locally listed buildings.

Please note that the eastern end of the borough is designated Archaeological Priority Zone. It is essential that consultation is undertaken with Greater London Archaeology Advisory Service (GLAAS). It is recommended that GLAAS are engaged early in the EIA process.

With respect to Item 4 of Table 6.9 and Table B5 of Appendix B, English Heritage has previously advised that there should also be no distinction drawn between Grade I and II* buildings and Grade II buildings. The degree of protection afforded to listed buildings by the legislation does not distinguish between grades and as a national designation all grades should be regarded as 'high' importance.

English Heritage has also previously advised that there should be no distinction in sensitivity between Conservation Areas. As a local designation arising from powers in national legislation they should be considered as designated heritage assets of 'high' importance. If a distinction is then to be drawn in townscape terms between those of consistent architectural or townscape character that should be reflected in the magnitude of change and not in their importance. Table 1 will therefore need to be updated accordingly

Townscape and Visual

No information has been provided on the viewpoints to be assessed, or which are to be wirelines/ rendered – views from LBTH will need to be discussed and agreed with the Council. As a minimum, we ask that London View Management Framework (LVMF) views are rendered. We also request that views from open spaces such as parks and waterways are rendered, as well as any within/ close to conservation areas and/ or heritage assets e.g. listed buildings.

All judgements on the significance of effects should be fully explained and justified and be based on judgements of the potential effects identified, their magnitude and the sensitivity of the receptor affected.

Cumulative Developments

No detail has been provided on the cumulative developments to be assessed with the EIA. Reasonably foreseeable schemes within LBTH should be taken into account if it is considered likely that they will contribute to any impacts identified in the EIA. The Council's standard advice is that the EIA should also assess cumulative developments that have been submitted as planning applications but not yet approved should also be included, as the Council considers these to be 'reasonably foreseeable'.

The following extant planning consents should be considered:

- Leamouth Peninsula North – PA/10/01864;
- Orchard Wharf - PA/10/02778;
- Aberfeldly Estate Redevelopment - PA/11/02716;
- Blackwall Reach Development - PA/12/00001;
- Wood Wharf - PA/13/2966;
- New Union Wharf - PA/12/00360;
- Land on West Side of Leamouth Road, Leamouth Road - PA/07/0039;
- 60 Portree Street and Lanrick House, Lanrick Road - PA/08/01669;
- Building C, New Providence Wharf, Blackwall Way - PA/06/02101;
- Alberta House - PA/07/00241;
- Prestons Road - PA/11/1668;
- Virginia Quays - PA/11/1462;
- Cannning Town and Custom House - 11/00662/LYGDC);
- Rathbone Market, Barking Road - 08/02263/LTGDC; and
- Crossrail - Eastern Tunnels Logistics Site (Planning References: 09/00912/AOD; 09/00787/AOD; 09/00912/AOD; 10/01016/AOD; and 11/00157/AOD).

The EIA will need to carefully and quantifiably (e.g. using data in other ESs) assess cumulative effects, and demonstrate this in the ES.

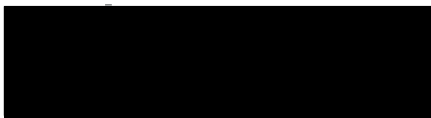
It is recommended that the list of cumulative developments is reviewed regularly to ensure that all relevant current applications are captured for EIA purposes

Conclusion

LBTH would welcome the opportunity to consult further on the EIA for this scheme both pre and post submission.

If you have any further queries, please do not hesitate to contact Harriet Peacock (EIA Officer) at the address above.

Yours sincerely,



**Paul Buckenham
Development Manager**

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Transport for London
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London SW1H 0TL

Transport & Highways
Communities Localities & Culture
Tower Hamlets Town Hall
Mulberry Place
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Tel 020 7364 6851

27 February 2013

Dear TfL River Crossings Consultation

LBTH Officer Response to the Mayor of London's TfL River Crossings Consultation

1) Introduction

Tower Hamlets Council officers welcome the opportunity to respond to the Mayor of London's TfL River Crossings Consultation.

The Council recognises the predicted growth in traffic associated with new development and population forecasts for East London and inevitably this will impact on demand for cross river movement. The Council also recognises the existing problems of extremely poor air quality, congestion and resilience of the existing Blackwall Tunnels to incidents. It is agreed that action needs to be taken but officers are concerned that the proposals set out in the present consultation do not deliver sufficient benefits.

2) Traffic levels and associated impacts

The proposed new Silvertown tunnel river crossing provides limited improvement to access between Greenwich and The Royals and Isle of Dogs. This may relieve pressure on the A12/A13 junction which would provide the opportunity taken to improve pedestrian and cycle movement through the junction along the A13.

However, much of this relief is simply achieved through displacement of traffic from the A13 to the Lower Lea Crossing, channelling more traffic onto Aspen Way which is already under pressure at peak times. It would be unacceptable to allow any of this pressure to displace traffic on to local roads and traffic management measures will need to be introduced to ensure new rat running

patterns do not emerge as a result.

Officers note that the Gallions Reach fixed link option would provide an additional 13% capacity relative to the Gallions Ferry option and this would appear to provide greater connectivity within the Thames Gateway area, supporting regeneration plans and intuitively reducing mileage travelled and relieving more traffic pressure in inner London, particularly on the A12.

We believe the Gallions Reach fixed link proposal should continue to be developed along the same timeframe as the Silvertown tunnel in order to deliver more regeneration and congestion reduction benefits at an earlier stage. This would allow more radical treatment of the A12 to take place in the Lower Lea growth corridor where the Mayor's population and employment growth targets have rendered the present design of the A12 completely inappropriate for future land use.

Local access needs to be much improved along the A12, together with reallocation of roadspace, to meet the needs of the growing numbers of people who will be living and working along this corridor. The strategic traffic function of the A12 must be downgraded to fulfil the Mayor's objectives and the Gallion's Reach Bridge option would provide the opportunity to achieve this.

2) Air quality

EU, national, London and local planning policy objectives seek to protect the environment and improve quality of life. The construction of further road tunnel capacity can generate additional traffic and harmful emissions which will be particularly critical in the Blackwall Tunnel corridor. The Mayor of London has a legal obligation to work towards meeting national objectives and European limit values for air quality, which are designed to protect human health. The UK is currently in breach of EU limit values for nitrogen dioxide (NO₂) and particulate matter (PM₁₀) under EU Air Quality Directive 2008/50/EC.

3) Sustainable transport

More emphasis should be given to improving connectivity by walking, cycling, public transport and sustainable freight travel to assist the regeneration of this part of London.

4) Tolling

It is noted that TfL proposes to use tolls at the Silvertown and Blackwall tunnels from 2021 to fund the construction of the new tunnel and manage traffic levels using the Silvertown and Blackwall tunnels.

This proposal would bring the status into line with the Dartford Crossing and thus remove the attraction as a cheaper through route. However, without discounts for local residents, tolls would penalise the very movements which the Silvertown crossing is seeking to improve, ie local cross river movements.

Consequently, officers strongly believe that if tolling is essential to funding these projects, differentiated tolls must be established to ensure local movement is not adversely affected. Such an approach would be consistent with the discount for residents living within the TfL central London Congestion Charging Zone.

5) Multi-modal tunnel - future proofing

We consider that if any new tunnelled river crossings are to be further developed, TfL should consider 'future-proof' multi-modal double-deck tunnels which would help provide a more long-term sustainable transport solution. This approach would greatly improve the reach of the DLR network for passengers in east and southeast London. It would increase rail capacity (and provide for better walking and cycling connectivity), as well as reduce pressure on the existing limited rail river crossings in this part of London.

6) Mitigation measures

As part of any river crossings package, the Council would seek environmental, social and economic mitigation measures from TfL to reduce the impacts of the Silvertown tunnel. This would include measures mentioned above to reduce the dominance of motor traffic and noise, as well as public realm and air quality improvement measures for communities living on or near the A12, A13 and other routes, to improve quality of life.

The river crossings package and related mitigation measures should also form part of the Mayor of London's emerging Roads Strategy.

7) Conclusions

Tower Hamlets Council would welcome the opportunity to engage further with TfL on the development of the emerging River Crossings proposals. The borough is significantly affected by traffic from Blackwall tunnel and potentially by the Silvertown tunnel proposals due to its geographical location in London, and considers that insufficient commitment has been given to developing other options to the east of Woolwich.

Thank you for your attention.

Yours faithfully

Margaret Cooper
Head of Transport & Highways



Marine
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The Planning Inspectorate
3/18 Eagle Wing
Temple Quay House
2 The Square
Bristol, BS1 6PN

Our reference: DCO/2014/00018
Your reference: TR010021

BY EMAIL ONLY

22 July 2014

Dear Ms Colfer,

Silvertown Tunnel – Scoping Report comments

Thank you for your letter dated 27 June 2014 requesting the Marine Management Organisation's comments on the Silvertown Tunnel Environmental Impact Assessment Scoping Report, dated June 2014. Enclosed with this letter are the Marine Management Organisation's comments on that report.

If you have any queries or require clarification on any of the above, then please do not hesitate to contact me.

Yours sincerely,

Laura Calvert
Inshore Licensing Team

D 0191 376 2575

E laura.calvert@marinemanagement.org.uk



INVESTORS
IN PEOPLE



Marine
Management
Organisation

Silvertown Tunnel

**Comments on the Environmental Impact Assessment Scoping Report,
dated June 2014**

1. The proposal

- 1.1. With the aim of reducing delays and closures at the Blackwall Tunnel by improving connections and offering alternative crossing options, Transport for London proposes to construct a new road tunnel linking the areas north and south of the Thames between the Greenwich Peninsula and Silvertown (the “Project”).
- 1.2. The Project would provide a dual two-lane connection between the A102 Blackwall Tunnel Approach on Greenwich Peninsula, and the Tidal Basin roundabout junction on the A102 Silvertown Way/Lower Lea Crossing by means of twin tunnels under the Thames.
- 1.3. The 1.0km long bored tunnels will have an internal diameter of 11.0m, with cross passages for evacuation, cut and cover tunnel approaches and a lining of reinforced pre-cast concrete segments.
- 1.4. An Environmental Impact Assessment Scoping Report ‘Transport for London, Silvertown Tunnel, Environmental Impact Assessment Scoping Report’ dated June 2014 (the “Report”) has been prepared by Hyder Consulting (UK) Limited for Transport for London as part of the Environmental Impact Assessment (“EIA”) process.

2. The MMO’s role in Nationally Significant Infrastructure Projects

- 2.1. The Marine Management Organisation (the “MMO”) was established by the Marine and Coastal Access Act 2009 (the “2009 Act”) to make a contribution to sustainable development in the marine area and to promote clean, healthy, safe, productive and biologically diverse oceans and seas.
- 2.2. The responsibilities of the MMO include the licensing of construction works, deposits and removals in the marine area by way of a marine licence¹. Marine licences are required for deposits or removals of articles or substances below the level of mean high water springs (“MHWS”), unless a relevant exemption applies under the Marine Licensing (Exempted Activities) (Amendment) Order 2013 (the “2013 Order”).
- 2.3. In the case of Nationally Significant Infrastructure Projects (“NSIPs”), the Planning Act 2008 (the “2008 Act”) enables Development Consent Order’s (“DCO”) for projects which affect the marine environment to include provisions which deem marine licences². Alternatively, applicants may wish to separately seek consent for a marine licence directly from the MMO rather than having it deemed by a DCO.
- 2.4. For NSIPs where applicants choose to have a marine licence deemed by a DCO, during pre-application the MMO will advise developers on the aspects of a project that may have an impact on the marine area or those who use it. In addition to considering the impacts of any construction within the marine area, this would also

¹ Under Part 4 of the 2009 Act

² Section 149A of the 2008 Act

include assessing any risks to human health, other legitimate uses of the sea and any potential impacts on the marine environment from terrestrial works.

- 2.5. Whether a marine licence is deemed within a DCO or consented independently by the MMO, the MMO is the delivery body responsible for post-consent monitoring, variation, enforcement and revocation of provisions relating to the marine environment. As such, the MMO has a keen interest in ensuring that provisions drafted in a deemed marine licence enable the MMO to fulfil these obligations. This includes ensuring that there has been a thorough assessment of the impact of the works on the marine environment (both direct and indirect), that it is clear within the DCO which works are consented within the deemed marine licence, that conditions or provisions imposed are proportionate, robust and enforceable and that there is clear and sufficient detail to allow for monitoring and enforcement. To achieve this, the MMO would seek to agree the deemed marine licence with the developer for inclusion with their application to the Planning Inspectorate (“PINS”).
- 2.6. Further information on licensable activities can be found on the MMOs website³. Further information on the interaction between PINS and the MMO can be found in our joint advice note⁴.
- 2.7. The MMO recognises there is some overlap between the geographical jurisdiction of the MMO and the local planning authorities (i.e. between MHWS and mean low water springs).
- 2.8. The MMO has considered this and is of the view that matters which fall within the scope of the marine licensing provisions of the 2009 Act (i.e. anything below MHWS) are generally best regulated by conditions on marine licences. This should minimize the risk of inconsistency between different schemes of regulation, or of a duplication of controls.
- 2.9. In considering applications for marine licences to be consented independently by the MMO, the MMO regularly consults with bodies including, but not limited, to:
 - the Environment Agency
 - Natural England
 - Natural Resources Wales (for works in or affecting Wales)
 - the Maritime and Coastguard Agency
 - English Heritage
 - local planning authorities
 - local harbour authorities
 - local inshore fisheries and conservation authorities
 - the Royal Yachting Association
 - the Royal Society for the Protection of Birds
 - the corporation of the Trinity House of Deptford Strond.

³ <http://www.marinemangement.org.uk/licensing/marine.htm>

⁴ <http://infrastructure.planningportal.gov.uk/wp-content/uploads/2013/04/Advice-note-11-v2.pdf>

Where a marine licence is to be deemed within a DCO, the MMO would expect that comments provided by the above list of bodies and any other relevant bodies are taken into consideration.

3. Activities for this project which would be licensable under the 2009 Act

3.1. Based on the information provided in the Report, the MMO has identified the following activities which may require licensing under the 2009 Act:

- Construction of the tunnels – The Report notes that the tunnels will be bored beneath the Thames. All work within the marine environment, including both beneath and above the tidal extents of rivers, will require a marine licence under the 2009 Act. It should be noted, however, that there is an exemption relating to bored tunnels in the Marine Licensing (Exempted Activities) (Amendment) Order 2013, as follows:

Bored tunnels

35.—(1) Article 4 applies to a deposit or works activity carried on wholly under the sea bed in connection with the construction or operation of a bored tunnel.

(2) Paragraph (1) is subject to conditions 1 and 2.

(3) Condition 1 is that notice of the intention to carry on the activity must be given to the licensing authority before the activity is carried on.

(4) Condition 2 is that the activity must not significantly adversely affect any part of the environment of the UK marine area or the living resources that it supports.

(5) But article 4 does not apply to any such deposit carried on for the purpose of disposal.

- Construction of drainage water outfalls – Section 2 of the Report refers to highway drainage. Paragraphs 2.3.18 and 2.3.20 state that surface run-off will be ‘gravity drained to an outfall’. The Report does not state if this will be via the use of an existing outfall or if a new outfall will be required. Any works below MHWS, including both the construction of a new outfall, or works to existing infrastructure, such as repair, modification or upgrades, would require a marine licence.
- Construction of in-river structures – Item 12 of section 6.5 of the Report mentions a ‘requirement for in-river structures’, however, notes that ‘this is not currently envisaged’. On this matter the MMO would highlight that further clarification is required.

3.2. The Report includes limited detail regarding work activities and their associated methodologies. Further detail is required in order to ascertain what, if any, activities require licensing under the 2009 Act, and to enable a thorough and robust assessment of their impacts upon the marine environment.

- 3.3. Any additional works or activities in the marine area which may require a marine licence under the 2009 Act should be notified to the MMO at the earliest opportunity and the impacts of such works considered in the EIA process.

4. Comments on the Report

General comments

- 4.1. The Report provides a broad overview of the Project; however, due to the high level nature of the document and lack of Project detail, confidence in the assessments made is limited. For example, as stated in section 3 of this document, only a broad overview of the works to be undertaken has been provided. This limits the confidence that all relevant elements of the project have been scoped with regards to impact pathways and receptors.

Chapter 2 – The Scheme

- 4.2. Paragraph 2.3.26 of the Report provides a brief description of the tunnel design, however, does not state how far below the river bed the tunnels will be bored. Further information is required regarding the exact location of the tunnels, their depth below the river bed and a more detailed works methodology regarding tunnel construction.
- 4.3. Paragraph 2.3.44 of the Report discusses waste and the disposal of excavated material from tunnelling activity. It is noted that, due to the location of the works in close proximity to the Thames, removal by barge would be a likely option. No further detail is provided to advise how this material will be used. The MMO would highlight that consideration should be given to the Waste Framework Directive.
- 4.4. Paragraph 2.3.47 also refers to the possible use of barges to transport tunnel segments and other bulk materials to the site. The impact of such barge movements on marine receptors such as marine ecology and navigation should be assessed.
- 4.5. As stated in paragraph 3.1 of this document, the construction of in-river structures such as jetties to support the use of barges, would constitute a licensable activity. Further detail should be provided and the impacts of such construction activities assessed as part of the EIA process.

Chapter 3 – Consideration of alternatives

- 4.6. Chapter 3 of the Report sets out a consideration of alternatives and discusses the possible use of immersed tube tunnel construction, however, states that this was not taken forward due to the associated higher environmental risks associated with this option.
- 4.7. The MMO supports the use of construction methods which minimise the impact upon the environment and should be advised of any amendment to the proposed works methodology, in particular, if a decision is made to use immersed tube tunnel construction.

Chapter 5 – Environmental impact assessment methodology

- 4.8. The MMO is content with the proposed method of assessment as outlined in Chapter 5 of the Report.

Chapter 6 – Scope of the EIA

- 4.9. Chapter 6 of the Report provides a high level overview of the proposed scope of the EIA, including environmental topics to be covered. This includes limited scope with regards to marine aspects with no consideration given to impacts upon river navigation, marine ecology, hydrodynamics, recreational and commercial fishing, or other marine users.
- 4.10. In particular, section 6.6 states that ‘given that the tunnel is to be created by directional drilling underneath the river, it is not considered that detailed surveys for fish or other features of the River Thames are necessary. These are therefore scoped out of the assessment.’ The proposed works have the potential for noise and vibration from boring activities to impact upon migratory fish. If no impact is expected then clear justification should be given as to why this has been scoped out.
- 4.11. As with all works within the marine environment, the MMO would expect to see a thorough and robust assessment of impacts upon marine receptors and clear justification provided for topics/impacts/receptors which have been scoped out.
- 4.12. Particular consideration should be given in relation to the bored tunnels exemption as outlined at section 3.1 of this document. In order for the exemption to apply, it must be demonstrated in the EIA that the construction of the tunnel does not adversely affect the environment of the UK Marine area or the living resources that it supports. Therefore, any potential for adverse impact on the marine environment should be adequately assessed and scoped out of consideration in the EIA, in order to effectively deliver this requirement.

5. Consultation process and next steps

- 5.1. The MMO welcomes further consultation and recommends that Transport for London discuss the licensing requirements under the 2009 Act with the MMO at the earliest opportunity.

The Planning Inspectorate
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Land and Development
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Network Engineering
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www.nationalgrid.com

SUBMITTED VIA EMAIL TO:
environmentalservices@infrastructure.gsi.gov.uk

04 July 2014

Your Ref: EN010068

Dear Sir/Madam,

Planning Act 2008 (as amended) and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 (as amended)- Regulations 8 and 9

Application by Transport for London for an order granting development consent for the Silvertown Tunnel

Scoping consultation and notification of the applicants contact details and duty to make available information to the applicant if requested.

This is a joint response by National Grid Electricity Transmission plc (NGET) and National Grid Gas plc (NGG)

I refer to your letter dated 27th June 2014 regarding the above proposed application. Having reviewed the scoping report, I would like to make the following comments:

National Grid Infrastructure within or in close proximity to the Proposed Order Limits

National Grid Electricity Transmission

National Grid Electricity Transmission has a high voltage electricity overhead transmission line which lies within or in close proximity to the proposed order limits. This line forms an essential part of the electricity transmission network in England and Wales and include the following:

- ZR 400kV Overhead Transmission Line – Barking-West Ham

The following points should be taken into consideration:

- National Grid's Overhead Line/s is protected by a Deed of Easement/Wayleave Agreement which provides full right of access to retain, maintain, repair and inspect our asset

- Statutory electrical safety clearances must be maintained at all times. Any proposed buildings must not be closer than 5.3m to the lowest conductor. National Grid recommends that no permanent structures are built directly beneath overhead lines. These distances are set out in EN 43 – 8 Technical Specification for “overhead line clearances Issue 3 (2004) available at:
http://www.nationalgrid.com/uk/LandandDevelopment/DDC/devnearohl_final/appendixIII/applII-part2
- If any changes in ground levels are proposed either beneath or in close proximity to our existing overhead lines then this would serve to reduce the safety clearances for such overhead lines. Safe clearances for existing overhead lines must be maintained in all circumstances.
- Further guidance on development near electricity transmission overhead lines is available here: <http://www.nationalgrid.com/NR/rdonlyres/1E990EE5-D068-4DD6-8C9A-4D0B06A1BA79/31436/Developmentnearoverheadlines1.pdf>
- The relevant guidance in relation to working safely near to existing overhead lines is contained within the Health and Safety Executive’s (www.hse.gov.uk) Guidance Note GS 6 “Avoidance of Danger from Overhead Electric Lines” and all relevant site staff should make sure that they are both aware of and understand this guidance.
- Plant, machinery, equipment, buildings or scaffolding should not encroach within 5.3 metres of any of our high voltage conductors when those conductors are under their worse conditions of maximum “sag” and “swing” and overhead line profile (maximum “sag” and “swing”) drawings should be obtained using the contact details above.
- If a landscaping scheme is proposed as part of the proposal, we request that only slow and low growing species of trees and shrubs are planted beneath and adjacent to the existing overhead line to reduce the risk of growth to a height which compromises statutory safety clearances.
- Drilling or excavation works should not be undertaken if they have the potential to disturb or adversely affect the foundations or “pillars of support” of any existing tower. These foundations always extend beyond the base area of the existing tower and foundation (“pillar of support”) drawings can be obtained using the contact details above
- Due to the scale, bulk and cost of the transmission equipment required to operate at 275kV or 400kV we only support proposals for the relocation of existing high voltage overhead lines where such proposals directly facilitate a major development or infrastructure project of national importance which has been identified as such by government.

To view the Development Near Lines Documents. Please use the link below:

http://www.nationalgrid.com/uk/LandandDevelopment/SC/devnearohl_final/

To view the National Grid Policy's for our Sense of Place Document. Please use the link below:

<http://www.nationalgrid.com/uk/LandandDevelopment/DDC/>

Gas Distribution

National Grid has Gas Distribution pipelines located within and in close proximity to the order limits. Details are as follows:

- High or Intermediate pressure (above 2 bar) Gas Pipelines and associated equipment
- Low or Medium pressure (below 2 bar) gas pipes and associated equipment. (As a result it is highly likely that there are gas services and associated apparatus in the vicinity)

Above ground gas sites and equipment has also been identified as being located within or in close proximity to the order limits.

Specific Comments – Gas Infrastructure

The following points should be taken into consideration:

- National Grid has a Deed of Grant of Easement for each pipeline, which prevents the erection of permanent / temporary buildings, or structures, change to existing ground levels, storage of materials etc.

Pipeline Crossings:

- Where existing roads cannot be used, construction traffic should ONLY cross the pipeline at previously agreed locations.
- The pipeline shall be protected, at the crossing points, by temporary rafts constructed at ground level. The third party shall review ground conditions, vehicle types and crossing frequencies to determine the type and construction of the raft required.
- The type of raft shall be agreed with National Grid prior to installation.
- No protective measures including the installation of concrete slab protection shall be installed over or near to the National Grid pipeline without the prior permission of National Grid.
- National Grid will need to agree the material, the dimensions and method of installation of the proposed protective measure.
- The method of installation shall be confirmed through the submission of a formal written method statement from the contractor to National Grid.
- Please be aware that written permission is required before any works commence within the National Grid easement strip.
- A National Grid representative shall monitor any works within close proximity to the pipeline to comply with National Grid specification T/SP/SSW22.
- A Deed of Consent is required for any crossing of the easement

Cables Crossing:

- Cables may cross the pipeline at perpendicular angle to the pipeline i.e. 90 degrees.
- A National Grid representative shall supervise any cable crossing of a pipeline.
- Clearance must be at least 600mm above or below the pipeline.
- Impact protection slab should be laid between the cable and pipeline if cable crossing is above the pipeline.
- A Deed of Consent is required for any cable crossing the easement.
- Where a new service is to cross over the pipeline a clearance distance of 0.6 metres between the crown of the pipeline and underside of the service should be maintained. If this cannot be achieved the service shall cross below the pipeline with a clearance distance of 0.6 metres.

General Notes on Pipeline Safety:

- You should be aware of the Health and Safety Executives guidance document HS(G) 47 "Avoiding Danger from Underground Services", and National Grid's specification for Safe Working in the Vicinity of National Grid High Pressure gas pipelines and associated installations - requirements for third parties T/SP/SSW22.
- National Grid will also need to ensure that our pipelines access is maintained during and after construction.
- Our pipelines are normally buried to a depth cover of 1.1 metres however; actual depth and position must be confirmed on site by trial hole investigation under the supervision of a National Grid representative. Ground cover above our pipelines should not be reduced or increased.
- If any excavations are planned within 3 metres of National Grid High Pressure Pipeline or, within 10 metres of an AGI (Above Ground Installation), or if any embankment or dredging works are proposed then the actual position and depth of the pipeline must be established on site in the presence of a National Grid representative. A safe working method agreed prior to any work taking place in order to minimise the risk of damage and ensure the final depth of cover does not affect the integrity of the pipeline.
- Excavation works may take place unsupervised no closer than 3 metres from the pipeline once the actual depth and position has been confirmed on site under the supervision of a National Grid representative. Similarly, excavation with hand held power tools is not permitted within 1.5 metres from our apparatus and the work is undertaken with NG supervision and guidance.

To view the SSW22 Document, please use the link below:

<http://www.nationalgrid.com/uk/LandandDevelopment/DDC/GasElectricNW/safeworking.htm>

To view the National Grid Policy's for our Sense of Place Document. Please use the link below:

National Grid is a trading name for:
National Grid Electricity Transmission plc
Registered Office: 1-3 Strand, London WC2N 5EH
Registered in England and Wales, No 2366977

National Grid is a trading name for:
National Grid Gas plc
Registered Office: 1-3 Strand, London WC2N 5EH
Registered in England and Wales, No 2006000

<http://www.nationalgrid.com/uk/LandandDevelopment/DDC/>

To download a copy of the HSE Guidance HS(G)47, please use the following link:

<http://www.hse.gov.uk/pubns/books/hsg47.htm>

Further information in relation to National Grid's gas transmission pipelines can be accessed via the following internet link:

<http://www.nationalgrid.com/uk/LandandDevelopment/DDC/gastransmission/gaspipes/>

Further Advice

We would request that the potential impact of the proposed scheme on National Grid's existing assets as set out above is considered in any subsequent reports, including in the Environmental Statement, and as part of any subsequent application.

Where the promoter intends to acquire land, extinguish rights, or interfere with any of National Grid apparatus protective provisions will be required in a form acceptable to it to be included within the DCO.

Where any diversion of apparatus may be required to facilitate a scheme, National Grid is unable to give any certainty with the regard to diversions until such time as adequate conceptual design studies have been undertaken by National Grid. Further information relating to this can be obtained by contacting the email address below.

National Grid requests to be consulted at the earliest stages to ensure that the most appropriate protective provisions are included within the DCO application to safeguard the integrity of our apparatus and to remove the requirement for objection. All consultations should be sent to the following: DCOConsultations@nationalgrid.com as well as by post to the following address:

The Company Secretary
1-3 The Strand
London
WC2N 5EH

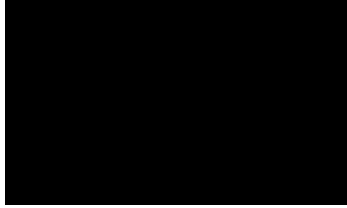
In order to respond at the earliest opportunity National Grid will require the following:

- Draft DCO including the Book of Reference and relevant Land Plans
- Shape Files or CAD Files for the order limits

I hope the above information is useful. If you require any further information please do not hesitate to contact me.

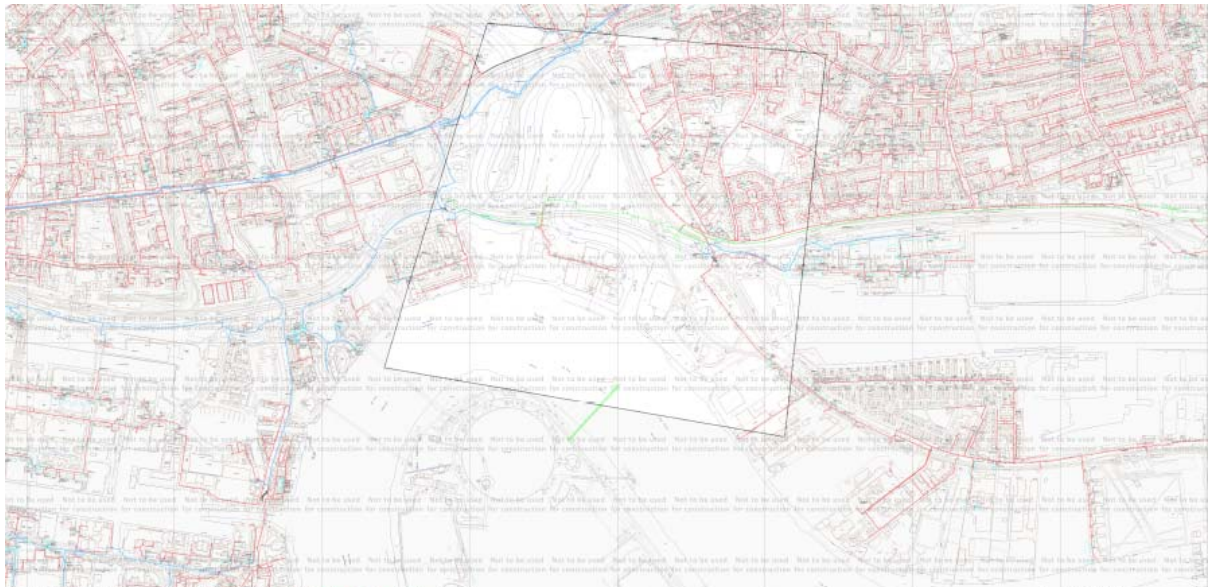
The information in this letter is provided notwithstanding any discussions taking place in relation to connections with electricity or gas customer services.

Yours sincerely



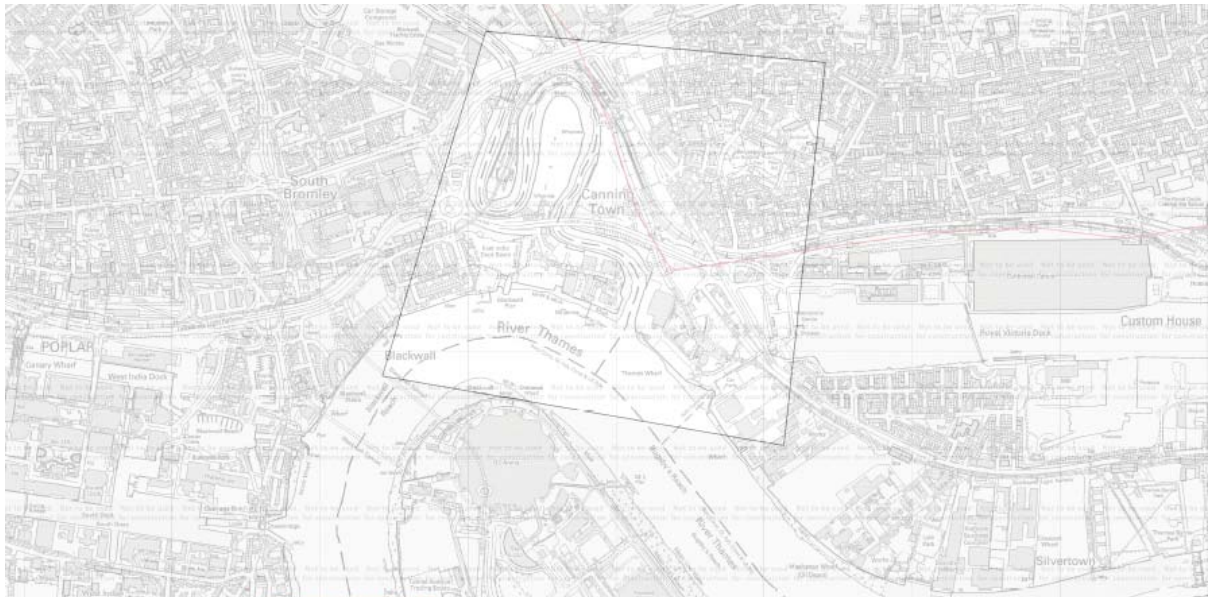
Laura Kelly
Town Planner, Land and Development

(Submitted Electronically)



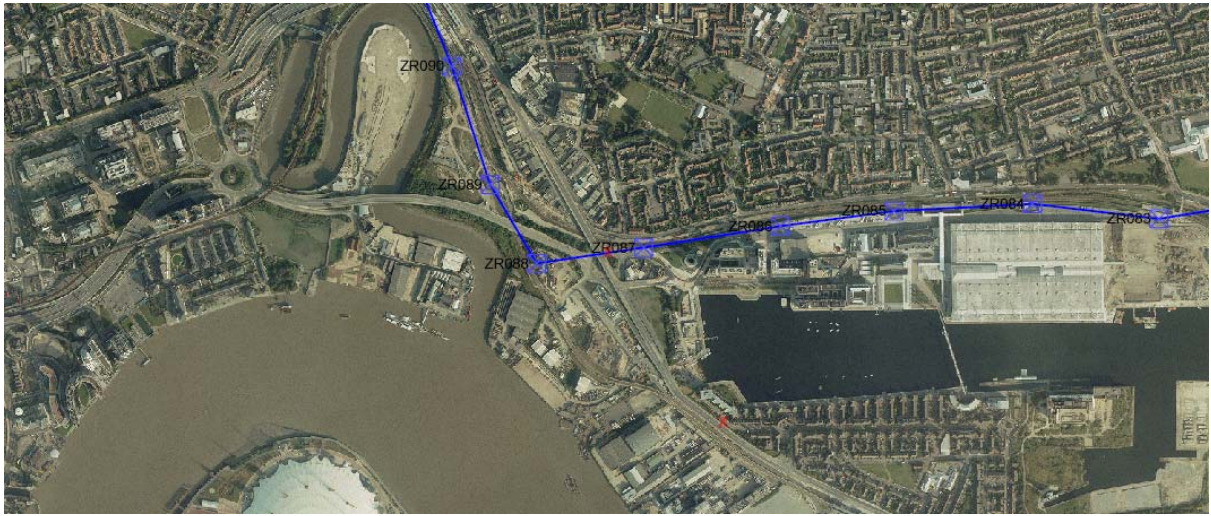
7_NL_TE_ZS_3FHP_018953 View extent: 4120m, 2440m SER: rebecca.fini ATE: 04/07/2014 ATA DATE: 03/07/2014 EF: Silvertown Tunnel (rt) AP REF: TQ3680 ENTRE: 539459, 180880		National Grid objects to this application This plan shows those pipes owned by National Grid Gas plc in its role as a Licensed Gas Transporter (GT). Gas pipes owned by other GTs, or otherwise privately owned, may be present in this area. Information with regard to such pipes should be obtained from the relevant owners. The information shown on this plan is given without warranty, the accuracy thereof cannot be guaranteed. Service pipes, valves, receptors, stub connections, etc. are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by National Grid Gas plc or their agents, servants or contractors for any error or omission. Safe digging practices, in accordance with H&G247, must be used to verify and establish the actual position of mains, pipes, services and other apparatus on site before any mechanical plant is used. It is your responsibility to ensure that the information is provided to all persons (either direct labour or contractors) working for you on or near gas apparatus. The information included on this plan should not be referred to beyond a period of 28 days from the date of issue.	Map 1 of 2 (GAS) MAPS Plot Server Version 1.8.0 nationalgrid Requested by: National Grid This plan is reproduced from or based on the GIS map by National Grid Gas plc, with the sanction of the controller of HM Railway Office. Crown Copyright Reserved. Ordnance Survey Licence number: 100024866
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View: <input type="checkbox"/> North <input type="checkbox"/> South <input type="checkbox"/> East <input type="checkbox"/> West <input type="checkbox"/> Diagonal <input type="checkbox"/> Syphon <input type="checkbox"/> Diameter Change <input type="checkbox"/> Material Change	0m 100m Approximate scale 1:1000 on A3 Colour Landscape
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7_NL_TE_ZS_3FHP_018953 View extent: 4120m, 2440m SER: rebecca.fini ATE: 04/07/2014 ATA DATE: 22/11/2013 EF: Silvertown Tunnel (rt) AP REF: TQ3680 ENTRE: 539459, 180880		National Grid objects to this application This plan shows those cables owned by National Grid Electricity Transmission plc in its role as a Licensed Electricity Transporter (ET). Electricity cables owned by other ETs, or otherwise privately owned, may be present in this area. Information with regard to such cables should be obtained from the relevant owners. The information shown on this plan is given without warranty, the accuracy thereof cannot be guaranteed. Ancillary equipment such as cooling systems and communication cables are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by National Grid Electricity Transmission plc or their agents, servants or contractors for any error or omission. Safe digging practices, in accordance with H&G247, must be used to verify and establish the actual position of cables and other apparatus on site before any mechanical plant is used. It is your responsibility to ensure that the information is provided to all persons (either direct labour or contractors) working for you on or near electricity apparatus. The information included on this plan should not be referred to beyond a period of 28 days from the date of issue.	Map 2 of 2 (ELECTRIC) MAPS Plot Server Version 1.8.0 nationalgrid Requested by: National Grid This plan is reproduced from or based on the GIS map by National Grid Electricity Transmission plc, with the sanction of the controller of HM Railway Office. Crown Copyright Reserved. Ordnance Survey Licence number: 100024866
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View: <input type="checkbox"/> North <input type="checkbox"/> South <input type="checkbox"/> East <input type="checkbox"/> West <input type="checkbox"/> Diagonal <input type="checkbox"/> Syphon <input type="checkbox"/> Diameter Change <input type="checkbox"/> Material Change	0m 100m Approximate scale 1:1000 on A3 Colour Landscape
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Hannah Nelson

From: ROSSI, Sacha <Sacha.Rossi@nats.co.uk>
Sent: 30 June 2014 18:03
To: Environmental Services
Cc: NATS Safeguarding
Subject: RE: TR010021 Silvertown Tunnel Scoping Consultation

Follow Up Flag: Follow up
Flag Status: Flagged

Dear Madam,

NATS anticipates no impact from the proposal and has no comments to make on the Scoping Request.

Regards
S. Rossi
NATS Safeguarding Office

Mr Sacha Rossi
ATC Systems Safeguarding Engineer

☎: 01489 444 205
✉: sacha.rossi@nats.co.uk

NATS Safeguarding
4000 Parkway,
Whiteley, PO15 7FL

<http://www.nats.co.uk/windfarms>

From: Environmental Services [<mailto:EnvironmentalServices@infrastructure.gsi.gov.uk>]
Sent: 27 June 2014 11:03
To: NSIP.applications@hse.gsi.gov.uk; shane.gould@english-heritage.org.uk; margaret.kowalewska@mcga.gov.uk; marine.consent@marinemanagement.org.uk; Baggy.Smailes@caa.co.uk; NSIPconsultations@PHE.gov.uk; southeast.fce@forestry.gsi.gov.uk; NATS Safeguarding; alans@espipelines.com; FPLplantprotection@fulcrum.co.uk
Subject: TR010021 Silvertown Tunnel Scoping Consultation

Dear Sir or Madam

Please see attached correspondence in relation to the request for a Scoping Request for the proposed Silvertown Tunnel.

Kind Regards

Jenny

Jenny Colfer
Senior EIA and Land Rights Advisor
Major Applications and Plans

The Planning Inspectorate, 3/18 Eagle Wing, Temple Quay House, Temple Quay,
Bristol BS1 6PN

Date: 03 July 2014
Our ref: 124887
Your ref: TR010021



Ms J Colfer
The Planning Inspectorate
3/18 Eagle Wing
Temple Quay House
2 The Square
Bristol
BS1 6PN

Sustainable Development
Hornbeam House
Crewe Business Park
Electra Way
Crewe
Cheshire CW1 6GJ

T 0300 060 3900

BY EMAIL ONLY

environmentalservices@infrastructure.gsi.gov.uk

Dear Ms Colfer,

Environmental Impact Assessment Scoping consultation (Regulation 15 (3) (i) of the EIA Regulations 2011): Application by Transport for London for an Order Granting Development Consent for the Silvertown Tunnel.

Location: Between the Greenwich Peninsula and Silvertown.

Thank you for your consultation dated and received by Natural England on 27 June 2014.

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

The scoping request is for a proposal that does not appear, from the information provided, to affect any nationally designated geological or ecological sites (Ramsar, SPA, SAC, SSSI, NNR) or landscapes (National Parks, AONBs, Heritage Coasts), or have significant impacts on the protection of soils (particularly of sites over 20ha of best or most versatile land), nor is the development for a mineral or waste site of over 5ha.

At present therefore it is not a priority for Natural England to advise on the detail of this EIA. We would, however, like to draw your attention to some key points of advice, presented in annex to this letter, and we would expect the final Environmental Statement (ES) to include all necessary information as outlined in Schedule 4 of the Town & Country Planning (Environmental Impact Assessment) Regulations 2011. If you believe that the development does affect one of the features listed in paragraph 3 above, please contact Natural England at consultations@naturalengland.org.uk, and we may be able to provide further information.

Yours sincerely,

Emma Cartwright
Sustainable Development Consultations Team



Natural England is accredited to the Cabinet Office Service Excellence Standard

Annex A – Advice related to EIA Scoping Requirements

1. General Principles

Schedule 4 of the Town & Country Planning (Environmental Impact Assessment) Regulations 2011, sets out the necessary information to assess impacts on the natural environment to be included in an ES, specifically:

- A description of the development – including physical characteristics and the full land use requirements of the site during construction and operational phases.
- Expected residues and emissions (water, air and soil pollution, noise, vibration, light, heat, radiation, etc.) resulting from the operation of the proposed development.
- An assessment of alternatives and clear reasoning as to why the preferred option has been chosen.
- A description of the aspects of the environment likely to be significantly affected by the development, including, in particular, population, fauna, flora, soil, water, air, climatic factors, material assets, including the architectural and archaeological heritage, landscape and the interrelationship between the above factors.
- A description of the likely significant effects of the development on the environment – this should cover direct effects but also any indirect, secondary, cumulative, short, medium and long term, permanent and temporary, positive and negative effects. Effects should relate to the existence of the development, the use of natural resources and the emissions from pollutants. This should also include a description of the forecasting methods to predict the likely effects on the environment
- A description of the measures envisaged to prevent, reduce and where possible offset any significant adverse effects on the environment.
- A non-technical summary of the information.
- An indication of any difficulties (technical deficiencies or lack of know-how) encountered by the applicant in compiling the required information.

It will be important for any assessment to consider the potential cumulative effects of this proposal, including all supporting infrastructure, with other similar proposals and a thorough assessment of the ‘in combination’ effects of the proposed development with any existing developments and current applications. A full consideration of the implications of the whole scheme should be included in the ES. All supporting infrastructure should be included within the assessment.

2. Biodiversity and Geology

2.1. Ecological Aspects of an Environmental Statement

Natural England advises that the potential impact of the proposal upon features of nature conservation interest and opportunities for habitat creation/enhancement should be included within this assessment in accordance with appropriate guidance on such matters. [Guidelines for Ecological Impact Assessment \(EclA\)](#) have been developed by the Institute of Ecology and Environmental Management (IEEM) and are available on their website.

EclA is the process of identifying, quantifying and evaluating the potential impacts of defined actions on ecosystems or their components. EclA may be carried out as part of the EIA process or to support other forms of environmental assessment or appraisal.

The National Planning Policy Framework ([NPPF](#)) sets out guidance in S.118 on how to take account of biodiversity interests in planning decisions and the framework that local authorities should provide to assist developers.



2.2. Internationally and Nationally Designated Sites

Natural England undertakes an initial assessment of all development consultations, by determining whether the location to which they relate falls within geographical 'buffer' areas within which development is likely to affect designated sites. The proposal is located outside these buffer areas and therefore appears unlikely to affect an Internationally or Nationally designated site. However, it should be recognised that the specific nature of a proposal may have the potential to lead to significant impacts arising at a greater distance than is encompassed by Natural England's buffers for designated sites. The ES should therefore thoroughly assess the potential for the proposal to affect designated sites, including Special Areas of Conservation (SAC), Special Protection Areas (SPA), Ramsar sites and Sites of Special Scientific Interest (SSSI). Should the proposal result in an emission to air or discharge to the ground or surface water catchment of a designated site then the potential effects and impact of this would need to be considered in the Environmental Statement

Local Planning Authorities, as competent authorities under the provisions of the Conservation of Habitats and Species Regulations 2010 (the 'Habitats Regulations'), should have regard to the Habitats Regulations Assessment process set out in Regulation 61 of the Habitats Regulations in their determination of a planning application. Should a Likely Significant Effect on a European/Internationally designated site be identified or be uncertain, the competent authority (in this case the Local Planning Authority) may need to prepare an Appropriate Assessment, in addition to consideration of impacts through the EIA process.

Statutory site locations can be found at www.magic.gov.uk. Further information concerning particular statutory sites can be found on the [Natural England website](#).

2.3. Protected Species

The ES should assess the impact of all phases of the proposal on protected species. Records of protected species should be sought from appropriate local biological record centres, nature conservation organisations, groups and individuals; and consideration should be given to the wider context of the site for example in terms of habitat linkages and protected species populations in the wider area, to assist in the impact assessment.

The conservation of species protected by law is explained in Part IV and Annex A of Government Circular 06/2005 *Biodiversity and Geological Conservation: Statutory Obligations and their Impact within the Planning System*. The area likely to be affected by the proposal should be thoroughly surveyed by competent ecologists at appropriate times of year for relevant species and the survey results, impact assessments and appropriate accompanying mitigation strategies included as part of the ES.

Natural England has adopted [standing advice](#) for protected species. It provides a consistent level of basic advice which can be applied to any planning application that could affect protected species. It also includes links to guidance on survey and mitigation.

Natural England does not hold comprehensive information regarding the locations of species protected by law, but advises on the procedures and legislation relevant to such species.

2.4. Regionally and Locally Important Sites

The ES should thoroughly assess the impact of the proposals on non-statutory sites, for example Local Wildlife Sites (LoWS), Local Nature Reserves (LNR) and Regionally Important Geological and Geomorphological Sites (RIGS). Natural England does not hold comprehensive information on these sites. We therefore advise that the appropriate local biological record centres, nature conservation organisations, Local Planning Authority and local RIGS group should be contacted with respect to this matter.



2.5. Biodiversity Action Plan Habitats and Species

The ES should thoroughly assess the impact of the proposals on habitats and/or species listed in the UK Biodiversity Action Plan (BAP). These Priority Habitats and Species are listed as 'Habitats and Species of Principal Importance' within the England Biodiversity List, recently [published](#) under the requirements of S14 of the Natural Environment and Rural Communities (NERC) Act 2006. Section 40 of the NERC Act 2006 places a general duty on all public authorities, including local planning authorities, to conserve and enhance biodiversity. Further information on this duty is available in the Defra publication '[Guidance for Local Authorities on Implementing the Biodiversity Duty](#)'.

Government Circular 06/2005 states that BAP species and habitats, 'are capable of being a material consideration...in the making of planning decisions'. Natural England therefore advises that survey, impact assessment and mitigation proposals for Habitats and Species of Principal Importance should be included in the ES. Consideration should also be given to those species and habitats included in the relevant Local BAP.

The record centre for the relevant Local Authorities should be able to provide the relevant information on the location and type of BAP habitat for the area under consideration.

3. **Landscape, Access and Recreation**

3.1. Landscape and Visual Impacts

The consideration of landscape impacts should reflect the approach set out in the *Guidelines for Landscape and Visual Impact Assessment* (Landscape Institute and the Institute of Environmental Assessment and Management, 2013, 3rd edition), the *Landscape Character Assessment Guidance for England and Scotland* (Scottish Natural Heritage and The Countryside Agency, 2002) and good practice. The assessment should also include the cumulative effect of the development with other relevant existing or proposed developments in the area. In this context Natural England would expect the cumulative impact assessment to include those proposals currently at Scoping stage. Due to the overlapping timescale of their progress through the planning system, cumulative impact of the proposed development with those proposals currently at Scoping stage would be likely to be a material consideration at the time of determination of the planning application.

The assessment should refer to the relevant [National Character Areas](#) which can be found on our website. Links for Landscape Character Assessment at a local level are also available on the same page.

3.2. Access and Recreation

The ES should include a thorough assessment of the development's effects upon public rights of way and access to the countryside and its enjoyment through recreation. With this in mind and in addition to consideration of public rights of way, the landscape and visual effects on Open Access land, whether direct or indirect, should be included in the ES.

Natural England would also expect to see consideration of opportunities for improved or new public access provision on the site, to include linking existing public rights of way and/or providing new circular routes and interpretation. We also recommend reference to relevant Right of Way Improvement Plans (ROWIP) to identify public rights of way within or adjacent to the proposed site that should be maintained or enhanced.

4. **Land use and soils**

Impacts from the development should be considered in light of the Government's policy for the protection of the best and most versatile (BMV) agricultural land as set out in paragraph 112 of the NPPF. We also recommend that soils should be considered under a more general heading of sustainable use of land and the valuing of the ecosystem services they provide as a natural resource in line with paragraph 109 of the NPPF.



Soil is a finite resource that fulfils many important functions and services (ecosystem services) for society; for instance as a growing medium for food, timber and other crops, as a store for carbon and water, as a reservoir of biodiversity and as a buffer against pollution. It is therefore important that the soil resources are protected and used sustainably. The Natural Environment White Paper (NEWP) '*The Natural Choice: securing the value of nature*' (Defra , June 2011), emphasises the importance of natural resource protection, including the conservation and sustainable management of soils and the protection of BMV agricultural land.

Development of buildings and infrastructure prevents alternative uses for those soils that are permanently covered, and also often results in degradation of soils around the development as result of construction activities. This affects their functionality as wildlife habitat, and reduces their ability to support landscape works and green infrastructure. Sealing and compaction can also contribute to increased surface run-off, ponding of water and localised erosion, flooding and pollution.

Defra published a Construction [Code of Practice for the sustainable use of soils on construction sites](#) (2009). The purpose of the Code of Practice is to provide a practical guide to assist anyone involved in the construction industry to protect the soil resources with which they work.

As identified in the NPPF new sites or extensions to new sites for Peat extraction should not be granted permission by Local Planning Authorities or proposed in development plans.

General advice on the agricultural aspects of site working and reclamation can be found in the Defra [Guidance for successful reclamation of mineral and waste sites](#).

5. Air Quality

Air quality in the UK has improved over recent decades but air pollution remains a significant issue; for example over 97% of sensitive habitat area in England is predicted to exceed the critical loads for ecosystem protection from atmospheric nitrogen deposition ([England Biodiversity Strategy](#), Defra 2011). A priority action in the England Biodiversity Strategy is to reduce air pollution impacts on biodiversity. The planning system plays a key role in determining the location of developments which may give rise to pollution, either directly or from traffic generation, and hence planning decisions can have a significant impact on the quality of air, water and land. The assessment should take account of the risks of air pollution and how these can be managed or reduced. Further information on air pollution impacts and the sensitivity of different habitats/designated sites can be found on the Air Pollution Information System (www.apis.ac.uk). Further information on air pollution modelling and assessment can be found on the Environment Agency website.

6. Climate Change Adaptation

The [England Biodiversity Strategy](#) published by Defra establishes principles for the consideration of biodiversity and the effects of climate change. The ES should reflect these principles and identify how the development's effects on the natural environment will be influenced by climate change, and how ecological networks will be maintained. The NPPF requires that the planning system should contribute to the enhancement of the natural environment "by establishing coherent ecological networks that are more resilient to current and future pressures" ([NPPF](#) Para 109), which should be demonstrated through the ES.



Hannah Nelson

From: Owen, Lucy <lucy.owen@pla.co.uk>
Sent: 25 July 2014 16:46
To: Environmental Services
Subject: TR010021 - Scoping consultation for the Silvertown Tunnel

Follow Up Flag: Follow up
Flag Status: Flagged

FAO: Jenny Colfer

Thank you for your letter dated 27 June 2014 inviting the Port of London Authority to comment on the information that it considers should be provided in the Environmental Statement for the Silvertown Tunnel.

The Port of London Authority is the statutory harbour authority for the tidal Thames between Teddington and the Thames Estuary. Its statutory functions include responsibility for conservancy, dredging, maintaining the public navigation and controlling vessel movements and its consent is required for the construction or carrying out of all works and dredging in the river and the provision of moorings. As the body responsible for licensing river works and moorings, the PLA has special regard to their continued viability for unimpeded use by the PLA's licensees. The PLA's functions also include the promotion of the use of the river as an important transport corridor for London.

Tunnel Design

It is understood that the Silvertown Tunnel would be a 1.0km long bored tunnel with an 11m internal diameter. There would be cut and cover tunnel approaches. Whilst reference is made to "*maximising cover to the river bed at the tunnel low point*" and that the "*tunnel will be constructed at such a depth that it would not directly impact on the River Thames*" what the PLA needs to understand and what the ES needs to address, is the depth of the tunnel under the River Thames. This includes not only the tunnel itself but also any scour protection/rock armour that the applicant may be considering placing on top of the tunnel. The depth of the tunnel, its alignment and any tunnel protection could have implications for users of the River Thames. For example, the PLA is currently undertaking some work for the applicant identifying existing moorings or other works in the river in this area. It may, depending on the depth of the tunnel be necessary at the applicant's expense, to relocate existing moorings or other works. Where would these moorings and works be relocated to? What are the navigational, river regime and environmental implications of any relocations? It may also be necessary to determine the impact of the tunnel on the foundations of the cable car tower.

It should also be confirmed whether the applicant would be looking for an exclusion zone(s) around the tunnel and whether there would be any limitations in the area. For example, would there be a limitation on anchoring due to the depth of the tunnel which would impact on river users. Would the applicant be looking to temporarily or permanently extinguish the public right of navigation?

It is noted that the tunnel would involve permanent land take of the PLA's land. Discussions will be needed with the PLA about the need for a River Works Licence.

Use of the River/Materials

It is noted and welcomed that the applicant will be looking to use the river for the removal of spoil and the delivery of tunnel lining segments and that this will be reviewed as part of the ES. Further details will be required on this aspect of the project, including projections for spoil removal and the sizes and types of vessels involved. For example, it might be possible depending on the wharf to be used, to use ships to transport materials rather than barges. It is therefore recommended that a full analysis of potential wharves in the area which could be utilised in connection with the delivery of construction and waste materials is undertaken. The ES should demonstrate how

the use of the river for the transport of construction and waste materials is to be maximised in line with planning policy.

Community and Private Assets

The land required for the Scheme has been confined to the Scheme's safeguarded area – this includes Thames Wharf, Alexandra Wharf and Royal Victoria Dock. Thames Wharf is safeguarded by Ministerial Direction and planning policy seeks to protect it for waterborne cargo handling uses. The planning policy section of the ES will need to address this and demonstrate how capacity and viability of the safeguarded wharf is not adversely affected as a result of the proposed development both during construction and on completion of the tunnel.

Reference is made to the Newham Core Strategy and Thames Wharf. It refers to the Core Strategy's proposed release of Thames Wharf from SIL and there being scope to reconfigure the safeguarded wharf on the site to the adjacent Carlsberg-Tetley) or to remove the wharf safeguarding at Thames Wharf if a consolidated wharf can be delivered at Thameside West subject to there being no net loss of functionality or wharf capacity. It is suggested that care needs to be taken in the ES in relation to the safeguarded wharf. The drawings in the appendix to the scoping document appear to show the limit of any use of Thames Wharf to being temporary land take for temporary works or site compounds. The ES will therefore need to be very clear about this aspect of planning policy and place the Newham Core Strategy into context, as it applies to the development itself rather than to any wider aspirations of Newham Council.

Ecology and Nature Conservation

Clarification should be provided in the ES of any works proposed in the River Thames. For example, reference is made to it being considered unlikely that *"the Scheme would cause any significant disturbance to wading birds as the area of mud appears to be very limited and the current baseline situation appears to include a lot of industrial activity, boat and vehicle movements adjacent to the river in this location."* What disturbance does the applicant consider might be likely from a bored tunnel to wading birds? The document implies that any effects would be indirect from elevated noise levels or the risk of accidental spillages during construction. What spillages does the applicant consider might be possible? Berths would have working practices to maintain clear berthing for the barges so spillages are avoided. Does the applicant mean pollution from liquid spills?

How the dewatering/drainage might be managed in relation to the river and the tunnel operation should also be explained in the ES (i.e. if there is a spillage and it is raining, is the attenuation going to be affected? Would it flow into the river or the sewage system?)

Cumulative Effects

It is recommended that the cumulative effects considered should include the Thames Tideway Tunnel the construction of which would be taking place at the same time at the Silvertown Tunnel.

I hope the above is of assistance to you.

Regards

Lucy Owen
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Your Ref : TR010021
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24th July 2014

Dear Jenny,

**Re: Scoping Consultation
Application for an Order Granting Development Consent for the
proposed Silvertown Tunnel**

Thank you for including Public Health England (PHE) in the scoping consultation phase of the above application. Our response focuses on health protection issues relating to chemicals and radiation. Advice offered by PHE is impartial and independent.

In order to ensure that health is fully and comprehensively considered the Environmental Statement (ES) should provide sufficient information to allow the potential impact of the development on public health to be fully assessed.

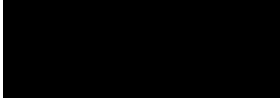
We understand that the promoter will wish to avoid unnecessary duplication and that many issues including air quality, emissions to water, waste, contaminated land etc. will be covered elsewhere in the ES. PHE however believes the summation of relevant issues into a specific section of the report provides a focus which ensures that public health is given adequate consideration. The section should summarise key information, risk assessments, proposed mitigation measures, conclusions and residual impacts, relating to human health. Compliance with the requirements of National Policy Statements and relevant guidance and standards should also be highlighted.

In terms of the level of detail to be included in an ES, we recognise that the differing nature of projects is such that their impacts will vary. Any assessments undertaken to inform the ES should be proportionate to the potential impacts of the proposal, therefore we accept that, in some circumstances particular assessments may not be relevant to an application, or that an assessment may be adequately completed using a qualitative rather than quantitative methodology. In cases where this

decision is made the promoters should fully explain and justify their rationale in the submitted documentation.

The attached appendix outlines generic areas that should be addressed by all promoters when preparing ES for inclusion with an NSIP submission. We are happy to assist and discuss proposals further in the light of this advice.

Yours sincerely



Environmental Public Health Scientist

nsipconsultations@phe.gov.uk

Please mark any correspondence for the attention of National Infrastructure Planning Administration.

Appendix: PHE recommendations regarding the scoping document

General approach

The EIA should give consideration to best practice guidance such as the Government's Good Practice Guide for EIA¹. It is important that the EIA identifies and assesses the potential public health impacts of the activities at, and emissions from, the installation. Assessment should consider the development, operational, and decommissioning phases.

It is not PHE's role to undertake these assessments on behalf of promoters as this would conflict with PHE's role as an impartial and independent body.

We note that the information provided states that there will be three associated development projects, but that these will be the subject of separate planning consent applications. We recommend that the EIA includes consideration of the impacts of associated development and that cumulative impacts are fully accounted for.

Consideration of alternatives (including alternative sites, choice of process, and the phasing of construction) is widely regarded as good practice. Ideally, EIA should start at the stage of site and process selection, so that the environmental merits of practicable alternatives can be properly considered. Where this is undertaken, the main alternatives considered should be outlined in the ES².

The following text covers a range of issues that PHE would expect to be addressed by the promoter. However this list is not exhaustive and the onus is on the promoter to ensure that the relevant public health issues are identified and addressed. PHE's advice and recommendations carry no statutory weight and constitute non-binding guidance.

Receptors

The ES should clearly identify the development's location and the location and distance from the development of off-site human receptors that may be affected by emissions from, or activities at, the development. Off-site human receptors may include people living in residential premises; people working in commercial, and industrial premises and people using transport infrastructure (such as roads and railways), recreational areas, and publicly-accessible land. Consideration should also be given to environmental receptors such as the surrounding land, watercourses, surface and groundwater, and drinking water supplies such as wells, boreholes and water abstraction points.

¹ Environmental Impact Assessment: A guide to good practice and procedures - A consultation paper; 2006; Department for Communities and Local Government. Available from:

<http://www.communities.gov.uk/archived/publications/planningandbuilding/environmentalimpactassessment>

² DCLG guidance, 1999 <http://www.communities.gov.uk/documents/planningandbuilding/pdf/155958.pdf>

Impacts arising from construction and decommissioning

Any assessment of impacts arising from emissions due to construction and decommissioning should consider potential impacts on all receptors and describe monitoring and mitigation during these phases. Construction and decommissioning will be associated with vehicle movements and cumulative impacts should be accounted for.

We would expect the promoter to follow best practice guidance during all phases from construction to decommissioning to ensure appropriate measures are in place to mitigate any potential impact on health from emissions (point source, fugitive and traffic-related). An effective Construction Environmental Management Plan (CEMP) (and Decommissioning Environmental Management Plan (DEMP)) will help provide reassurance that activities are well managed. The promoter should ensure that there are robust mechanisms in place to respond to any complaints of traffic-related pollution, during construction, operation, and decommissioning of the facility.

Emissions to air and water

Significant impacts are unlikely to arise from installations which employ Best Available Techniques (BAT) and which meet regulatory requirements concerning emission limits and design parameters. However, PHE has a number of comments regarding emissions in order that the EIA provides a comprehensive assessment of potential impacts.

When considering a baseline (of existing environmental quality) and in the assessment and future monitoring of impacts these:

- should include appropriate screening assessments and detailed dispersion modelling where this is screened as necessary
- should encompass all pollutants which may be emitted by the installation in combination with all pollutants arising from associated development and transport, ideally these should be considered in a single holistic assessment
- should consider the construction, operational, and decommissioning phases
- should consider the typical operational emissions and emissions from start-up, shut-down, abnormal operation and accidents when assessing potential impacts and include an assessment of worst-case impacts

- should fully account for fugitive emissions
- should include appropriate estimates of background levels
- should identify cumulative and incremental impacts (i.e. assess cumulative impacts from multiple sources), including those arising from associated development, other existing and proposed development in the local area, and new vehicle movements associated with the proposed development; associated transport emissions should include consideration of non-road impacts (i.e. rail, sea, and air)
- should include consideration of local authority, Environment Agency, Defra national network, and any other local site-specific sources of monitoring data
- should compare predicted environmental concentrations to the applicable standard or guideline value for the affected medium (such as UK Air Quality Standards and Objectives and Environmental Assessment Levels)
 - If no standard or guideline value exists, the predicted exposure to humans should be estimated and compared to an appropriate health-based value (a Tolerable Daily Intake or equivalent). Further guidance is provided in Annex 1
 - This should consider all applicable routes of exposure e.g. include consideration of aspects such as the deposition of chemicals emitted to air and their uptake via ingestion
- should identify and consider impacts on residential areas and sensitive receptors (such as schools, nursing homes and healthcare facilities) in the area(s) which may be affected by emissions, this should include consideration of any new receptors arising from future development

Whilst screening of impacts using qualitative methodologies is common practice (e.g. for impacts arising from fugitive emissions such as dust), where it is possible to undertake a quantitative assessment of impacts then this should be undertaken.

PHE's view is that the EIA should appraise and describe the measures that will be used to control both point source and fugitive emissions and demonstrate that standards, guideline values or health-based values will not be exceeded due to emissions from the installation, as described above. This should include consideration of any emitted pollutants for which there are no set emission limits. When assessing the potential impact of a proposed installation on environmental quality, predicted environmental concentrations should be compared to the permitted concentrations in the affected media; this should include both standards for short and long-term exposure.

Additional points specific to emissions to air

When considering a baseline (of existing air quality) and in the assessment and future monitoring of impacts these:

- should include consideration of impacts on existing areas of poor air quality e.g. existing or proposed local authority Air Quality Management Areas (AQMAs)
- should include modelling using appropriate meteorological data (i.e. come from the nearest suitable meteorological station and include a range of years and worst case conditions)
- should include modelling taking into account local topography

Additional points specific to emissions to water

When considering a baseline (of existing water quality) and in the assessment and future monitoring of impacts these:

- should include assessment of potential impacts on human health and not focus solely on ecological impacts
- should identify and consider all routes by which emissions may lead to population exposure (e.g. surface watercourses; recreational waters; sewers; geological routes etc.)
- should assess the potential off-site effects of emissions to groundwater (e.g. on aquifers used for drinking water) and surface water (used for drinking water abstraction) in terms of the potential for population exposure
- should include consideration of potential impacts on recreational users (e.g. from fishing, canoeing etc) alongside assessment of potential exposure via drinking water

Land quality

We would expect the promoter to provide details of any hazardous contamination present on site (including ground gas) as part of the site condition report.

Emissions to and from the ground should be considered in terms of the previous history of the site and the potential of the site, once operational, to give rise to issues. Public health impacts associated with ground contamination and/or the migration of material off-site should be assessed³ and the potential impact on nearby receptors and control and mitigation measures should be outlined.

Relevant areas outlined in the Government's Good Practice Guide for EIA include:

³ Following the approach outlined in the section above dealing with emissions to air and water i.e. comparing predicted environmental concentrations to the applicable standard or guideline value for the affected medium (such as Soil Guideline Values)

- effects associated with ground contamination that may already exist
- effects associated with the potential for polluting substances that are used (during construction / operation) to cause new ground contamination issues on a site, for example introducing / changing the source of contamination
- impacts associated with re-use of soils and waste soils, for example, re-use of site-sourced materials on-site or offsite, disposal of site-sourced materials offsite, importation of materials to the site, etc.

Waste

The EIA should demonstrate compliance with the waste hierarchy (e.g. with respect to re-use, recycling or recovery and disposal).

For wastes arising from the installation the EIA should consider:

- the implications and wider environmental and public health impacts of different waste disposal options
- disposal route(s) and transport method(s) and how potential impacts on public health will be mitigated

Other aspects

Within the EIA PHE would expect to see information about how the promoter would respond to accidents with potential off-site emissions e.g. flooding or fires, spills, leaks or releases off-site. Assessment of accidents should: identify all potential hazards in relation to construction, operation and decommissioning; include an assessment of the risks posed; and identify risk management measures and contingency actions that will be employed in the event of an accident in order to mitigate off-site effects.

The EIA should include consideration of the COMAH Regulations (Control of Major Accident Hazards) and the Major Accident Off-Site Emergency Plan (Management of Waste from Extractive Industries) (England and Wales) Regulations 2009: both in terms of their applicability to the installation itself, and the installation's potential to impact on, or be impacted by, any nearby installations themselves subject to the these Regulations.

There is evidence that, in some cases, perception of risk may have a greater impact on health than the hazard itself. A 2009 report⁴, jointly published by Liverpool John Moores University and the HPA, examined health risk perception and environmental problems using a number of case studies. As a point to consider, the report suggested: "Estimation of community anxiety and stress should be included as part of every risk or impact assessment of proposed plans that involve a potential

⁴ Available from: <http://www.cph.org.uk/showPublication.aspx?pubid=538>

environmental hazard. This is true even when the physical health risks may be negligible.” PHE supports the inclusion of this information within EIAs as good practice.

Electromagnetic fields (EMF) [include for installations with associated substations and/or power lines]

There is a potential health impact associated with the electric and magnetic fields around substations and the connecting cables or lines. The following information provides a framework for considering the potential health impact.

In March 2004, the National Radiological Protection Board, NRPB (now part of PHE), published advice on limiting public exposure to electromagnetic fields. The advice was based on an extensive review of the science and a public consultation on its website, and recommended the adoption in the UK of the EMF exposure guidelines published by the International Commission on Non-ionizing Radiation Protection (ICNIRP):-

<http://www.hpa.org.uk/Publications/Radiation/NPRBArchive/DocumentsOfTheNRPB/Absd1502/>

The ICNIRP guidelines are based on the avoidance of known adverse effects of exposure to electromagnetic fields (EMF) at frequencies up to 300 GHz (gigahertz), which includes static magnetic fields and 50 Hz electric and magnetic fields associated with electricity transmission.

PHE notes the current Government policy is that the ICNIRP guidelines are implemented in line with the terms of the EU Council Recommendation on limiting exposure of the general public (1999/519/EC):

http://www.dh.gov.uk/en/Publichealth/Healthprotection/DH_4089500

For static magnetic fields, the latest ICNIRP guidelines (2009) recommend that acute exposure of the general public should not exceed 400 mT (millitesla), for any part of the body, although the previously recommended value of 40 mT is the value used in the Council Recommendation. However, because of potential indirect adverse effects, ICNIRP recognises that practical policies need to be implemented to prevent inadvertent harmful exposure of people with implanted electronic medical devices and implants containing ferromagnetic materials, and injuries due to flying ferromagnetic objects, and these considerations can lead to much lower restrictions, such as 0.5 mT as advised by the International Electrotechnical Commission.

At 50 Hz, the known direct effects include those of induced currents in the body on the central nervous system (CNS) and indirect effects include the risk of painful spark discharge on contact with metal objects exposed to the field. The ICNIRP guidelines give reference levels for public exposure to 50 Hz electric and magnetic fields, and these are respectively 5 kV m^{-1} (kilovolts per metre) and $100 \text{ } \mu\text{T}$ (microtesla). If people are not exposed to field strengths above these levels, direct effects on the CNS should be avoided and indirect effects such as the risk of painful

spark discharge will be small. The reference levels are not in themselves limits but provide guidance for assessing compliance with the basic restrictions and reducing the risk of indirect effects. Further clarification on advice on exposure guidelines for 50 Hz electric and magnetic fields is provided in the following note on the HPA website:

http://www.hpa.org.uk/webw/HPAweb&HPAwebStandard/HPAweb_C/1195733805036

The Department of Energy and Climate Change has also published voluntary code of practices which set out key principles for complying with the ICNIRP guidelines for the industry.

http://www.decc.gov.uk/en/content/cms/what_we_do/uk_supply/consents_planning/codes/codes.aspx

There is concern about the possible effects of long-term exposure to electromagnetic fields, including possible carcinogenic effects at levels much lower than those given in the ICNIRP guidelines. In the NRPB advice issued in 2004, it was concluded that the studies that suggest health effects, including those concerning childhood leukaemia, could not be used to derive quantitative guidance on restricting exposure. However, the results of these studies represented uncertainty in the underlying evidence base, and taken together with people's concerns, provided a basis for providing an additional recommendation for Government to consider the need for further precautionary measures, particularly with respect to the exposure of children to power frequency magnetic fields.

The Stakeholder Advisory Group on ELF EMFs (SAGE) was then set up to take this recommendation forward, explore the implications for a precautionary approach to extremely low frequency electric and magnetic fields (ELF EMFs), and to make practical recommendations to Government. In the First Interim Assessment of the Group, consideration was given to mitigation options such as the 'corridor option' near power lines, and optimal phasing to reduce electric and magnetic fields. A Second Interim Assessment addresses electricity distribution systems up to 66 kV. The SAGE reports can be found at the following link:

<http://sagedialogue.org.uk/> (go to "Document Index" and Scroll to SAGE/Formal reports with recommendations)

The Agency has given advice to Health Ministers on the First Interim Assessment of SAGE regarding precautionary approaches to ELF EMFs and specifically regarding power lines and property, wiring and electrical equipment in homes:

http://www.hpa.org.uk/webw/HPAweb&HPAwebStandard/HPAweb_C/1204276682532?p=1207897920036

The evidence to date suggests that in general there are no adverse effects on the health of the population of the UK caused by exposure to ELF EMFs below the guideline levels. The scientific evidence, as reviewed by PHE, supports the view that

precautionary measures should address solely the possible association with childhood leukaemia and not other more speculative health effects. The measures should be proportionate in that overall benefits outweigh the fiscal and social costs, have a convincing evidence base to show that they will be successful in reducing exposure, and be effective in providing reassurance to the public.

The Government response to the SAGE report is given in the written Ministerial Statement by Gillian Merron, then Minister of State, Department of Health, published on 16th October 2009:

<http://www.publications.parliament.uk/pa/cm200809/cmhansrd/cm091016/wmstext/91016m0001.htm>

http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_107124

HPA and Government responses to the Second Interim Assessment of SAGE are available at the following links:

http://www.hpa.org.uk/Publications/Radiation/HPAResponseStatementsOnRadiationTopics/rpdadvice_sage2

http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_130703

The above information provides a framework for considering the health impact associated with the proposed development, including the direct and indirect effects of the electric and magnetic fields as indicated above.

Liaison with other stakeholders, comments should be sought from:

- the local authority for matters relating to noise, odour, vermin and dust nuisance
- the local authority regarding any site investigation and subsequent construction (and remediation) proposals to ensure that the site could not be determined as 'contaminated land' under Part 2A of the Environmental Protection Act
- the local authority regarding any impacts on existing or proposed Air Quality Management Areas
- the Food Standards Agency for matters relating to the impact on human health of pollutants deposited on land used for growing food/ crops
- the Environment Agency for matters relating to flood risk and releases with the potential to impact on surface and groundwaters
- the Environment Agency for matters relating to waste characterisation and acceptance

- the Clinical Commissioning Groups, NHS commissioning Boards and Local Planning Authority for matters relating to wider public health

Environmental Permitting

Amongst other permits and consents, the development will require an environmental permit from the Environment Agency to operate (under the Environmental Permitting (England and Wales) Regulations 2010). Therefore the installation will need to comply with the requirements of best available techniques (BAT). PHE is a consultee for bespoke environmental permit applications and will respond separately to any such consultation.

Annex 1

Human health risk assessment (chemical pollutants)

The points below are cross-cutting and should be considered when undertaking a human health risk assessment:

- The promoter should consider including Chemical Abstract Service (CAS) numbers alongside chemical names, where referenced in the ES
- Where available, the most recent United Kingdom standards for the appropriate media (e.g. air, water, and/or soil) and health-based guideline values should be used when quantifying the risk to human health from chemical pollutants. Where UK standards or guideline values are not available, those recommended by the European Union or World Health Organisation can be used
- When assessing the human health risk of a chemical emitted from a facility or operation, the background exposure to the chemical from other sources should be taken into account
- When quantitatively assessing the health risk of genotoxic and carcinogenic chemical pollutants PHE does not favour the use of mathematical models to extrapolate from high dose levels used in animal carcinogenicity studies to well below the observed region of a dose-response relationship. When only animal data are available, we recommend that the 'Margin of Exposure' (MOE) approach⁵ is used

⁵ Benford D et al. 2010. Application of the margin of exposure approach to substances in food that are genotoxic and carcinogenic. Food Chem Toxicol 48 Suppl 1: S2-24

APPENDIX 3

Presentation of the Environmental Statement

APPENDIX 3

PRESENTATION OF THE ENVIRONMENTAL STATEMENT

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (SI 2264) (as amended) sets out the information which must be provided for an application for a development consent order (DCO) for nationally significant infrastructure under the Planning Act 2008. Where required, this includes an environmental statement. Applicants may also provide any other documents considered necessary to support the application. Information which is not environmental information need not be replicated or included in the ES.

An environmental statement (ES) is described under the Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 (SI 2263) (as amended) (the EIA Regulations) as a statement:

- a) 'that includes such of the information referred to in Part 1 of Schedule 4 as is reasonably required to assess the environmental effects of the development and of any associated development and which the applicant can, having regard in particular to current knowledge and methods of assessment, reasonably be required to compile; but
- b) that includes at least the information required in Part 2 of Schedule 4'.

(EIA Regulations Regulation 2)

The purpose of an ES is to ensure that the environmental effects of a proposed development are fully considered, together with the economic or social benefits of the development, before the development consent application under the Planning Act 2008 is determined. The ES should be an aid to decision making.

The SoS advises that the ES should be laid out clearly with a minimum amount of technical terms and should provide a clear objective and realistic description of the likely significant impacts of the proposed development. The information should be presented so as to be comprehensible to the specialist and non-specialist alike. The SoS recommends that the ES be concise with technical information placed in appendices.

ES Indicative Contents

The SoS emphasises that the ES should be a 'stand alone' document in line with best practice and case law. The EIA Regulations Schedule 4, Parts 1 and 2, set out the information for inclusion in environmental statements.

Schedule 4 Part 1 of the EIA Regulations states this information includes:

- '17. *Description of the development, including in particular—*

- (a) *a description of the physical characteristics of the whole development and the land-use requirements during the construction and operational phases;*
 - (b) *a description of the main characteristics of the production processes, for instance, nature and quantity of the materials used;*
 - (c) *an estimate, by type and quantity, of expected residues and emissions (water, air and soil pollution, noise, vibration, light, heat, radiation, etc) resulting from the operation of the proposed development.*
18. *An outline of the main alternatives studied by the applicant and an indication of the main reasons for the applicant's choice, taking into account the environmental effects.*
19. *A description of the aspects of the environment likely to be significantly affected by the development, including, in particular, population, fauna, flora, soil, water, air, climatic factors, material assets, including the architectural and archaeological heritage, landscape and the interrelationship between the above factors.*
20. *A description of the likely significant effects of the development on the environment, which should cover the direct effects and any indirect, secondary, cumulative, short, medium and long-term, permanent and temporary, positive and negative effects of the development, resulting from:*
- (a) *the existence of the development;*
 - (b) *the use of natural resources;*
 - (c) *the emission of pollutants, the creation of nuisances and the elimination of waste,*
- and the description by the applicant of the forecasting methods used to assess the effects on the environment.*
21. *A description of the measures envisaged to prevent, reduce and where possible offset any significant adverse effects on the environment.*
22. *A non-technical summary of the information provided under paragraphs 1 to 5 of this Part.*
23. *An indication of any difficulties (technical deficiencies or lack of know-how) encountered by the applicant in compiling the required information'.*

EIA Regulations Schedule 4 Part 1

The content of the ES must include as a minimum those matters set out in Schedule 4 Part 2 of the EIA Regulations. This includes the consideration of 'the main alternatives studied by the applicant' which the SoS recommends could be addressed as a separate chapter in the ES. Part 2 is included below for reference:

Schedule 4 Part 2

- A description of the development comprising information on the site, design and size of the development
- A description of the measures envisaged in order to avoid, reduce and, if possible, remedy significant adverse effects
- The data required to identify and assess the main effects which the development is likely to have on the environment
- An outline of the main alternatives studied by the applicant and an indication of the main reasons for the applicant's choice, taking into account the environmental effects, and
- A non-technical summary of the information provided [*under the four paragraphs above*].

Traffic and transport is not specified as a topic for assessment under Schedule 4; although in line with good practice the SoS considers it is an important consideration *per se*, as well as being the source of further impacts in terms of air quality and noise and vibration.

Balance

The SoS recommends that the ES should be balanced, with matters which give rise to a greater number or more significant impacts being given greater prominence. Where few or no impacts are identified, the technical section may be much shorter, with greater use of information in appendices as appropriate.

The SoS considers that the ES should not be a series of disparate reports and stresses the importance of considering inter-relationships between factors and cumulative impacts.

Project Proposals

The project parameters will need to be clearly defined in the draft DCO and therefore in the accompanying ES which should support the application as described. The SoS is not able to entertain material changes to a project once an application is submitted. The SoS draws the attention of the applicant to the DCLG and the Planning Inspectorate's published advice on the preparation of a draft DCO and accompanying application documents.

Flexibility

The SoS acknowledges that the EIA process is iterative, and therefore the proposals may change and evolve. For example, there may be changes to the project design in response to consultation. Such changes should be addressed in the ES. However, at the time of the application for a DCO, any proposed project parameters should not be so wide ranging as to represent effectively different projects.

It is a matter for the applicant, in preparing an ES, to consider whether it is possible to assess robustly a range of impacts resulting from a large number of undecided parameters. The description of the proposed development in the ES must not be so wide that it is insufficiently certain to comply with requirements of paragraph 17 of Schedule 4 Part 1 of the EIA Regulations.

The Rochdale Envelope principle (see *R v Rochdale MBC ex parte Tew (1999)* and *R v Rochdale MBC ex parte Milne (2000)*) is an accepted way of dealing with uncertainty in preparing development applications. The applicant's attention is drawn to the Planning Inspectorate's Advice Note 9 'Rochdale Envelope' which is available on the Advice Note's page of the National Infrastructure Planning website.

The applicant should make every attempt to narrow the range of options and explain clearly in the ES which elements of the project have yet to be finalised and provide the reasons. Where some flexibility is sought and the precise details are not known, the applicant should assess the maximum potential adverse impacts the project could have to ensure that the project as it may be constructed has been properly assessed.

The ES should be able to confirm that any changes to the development within any proposed parameters would not result in significant impacts not previously identified and assessed. The maximum and other dimensions of the proposed development should be clearly described in the ES, with appropriate justification. It will also be important to consider choice of materials, colour and the form of the structures and of any buildings. Lighting proposals should also be described.

Scope

The SoS recommends that the physical scope of the study areas should be identified under all the environmental topics and should be sufficiently robust in order to undertake the assessment. The extent of the study areas should be on the basis of recognised professional guidance, whenever such guidance is available. The study areas should also be agreed with the relevant consultees and local authorities and, where this is not possible, this should be stated clearly in the ES and a reasoned justification given. The scope should also cover the breadth of the topic area and the temporal scope, and these aspects should be described and justified.

Physical Scope

In general the SoS recommends that the physical scope for the EIA should be determined in the light of:

- the nature of the proposal being considered
- the relevance in terms of the specialist topic

- the breadth of the topic
- the physical extent of any surveys or the study area, and
- the potential significant impacts.

The SoS recommends that the physical scope of the study areas should be identified for each of the environmental topics and should be sufficiently robust in order to undertake the assessment. This should include at least the whole of the application site, and include all offsite works. For certain topics, such as landscape and transport, the study area will need to be wider. The extent of the study areas should be on the basis of recognised professional guidance and best practice, whenever this is available, and determined by establishing the physical extent of the likely impacts. The study areas should also be agreed with the relevant consultees and, where this is not possible, this should be stated clearly in the ES and a reasoned justification given.

Breadth of the Topic Area

The ES should explain the range of matters to be considered under each topic and this may respond partly to the type of project being considered. If the range considered is drawn narrowly then a justification for the approach should be provided.

Temporal Scope

The assessment should consider:

- environmental impacts during construction works
- environmental impacts on completion/operation of the proposed development
- where appropriate, environmental impacts a suitable number of years after completion of the proposed development (for example, in order to allow for traffic growth or maturing of any landscape proposals), and
- environmental impacts during decommissioning.

In terms of decommissioning, the SoS acknowledges that the further into the future any assessment is made, the less reliance may be placed on the outcome. However, the purpose of such a long term assessment, as well as to enable the decommissioning of the works to be taken into account, is to encourage early consideration as to how structures can be taken down. The purpose of this is to seek to minimise disruption, to re-use materials and to restore the site or put it to a suitable new use. The SoS encourages consideration of such matters in the ES.

The SoS recommends that these matters should be set out clearly in the ES and that the suitable time period for the assessment should be agreed with the relevant statutory consultees.

The SoS recommends that throughout the ES a standard terminology for time periods should be defined, such that for example, 'short term' always refers to the same period of time.

Baseline

The SoS recommends that the baseline should describe the position from which the impacts of the proposed development are measured. The baseline should be chosen carefully and, whenever possible, be consistent between topics. The identification of a single baseline is to be welcomed in terms of the approach to the assessment, although it is recognised that this may not always be possible.

The SoS recommends that the baseline environment should be clearly explained in the ES, including any dates of surveys, and care should be taken to ensure that all the baseline data remains relevant and up to date.

For each of the environmental topics, the data source(s) for the baseline should be set out together with any survey work undertaken with the dates. The timing and scope of all surveys should be agreed with the relevant statutory bodies and appropriate consultees, wherever possible.

The baseline situation and the proposed development should be described within the context of the site and any other proposals in the vicinity.

Identification of Impacts and Method Statement

Legislation and Guidelines

In terms of the EIA methodology, the SoS recommends that reference should be made to best practice and any standards, guidelines and legislation that have been used to inform the assessment. This should include guidelines prepared by relevant professional bodies.

In terms of other regulatory regimes, the SoS recommends that relevant legislation and all permit and licences required should be listed in the ES where relevant to each topic. This information should also be submitted with the application in accordance with the APFP Regulations.

In terms of assessing the impacts, the ES should approach all relevant planning and environmental policy – local, regional and national (and where appropriate international) – in a consistent manner.

Assessment of Effects and Impact Significance

The EIA Regulations require the identification of the 'likely significant effects of the development on the environment' (Schedule 4 Part 1 paragraph 20).

As a matter of principle, the SoS applies the precautionary approach to follow the Court's⁴ reasoning in judging 'significant effects'.

⁴ See Landelijke Vereniging tot Behoud van de Waddenzee and Nederlandse Vereniging tot Bescherming van Vogels v Staatssecretaris van Landbouw (Waddenzee Case No C 127/02/2004)

In other words 'likely to affect' will be taken as meaning that there is a probability or risk that the proposed development will have an effect, and not that a development will definitely have an effect.

The SoS considers it is imperative for the ES to define the meaning of 'significant' in the context of each of the specialist topics and for significant impacts to be clearly identified. The SoS recommends that the criteria should be set out fully and that the ES should set out clearly the interpretation of 'significant' in terms of each of the EIA topics. Quantitative criteria should be used where available. The SoS considers that this should also apply to the consideration of cumulative impacts and impact inter-relationships.

The SoS recognises that the way in which each element of the environment may be affected by the proposed development can be approached in a number of ways. However it considers that it would be helpful, in terms of ease of understanding and in terms of clarity of presentation, to consider the impact assessment in a similar manner for each of the specialist topic areas. The SoS recommends that a common format should be applied where possible.

Inter-relationships between environmental factors

The inter-relationship between aspects of the environments likely to be significantly affected is a requirement of the EIA Regulations (see Schedule 4 Part 1 of the EIA Regulations). These occur where a number of separate impacts, e.g. noise and air quality, affect a single receptor such as fauna.

The SoS considers that the inter-relationships between factors must be assessed in order to address the environmental impacts of the proposal as a whole. This will help to ensure that the ES is not a series of separate reports collated into one document, but rather a comprehensive assessment drawing together the environmental impacts of the proposed development. This is particularly important when considering impacts in terms of any permutations or parameters to the proposed development.

Cumulative Impacts

The potential cumulative impacts with other major developments will need to be identified, as required by the Directive. The significance of such impacts should be shown to have been assessed against the baseline position (which would include built and operational development). In assessing cumulative impacts, other major development should be identified through consultation with the local planning authorities and other relevant authorities on the basis of those that are:

- projects that are under construction
- permitted application(s) not yet implemented
- submitted application(s) not yet determined
- all refusals subject to appeal procedures not yet determined

- projects on the National Infrastructure's programme of projects, and
- projects identified in the relevant development plan (and emerging development plans - with appropriate weight being given as they move closer to adoption) recognising that much information on any relevant proposals will be limited.

Details should be provided in the ES, including the types of development, location and key aspects that may affect the EIA and how these have been taken into account as part of the assessment.

The SoS recommends that offshore wind farms should also take account of any offshore licensed and consented activities in the area, for the purposes of assessing cumulative effects, through consultation with the relevant licensing/consenting bodies.

For the purposes of identifying any cumulative effects with other developments in the area, applicants should also consult consenting bodies in other EU states to assist in identifying those developments (see commentary on Transboundary Effects below).

Related Development

The ES should give equal prominence to any development which is related with the proposed development to ensure that all the impacts of the proposal are assessed.

The SoS recommends that the applicant should distinguish between the proposed development for which development consent will be sought and any other development. This distinction should be clear in the ES.

Alternatives

The ES must set out an outline of the main alternatives studied by the applicant and provide an indication of the main reasons for the applicant's choice, taking account of the environmental effect (Schedule 4 Part 1 paragraph 18).

Matters should be included, such as *inter alia* alternative design options and alternative mitigation measures. The justification for the final choice and evolution of the project development should be made clear. Where other sites have been considered, the reasons for the final choice should be addressed.

The SoS advises that the ES should give sufficient attention to the alternative forms and locations for the off-site proposals, where appropriate, and justify the needs and choices made in terms of the form of the development proposed and the sites chosen.

Mitigation Measures

Mitigation measures may fall into certain categories namely: avoid; reduce; compensate or enhance (see Schedule 4 Part 1 paragraph 21); and should be identified as such in the specialist topics. Mitigation measures should not be developed in isolation as they may relate to more than one topic area. For each topic, the ES should set out any mitigation measures required to prevent, reduce and where possible offset any significant adverse effects, and to identify any residual effects with mitigation in place. Any proposed mitigation should be discussed and agreed with the relevant consultees.

The effectiveness of mitigation should be apparent. Only mitigation measures which are a firm commitment and can be shown to be deliverable should be taken into account as part of the assessment.

It would be helpful if the mitigation measures proposed could be cross referred to specific provisions and/or requirements proposed within the draft development consent order. This could be achieved by means of describing the mitigation measures proposed either in each of the specialist reports or collating these within a summary section on mitigation.

The SoS advises that it is considered best practice to outline in the ES, the structure of the environmental management and monitoring plan and safety procedures which will be adopted during construction and operation and may be adopted during decommissioning.

Cross References and Interactions

The SoS recommends that all the specialist topics in the ES should cross reference their text to other relevant disciplines. Interactions between the specialist topics is essential to the production of a robust assessment, as the ES should not be a collection of separate specialist topics, but a comprehensive assessment of the environmental impacts of the proposal and how these impacts can be mitigated.

As set out in EIA Regulations Schedule 4 Part 1 paragraph 23, the ES should include an indication of any technical difficulties (technical deficiencies or lack of know-how) encountered by the applicant in compiling the required information.

Consultation

The SoS recommends that any changes to the project design in response to consultation should be addressed in the ES.

It is recommended that the applicant provides preliminary environmental information (PEI) (this term is defined in the EIA Regulations under regulation 2 'Interpretation') to the local authorities.

Consultation with the local community should be carried out in accordance with the SoCC which will state how the applicant intends to consult on the preliminary environmental information (PEI). This PEI could include results of detailed surveys and recommended mitigation actions. Where effective consultation is carried out in accordance with Section 47 of the Planning Act, this could usefully assist the applicant in the EIA process – for example the local community may be able to identify possible mitigation measures to address the impacts identified in the PEI. Attention is drawn to the duty upon applicants under Section 50 of the Planning Act to have regard to the guidance on pre-application consultation.

Transboundary Effects

The SoS recommends that consideration should be given in the ES to any likely significant effects on the environment of another Member State of the European Economic Area. In particular, the SoS recommends consideration should be given to discharges to the air and water and to potential impacts on migratory species and to impacts on shipping and fishing areas.

The Applicant's attention is also drawn to the Planning Inspectorate's Advice Note 12 'Development with significant transboundary impacts consultation' which is available on the Advice Notes Page of the National Infrastructure Planning website

Summary Tables

The SoS recommends that in order to assist the decision making process, the applicant may wish to consider the use of tables:

Table X to identify and collate the residual impacts after mitigation on the basis of specialist topics, inter-relationships and cumulative impacts.

Table XX to demonstrate how the assessment has taken account of this Opinion and other responses to consultation.

Table XXX to set out the mitigation measures proposed, as well as assisting the reader, the SoS considers that this would also enable the applicant to cross refer mitigation to specific provisions proposed to be included within the draft Development Consent Order.

Table XXXX to cross reference where details in the HRA (where one is provided) such as descriptions of sites and their locations, together with any mitigation or compensation measures, are to be found in the ES.

Terminology and Glossary of Technical Terms

The SoS recommends that a common terminology should be adopted.

This will help to ensure consistency and ease of understanding for the decision making process. For example, 'the site' should be defined and used only in terms of this definition so as to avoid confusion with, for example, the wider site area or the surrounding site.

A glossary of technical terms should be included in the ES.

Presentation

The ES should have all of its paragraphs numbered, as this makes referencing easier as well as accurate.

Appendices must be clearly referenced, again with all paragraphs numbered.

All figures and drawings, photographs and photomontages should be clearly referenced. Figures should clearly show the proposed site application boundary.

Bibliography

A bibliography should be included in the ES. The author, date and publication title should be included for all references. All publications referred to within the technical reports should be included.

Non Technical Summary

The EIA Regulations require a Non Technical Summary (EIA Regulations Schedule 4 Part 1 paragraph 22). This should be a summary of the assessment in simple language. It should be supported by appropriate figures, photographs and photomontages.