

20 November 2017

ITEM: 7

Lower Thames Crossing Task Force

Council's Proposed Response to Environmental Impact Assessment Scoping Report

Report of: Steve Cox, Corporate Director of Place

Accountable Directors: Steve Cox, Corporate Director of Place

This report is Public.

Executive Summary

This report sets out the key points of the proposed response to the Planning Inspectorate on the Highways England's Lower Thames Crossing Environmental Impact Assessment Scoping Report (the Scoping Report). The Council received a copy of the Scoping Report on 2 November 2017 and has been given 28 days to submit a formal response to the Planning Inspectorate. This report provides a summary of the proposed technical response to the Environmental Scoping Report, which includes baseline information, scope and methodology proposed for the Environmental Impact Assessment (EIA) (which will be presented within an Environmental Statement (ES)).

1. Recommendation(s)

- 1.1 That the Task Force Members flag particular issues for officers to take on board in the response to the Lower Thames Crossing Environmental Impact Assessment Scoping Report.**
- 1.2 That the Task Force Members endorse the Council's proposed response to the Lower Thames Crossing Environmental Impact Assessment Scoping Report, for submission to the Planning Inspectorate by the deadline of 30th November 2017.**

2. Introduction and Background

- 2.1 On 12 April 2017 the Secretary of State for Transport announced the preferred route for the Lower Thames Crossing (LTC). On 2 November 2017 Thurrock Council received the Lower Thames Crossing Environmental Impact Assessment Scoping Report (the Scoping Report) from the Planning Inspectorate. The Planning Inspectorate have invited Thurrock Council to provide comment on the Scoping Report. This report therefore has been prepared to outline the main points of Thurrock's proposed technical response to the information outlined in the Scoping Report.

- 2.2 The aim of a Scoping Report is to identify and report the baseline conditions of the existing environment, to determine which (if any) environmental topics are to be further examined in the EIA, and to outline the methodology proposed for further assessment. The purpose of submitting a Scoping Report is to give the applicant the opportunity to ask the Secretary of State for a formal written opinion on the information to be included within the EIA. This is known as the Scoping Opinion. The Secretary of State must consult with the prescribed consultation bodies (which includes Thurrock Council as the Local Planning Authority) and incorporate their responses within their Scoping Opinion.
- 2.3 This gives Thurrock the opportunity to comment on, at an early stage, the information that should be included in the assessment as part of the EIA.
- 2.4 The Scoping Report is structured in the following way:
1. Introduction
 2. The Project
 3. Consultation
 4. The Reasonable Alternatives Considered
 5. Environmental Impact Assessment Method
 6. Air Quality
 7. Cultural Heritage
 8. Landscape
 9. Biodiversity
 10. Geology and Soils
 11. Materials
 12. Noise and Vibration
 13. People and Communities
 14. Road Drainage and Water Environment
 15. Climate
 16. Cumulative Effects
 17. Proposed Structure of the Environmental Statement
 18. Transboundary Screening
 19. References
 20. Abbreviations
 21. Appendices
- 2.5 The Scoping Report has been reviewed by various specialists within the Council as well as by third parties on behalf of Thurrock. The Council also engaged the services of Independent Technical Advisors to provide technical support with the coordination of and input into the Council's response to the Planning Inspectorate. A summary of the review is presented in Section 3 of this report and the full review comments from specialists are provided in Appendix 1.

3. Review Summary and Issues / Comments Identified

Overview

3.1 The table below provides a Red Amber Green (RAG) analysis of the acceptability of the information provided within the Scoping Report:

- Green identifies that the information is comprehensive and does not require modification;
- Amber identifies that the information is generally acceptable with minor modifications or recommendations by the Council; and,
- Red identifies that the information requires major modifications.

Topic	Baseline Information	Study Area	Methodology	Scope of Assessment
Air Quality	Amber	Green	Amber	Green
Cultural Heritage	Green	Amber	Amber	Green
Landscape	Green	Red	Amber	Green
Biodiversity	Amber	Amber	Amber	Green
Geology and Soils	Amber	Green	Amber	Green
Materials	Green	Green	Red	Green
Noise and Vibration	Amber	Green	Green	Green
People and Communities	Green	Amber	Amber	Green
Road Drainage and the Water Environment	Amber	Amber	Green	Green
Climate	Amber	Green	Amber	Green
Cumulative Effects	Red	Amber	Green	Green

Commentary: Issues / Recommendations

3.2 The following section outlines the key issues the Council has identified and/or the key recommendations the Council wishes to make. It has been subdivided into the discipline headings, as per the Scoping Report.

3.3 It should be noted that overall the Scoping Report followed best practice for the methodology proposed and no topics/aspects have been scoped out of the final EIA assessment.

General Comments / Recommendations

3.4 The Council strongly request that a separate Health Impact Assessment (HIA) is undertaken, the methodology of which should be agreed with the Council and Public Health England. This will ensure that any negative consequences

of the development are identified and mitigated and that opportunities for improving the well-being of the community are maximised. Full justification is provided in Appendix 2.

- 3.5 The initial chapters reflect the current existing knowledge of the proposed project and Thurrock Council should be consulted on any updates to the Scheme design and project information that take place following the issuing of this EIA Scoping Report.
- 3.6 It is a requirement of the new EIA regulations (Infrastructure Planning (Environmental Impact Assessment) Regulations 2017) to assess 'the expected significant effects arising from the vulnerability of the proposed development to major accidents or disasters that are relevant to the development'. The EIA regulations do not set out what is meant by the term 'major accident or disaster', therefore it is assumed that both man-made and natural accidents/disasters would qualify under this term. We therefore want to use this as a platform to suggest that sensitivity testing should be undertaken to assess unusual but not uncommon traffic scenarios due to major accidents, e.g. closure of both crossing, and the impact this would have on traffic, noise, air quality, people and communities.
- 3.7 The Scoping Report does not fully justify the reason why Location C was chosen as the Preferred Route from an environmental perspective. The reasons provided focus on the Scheme objectives and cost and do not take into consideration the effects on the environment / communities / Thurrock's Strategic Growth Plans. I would expect to see full justification regarding the Preferred Route selection from an environmental perspective, outlining a comparison of the environmental effects of each option to reach the decision on the Preferred Route.
- 3.8 The Council has major concerns regarding the proposed junction with the A13 and the A1089. This is likely to be significantly elevated, which would be very prominent in the landscape. The elevation in combination with the complex arrangement is also likely to cause adverse visual effects, decrease air quality and increase noise levels significantly. As noted in the Cultural Heritage section below, the junction is also located on a nationally significant Scheduled Monument, the construction of this junction would have direct effects (through the removal of) the Scheduled Monument. The significant adverse effects caused by this junction will need significant mitigation to ensure the effects are reduced and to ensure the introduction of the junction is acceptable.
- 3.9 The report mentions opportunities to deliver environmental enhancements, however there is no explicit mention of any enhancements that have been identified. Opportunities should consider enhancements to the existing public rights of way network in line with Thurrock Rights of Way Improvement Plan which is currently in draft form, as well as enhancements to the landscape. It is recommended that an application for Highways England Environment Designated Funds is sought for the Scheme, to finance the environmental enhancements/improvements, to ensure the Scheme delivers better environmental outcomes.

- 3.10 The report states that the LTC north of the Thames will be at grade or on embankments though the Kent section will be in a deep cutting which is likely to lessen its visual effects. The reasoning for this will need to be clearly presented and fully justified. To assess the landscape and visual effects the Council will need plans showing which sections would be on embankments and which at grade. The landscape and visual effects of the road, especially where the road will be located on embankments, needs to be fully assessed within a Landscape and Visual Impact Assessment (LVIA). The Council would like to see 3D visualisation for the Scheme to ascertain the visual impact on the landscape.
- 3.11 The tunnel construction will result in large areas of land east of the power station site, adjacent to the Two Forts Way recreational route, being set aside for construction purposes, which is a concern. The final restoration of this area will need to demonstrate landscape and ecological benefits e.g. restoring the land immediately west of Coalhouse Fort as coastal grazing grass or wetland.
- 3.12 The report recognises that the scheme would have a direct effect on the Orsett Fen Open Access Area, so it will be necessary to ensure that there is connectivity and how mitigation measures for landscape, ecology and water management effects can be integrated to ensure that the historic fenland habitat can be recreated.

Air Quality

- 3.13 The Council recommends that additional baseline monitoring is established at sensitive receptors along the new proposed link road to Tilbury, just off the A1031 along Heath Road, and along Baker Street, and that the additional monitoring, which has been set up by the Council in November 2017, should be used in the air quality assessment.
- 3.14 It is well known that emissions from vehicles, in particular diesels, do not perform to their prescribed European emission standards and any modelling using DEFRA's Emission Factor Toolkit V7.0 (EFT 7.0) is likely to underestimate these emissions considerably. The Council recommends a conservative approach should be adopted, in particularly the upscaling of diesel emissions should be undertaken.
- 3.15 Any sensitive receptor that is predicted to experience an increase of $>2 \mu\text{g}/\text{m}^3$ NO_x and PM_{10} should be considered in the evaluation of the significance of effects, not just the receptors which exceed the Air Quality Standards / Objectives (i.e. annual mean of $40 \mu\text{g}/\text{m}^3$ for NO_2 and PM_{10}).
- 3.16 $\text{PM}_{2.5}$ should be considered within the assessment, as this is known to have adverse health implications.
- 3.17 As the construction period will last 6 years, the Council recommend that full Detailed air quality modelling and assessment should be undertaken for construction.

Cultural Heritage

- 3.18 Consideration needs to be given in any EIA for the appropriate recording of the scheduled monument (Crop mark complex, Orsett) at the junction with the A13 and A1089 considering the extensive damage that will be caused. Consideration needs to be given to undertaking a total excavation of the scheduled area and associated elements of this nationally important complex.
- 3.19 A Heritage Statement should be undertaken and reported in compliance with Historic England Good Practice Advice Note 3: The Setting of Heritage Assets 2015.
- 3.20 Tilbury Fort and Coalhouse Fort should be classified as a Very High Value resource rather than High Value and should be discussed with Historic England.
- 3.21 Trial trenching should be used in its own right for buried archaeology, not just related to geophysics. For those areas where geophysics cannot be used a general trial trenching evaluation at 5% should be considered.
- 3.22 Thurrock Council, as curators, should be undertaking monitoring visits to all of the sites investigated.
- 3.23 Consideration should be given to using side scanning sonar for the Thames.

Landscape

- 3.24 The Landscape and Visual Impact Assessment should have regard to the new (currently draft) "Landscape Character Assessment for Thurrock" and the "Land of the Fanns Character Assessment" which covers a large proportion of the affected landscape north of the Thames. The Land of the Fanns is an Heritage Lottery Fund Landscape Partnership scheme which should be considered as part of any landscape, ecology and cultural heritage assessment.
- 3.25 The Scoping Report provides no justification for the decision to adopt a 2km Zone of Visual Influence (ZVI) and should follow standard best practice and identify a ZVI which is likely to be much larger. While this is not too much of an issue for the land south of the A13 the land to the north is much more open. It is likely that the route (which is likely to be elevated through this area) would be very prominent from a long distance e.g. from Thorndon Country Park in Brentwood.
- 3.26 The report makes no mention of the relative tranquillity of the upper Mardyke Valley where there are few dwellings and no street lights. This area should also be assessed for the combined effects of noise and visual intrusion in the same way as the Thames Estuary.
- 3.27 The methodology for production of photomontages is lacking. These should show the landscape as it is now and should be produced for year 1 and year 15 to show the future visual impact of the proposal.

- 3.28 Reference should be made to the Thames Estuary Path (including the Two Forts Way) and Grangewaters, which is a recreation site close to the proposed route.
- 3.29 Mitigation measures should also include opportunities to restore/recreate historic landscape features such as marsh and fen which would link to biodiversity and water management mitigation. Green bridges will be important for public rights of way and biodiversity mitigation and the Council will wish to see several provided.
- 3.30 The Council will need to agree any proposed viewpoint receptors in advance of the assessment commencing. These will need to ensure that all settlements are assessed, as well as sites used for public recreation, cultural heritage assets and public rights of way and existing transport routes. Long views will also need to be assessed e.g. from Thorndon Park in Brentwood. Some future baseline viewpoints will also need to be considered.

Biodiversity

- 3.31 The report details a comprehensive list of protected species that are being surveyed. However, there is no mention of barn owls, which should be surveyed, as these may be impacted within a buffer zone of up to 1.5km from new roads.
- 3.32 Sufficient weight should be given to the potential severance of ecological corridors for species such as bats.
- 3.33 It is important that any surveys take into account the ways animals move through the area and what effects the new route would have, therefore consideration should be given to conducting crossing point surveys and landscape scale transect surveys for bats.
- 3.34 Ecological corridors/networks should also have regard to the landscape character and seek to restore/enhance landscape features.

Geology and Soils

- 3.35 Geologically designated sites and sites of special scientific interest need to be considered within the EIA.
- 3.36 The assessment needs to consider impacts relating to the generation of excess geological materials.
- 3.37 A key concern of the Council's is the potentially hazardous historic landfill where the tunnel portal would be located (Goshems Farm (THU048)). The Ground Investigation needs to fully determine if significant contamination is present here.

Materials

- 3.38 No methodology has been outlined. The methodology needs to be fully defined to ensure full understanding on how the conclusion regarding effects will be reached. This should also consider the calculation of the embodied carbon emissions of the materials required to construct the Scheme, as a good benchmark for comparison against other similar road schemes.
- 3.39 A clear understanding of the potential effects for Thurrock needs to be provided, e.g. increased mineral extraction, storage/disposal of material arising from tunnelling and wider construction.

Noise and Vibration

- 3.40 The locations of the noise surveys need to be agreed with the Council, although the indicative noise monitoring locations outlined in the Scoping Report are generally in satisfactory locations. The Council would recommend a long-term monitor is set up in Baker Street, as this would be closest to the proposed southbound road to A13 eastbound slip. Further monitoring may also be necessary in the south of Tilbury where the link could be preferentially used by the existing Tilbury port traffic rather than the A1089 dock access road.

People and Communities

- 3.41 There is no mention of non-motorised user surveys. The Council recommends that these should be undertaken.
- 3.42 Strategic sites in the new (draft) Local Plan and the Council's regeneration strategies (which promote growth in locations) need to be considered in the assessment of impacts on development land. This assessment should also consider how the proposed development could increase attractiveness of some development land and reduce attractiveness of others.
- 3.43 Coalhouse Fort needs to be considered within the community facilities assessment.
- 3.44 Severance should also be considered in the context of dividing the borough and creating two separate sets of communities.
- 3.45 Amenity of people living and working in the area and using established leisure facilities such as parks should also be included in the scope.
- 3.46 The Local Study Area (200m) needs to be more flexible, some of the impacts could be outside of this zone such as the severance of catchment areas for community and private assets, and changes in traffic flows.
- 3.47 Clarification is required regarding how the impacts on public rights of way will be mitigated. The use of green bridges and underpasses to replace any public rights of way that are permanently affected by the development would be beneficial.

- 3.48 Impacts on public rights of way should take into consideration Thurrock's Rights of Way Improvement Plan (currently draft), particularly the aims to improve east to west connectivity for equestrians. Opportunities to enhance existing rights of way should be considered.
- 3.49 The Scoping Report does not acknowledge all of the concerns Thurrock faces in terms of health and wellbeing which could be further impacted by the proposed development. A full Health Impact Assessment should be undertaken. Appendix B provides full justification for this.

Road Drainage and the Water Environment

- 3.50 A key concern the Council has is that the redline boundary only takes account of the road area itself and does not consider the space that will be required for attenuation storage and flood zone compensation. It is critical to consider this as early as possible to ensure we do not have any space issues further down the line.
- 3.51 Infiltration testing and groundwater testing should be conducted.
- 3.52 It must be insured that flood risk or water pollution is not increased off site.
- 3.53 Sustainable Drainage Systems should be located outside of undefended Flood Risk Zones.
- 3.54 The value of the River Thames Estuary and the Mardyke River should be considered High or Very High.
- 3.55 Heavily Modified Waterbodies need to be identified and considered within the assessment.
- 3.56 The Thames Local Flood Risk Management Strategy including the Critical Drainage Areas included in this document should be considered.
- 3.57 Detailed analysis of the impact of the proposed development with reference to the latest surface water modelling in the Surface Water Management Plan should be undertaken.

Climate

- 3.58 The baseline needs to consider actual weather conditions (temperature, rainfall, wind etc.) as well as observed changes, so that the impact of Climate Change can be fully assessed.
- 3.59 Embodied carbon from the use of materials within the construction needs to be considered, as this makes up approx. 70-80% of the construction carbon footprint. Ensuring a low carbon design should be considered throughout the project.
- 3.60 Greenhouse gas emissions, from the increased volume of traffic needs to be considered within the operational assessment.

Cumulative Effects

- 3.61 Tilbury Energy Centre needs to be included within the assessment of cumulative effects (as well as Tilbury2).
- 3.62 The study area for the initial identification of the 'other developments' to include in the cumulative assessment needs to be clarified, and whether this has been aligned to the traffic model study area or not.
- 3.63 The methodology for the approach to the cumulative effects assessment of air quality and noise and vibration should be clarified. Operational assessments for air quality and noise and vibration are often already included within the assessment due to the use of the traffic forecasts. If this is the case, this needs to be included for clarity.

4. Reasons for Recommendation

- 4.1 The reasons for the recommendation is so that the Council can provide a response to the Planning Inspectorate on the Lower Thames Crossing Environmental Impact Assessment Scoping Report by the deadline of the 30th November 2017.

5. Consultation (including Overview and Scrutiny, if applicable)

- 5.1 Various council officers with lead responsibility for thematic areas within the EIA have been consulted.

6. Impact on corporate policies, priorities, performance and community impact

- 6.1 The Lower Thames Crossing is the Council's most important priority and has an impact across all aspects of the Council's corporate priorities.

7. Implications

7.1 Financial

Implications verified by: **Laura Last**
Management Accountant
(Environment and Place)

The activities set out in this report will be funded from existing budget allocations.

7.2 Legal

Implications verified by: **Vivien Williams**
Planning and Regeneration Solicitor

The activities set out in this report support the Council in discharging its obligations as statutory consultee under the 2008 Planning Act.

7.3 **Diversity and Equality**

Implications verified by: **Natalie Warren**
Community Development Manager

Diversity and Equality impacts will fall within the scope of the Environmental Impact Assessment Scoping Report, and will form part of the Council's formal response.

7.4 **Other implications** (where significant) – i.e. Staff, Health, Sustainability, Crime and Disorder)

There are no other implications.

8. **Background papers used in preparing the report** (including their location on the Council's website or identification whether any are exempt or protected by copyright):

- Highways England's Lower Thames Crossing Environmental Impact Assessment Scoping Report
(<https://infrastructure.planninginspectorate.gov.uk/projects/south-east/lower-thames-crossing/?ipcsection=docs>)

9. **Appendices to the report**

Appendix 1 – Statement of Comments and Observations
Appendix 2 – Request for Health Impact Assessment Justification

Report Author:

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