

Lower Thames Crossing 9.114 Wider Network Impacts Update

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Lower Thames Crossing

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1 Executive summary

1.1 Executive summary

- 1.1.1 This document has been prepared to set out the Applicants current position in response to:
- a. Issue Specific Hearing 4 (ISH4) Action point 3 relating to ‘Local Road Network Impact Mitigation: Security’; and
 - b. Issue Specific Hearing 7 (ISH7) Action point 5 relating to ‘Orsett Cock Roundabout’.
- 1.1.2 The Applicant is proposing a Requirement to secure the identified work necessary to improve Orsett Cock roundabout.
- 1.1.3 The Applicant is in continued discussion with Interested Parties regarding the nature of the impacts on the network, and is proposing a further submission at Deadline 6 which would include:
- a. a further consideration of planning policy with regard to the severity of impacts
 - b. a consideration of the identified major adverse effects
 - c. a consideration of the appropriateness of the Silvertown Tunnel approach.

2 Response to Action Points

2.1 Introduction

2.1.1 During Issue Specific Hearing 4 (ISH4) and Issue Specific Hearing 7 (ISH7), the Examining Authority issued a number of Action Points [EV-042f] and [EV-046e] with regard to the impacts on the local road network, and specifically at Orsett Cock roundabout and Blue Bell Hill, as follows:

a. ISH 4 Action Point 3 [EV-042f] states:

Local Road Network Impact Mitigation: Security

Consider how the DCO/Wider Network Impacts Management and Monitoring Plan [APP-545] could be amended to secure mitigation at locations where monitoring shows that LTC traffic has caused unacceptable impacts on the local road network that were not predicted in the Transport Assessment i.e., the Orsett Cock roundabout.

Consider how the DCO/Wider Network Impacts Management and Monitoring Plan could be amended to secure mitigation at the A229 Bluebell Hill where a significant adverse impact is forecasted in the Transport Assessment.

b. ISH 7 Action Point 5 [EV-046e] states:

Orsett Cock Roundabout

Without prejudice, Provision of draft wording for an additional DCO requirement relating specifically to the modelling, monitoring and if necessary, mitigation of the Orsett Cock roundabout.

2.1.2 In addition, the Examining Authority directed the Applicant to hold three workshops, discussing Orsett Cock, Asda Roundabout and Blue Bell Hill, which took place as follows:

- a. Orsett Cock roundabout – workshop took place on 25 October 2023, and is reported in **9.113 ISH7 action point 6 – Orsett Cock**
- b. Blue Bell Hill – workshop took place on 25 October 2023, and is reported in **9.112 ISH7 action point 7 – Blue Bell Hill**
- c. Asda roundabout – discussion with Port of Tilbury London Limited took place on 28 October 2023. PoTLL have advised that they are preparing information on their considerations regarding mitigation at Asda Roundabout. The Applicant will respond to ISH 7 Action Point 8 following receipt of that information.

2.1.3 In the course of holding the relevant workshops relating to Orsett Cock, Asda Roundabout, and Bluebell Hill, the Applicant has identified that there would be benefit in further engagement. The Applicant is therefore proposing to

undertake that engagement, with a view to providing a further position statement on Wider Network Impacts at Issue Specific Hearing 10 (Traffic and Transport), with the permission of the Examining Authority (ExA). The Applicant will then provide an updated “Wider Network Impacts Management Position Statement” at Deadline 6 which will provide:

- a. a further consideration of planning policy with regard to the severity of impacts
- b. a consideration of the identified major adverse effects
- c. a consideration of the appropriateness of the Silvertown Tunnel approach.

2.2 Response to ISH 4 Action Point 3

- 2.2.1 The Applicant has given careful consideration to the impacts at Orsett Cock junction. Noting the importance of this junction, the Applicant does not consider that an amendment of the Wider Network Impacts Management and Monitoring Plan [APP-545] to secure mitigation of potential but uncertain unacceptable impacts at the Orsett Cock roundabout is appropriate. The current drafting of the Wider Network Impacts Management and Monitoring Plan [APP-545] would allow for monitoring and identification of any such impacts, as well as other changes in the use of the network arising from new developments and other factors, and the Applicant has clearly set out the position regarding funding of any further works.
- 2.2.2 However, as discussed in Section 3 below, the Applicant acknowledges that certain works at Orsett Cock roundabout would be required to optimise the scheme design, including changes to the traffic light layout, timings and sequencing. The Applicant is therefore proposing to include a specific Requirement into Schedule 2 of the draft Development Consent Order [[REP4-094](#)], following engagement with the relevant Interested Parties.
- 2.2.3 Further information on the Applicant’s position, and the proposed drafting is set out below in Section 3.
- 2.2.4 The Applicant maintains that a commitment to fund works at Blue Bell Hill would not be appropriate as it would bypass the existing processes through which the Secretary of State makes decisions (and is already considering) regarding the funding of road improvements there. The Department for Transport is currently considering a Strategic Outline Business Case for improvements on Blue Bell Hill, considering schemes both with and without the A122 Lower Thames Crossing. The Applicant considers that this demonstrates the process working appropriately.
- 2.2.5 The Applicant therefore does not consider it appropriate to provide any form of specific wording in this DCO to secure mitigation at the A229 Blue Bell Hill.

2.3 Response to ISH 7 Action Point 5

- 2.3.1 The Applicant considers that the statement made above in relation to ISH4 Action Point 3 provides a response to ISH 7 Action Point 5.

3 Impacts at Orsett Cock

- 3.1.1 The Applicant has set out the impacts at Orsett Cock in the Transport Assessment [[REP4-148](#) to [REP4-150](#)]. The Applicant acknowledges adverse impacts in 2030, and these are shown in Plates 7.25, 7.26 and 7.27, with the most adverse impacts being characterised as ‘moderate adverse’ in the PM peak. The Applicant has supported this assessment by providing VISSIM modelling in Appendix C of the Localised Traffic Modelling report [[REP1-189](#)]. While the modelling in this report continues to be under discussion and further work has been agreed, as set out in **9.113 ISH7 action point 6 – Orsett Cock**, this report clearly demonstrates that in 2030 while there are some increases delays to users of the roundabout, there are no unacceptable impacts. Sensitivity analysis of this has been completed, in accordance with the Transport Analysis Guidance, and this is reported in Plates 1.17 and 1.19 of Appendix D of the Transport Assessment [[APP-533](#)], with both high growth and low growth scenarios showing ‘moderate adverse’ impacts.
- 3.1.2 Traffic growth between 2030 and 2045 leads to increased flows through Orsett Cock roundabout. The Transport Assessment shows in Plates 7.23 and 7.24 that the volume over capacity on certain links at the Orsett Cock roundabout in 2045 is above 95 both with and without the Lower Thames Crossing. This is again supported by the information in Appendix C of the Localised Traffic Modelling report [[REP1-189](#)] though the Applicant acknowledges the delays and queuing are greater with the project than in the Do Minimum scenario. While acknowledging the adverse effects in 2045, the Applicant does not consider these effects to be unacceptable. However, during the modelling work, some modifications to Orsett Cock roundabout and the approaches were identified that would be required to optimise flow. These modifications, set out in Section 3.9 of Appendix C of the Localised Modelling Report [[REP1-189](#)]. Further work would be undertaken during detailed design and the Applicant notes that this could include other measures to minimise delays to traffic, beyond those identified to date.
- 3.1.3 The Applicant has considered carefully the Examining Authorities Question 4.2.5:
- Q4.2.5 - Mitigation Security: Orsett Cock** *The Applicant’s Deadline 1 submission “Localised Traffic Modelling” [[REP1-187](#)] suggests that changes to the traffic light layout, timings and sequencing would be required at Orsett Cock to optimise flows. How would this work be secured in the DCO?*
- 3.1.4 The Applicant responded by advising that it would be including Protective Provisions for the benefit of Local Highways Authorities, which were included in the draft Development Consent Order (dDCO) at Deadline 4 [[REP4-094](#)].
- 3.1.5 The Applicant recognises the significance of Orsett Cock roundabout to the A122 / A13 / A1089 junction, and notes the following considerations, which are unique to Orsett Cock roundabout:
- a. The Applicant is proposing to add new links connecting into the junction, specifically the connections from the A122 Lower Thames Crossing both northbound and southbound to Orsett Cock roundabout.

- b. The Applicant is proposing to rerouting a major road connection through the junction, by removing the direct connecting slip between the A13 and the A1089 and rerouting that link through Orsett Cock roundabout.

- 3.1.6 Recognising these considerations, the Applicant is considering a specific Requirement to be included in Schedule 2 of the dDCO in relation to Orsett cock roundabout, which could be drafted as follows:

Operation of Orsett Cock junction

17.—(1) No part of Work No. 7F is to commence until a scheme for the Orsett Cock roundabout has been submitted to and approved in writing by the Secretary of State, following consultation with the relevant highway authority, the Port of Tilbury London Limited and DP World London Gateway.

(2) The scheme submitted under subparagraph (1) must include details, and a programme for the implementation, of the proposed design and signalisation on that roundabout or other related measures as may be reasonably practicable to minimise delays for traffic arising as a result of the authorised development and optimise the performance of the Orsett Cock roundabout.

(3) The authorised development must be carried out in accordance with the approved plan referred to in sub-paragraph (1).

- 3.1.7 The proposed Requirement introduces consultation with Thurrock Council, Port of Tilbury London Limited and DP World London Gateway, as interested parties. The Applicant would have to give due consideration to any representations and pursuant to paragraph 20 of Schedule 2 would have to include a written account of how they had been considered, along with the representations themselves, to the Secretary of State as part of the approvals process. This would include consideration of any other related measures put forward by the consulted parties.
- 3.1.8 The Applicant sought to discuss this proposal at the workshop held in response to the Examining Authorities Action Point 6 arising from ISH7 [\[EV-064e\]](#) as part of a broader ‘without prejudice’ discussion on monitoring and mitigation, however the attendees requested that the discussion be limited to modelling matters only.
- 3.1.9 The Applicant is seeking to engage with Thurrock Council, Essex County Council, Port of Tilbury London Limited and DP World London Gateway Limited on this proposed Requirement, as well as having in advance a broader ‘without prejudice’ discussion on monitoring and mitigation, in advance of Issue Specific Hearing 10 (Traffic and Transport) on the 24 October 2023.
- 3.1.10 The Applicant will review responses to the proposed Orsett Cock junction Requirement, and subject to consideration of those submissions will seek to incorporate the provision into the draft DCO at Deadline 6.
- 3.1.11 For completeness, It is noted that PoTLL submitted its preferred provision in the DCO Drafting Proposals [\[REP4-350\]](#). The Applicant’s position on that drafting it is set out in the Applicant’s responses to comments on the dDCO at Deadline 4 (Examination Document 9.118) submitted at Deadline 5. The Applicant would note that its preferred drafting is similar to Requirement 14 of the M25 Junction 28 Development Consent Order 2022 which provides as follows:

“Operation of M25 Junction 28 Roundabout

14.—(1) No part of the new loop road forming Work No. 6 is to be opened for traffic until a plan for the M25 Junction 28 roundabout containing details of the proposed operation of traffic signal timings or such other related measures as may be reasonably practicable to prevent any increase in delays for traffic on the A1023 Brook Street entering the M25 Junction 28 roundabout arising as a result of the authorised development has been submitted to and approved in writing by the Secretary of State, following consultation with the highway authorities within the Order limits.

(2) The authorised development must be operated in accordance with the approved plan referred to in sub-paragraph (1) or such amended plan following consultation with the highway authorities within the Order limits.”

- 3.1.12 While the circumstances are not identical, the concern there was specifically in relation to increase in delays on A1023 Brook Street entering the M25 junction 28 roundabout and so the Applicant considers it to be relevant.

Glossary

Term	Abbreviation	Explanation
A122		The new A122 trunk road to be constructed as part of the Lower Thames Crossing project, including links, as defined in Part 2, Schedule 5 (Classification of Roads) in the draft DCO (Application Document 3.1)
A122 Lower Thames Crossing	Project	A proposed new crossing of the Thames Estuary linking the county of Kent with the county of Essex, at or east of the existing Dartford Crossing.
A122 Lower Thames Crossing/M25 junction		New junction with north-facing slip roads on the M25 between M25 junctions 29 and 30, near North Ockendon.
A13/A1089/A122 Lower Thames Crossing junction		Alteration of the existing junction between the A13 and the A1089, and construction of a new junction between the A122 Lower Thames Crossing and the A13 and A1089, comprising the following link roads: <ul style="list-style-type: none"> • Improved A13 westbound to A122 Lower Thames Crossing southbound • Improved A13 westbound to A122 Lower Thames Crossing northbound • Improved A13 westbound to A1089 southbound • A122 Lower Thames Crossing southbound to improved A13 eastbound and Orsett Cock roundabout • A122 Lower Thames Crossing northbound to improved A13 eastbound and Orsett Cock roundabout • Orsett Cock roundabout to the improved A13 westbound • Improved A13 eastbound to Orsett Cock roundabout • Improved A1089 northbound to A122 Lower Thames Crossing northbound • Improved A1089 northbound to A122 Lower Thames Crossing southbound
A2		A major road in south-east England, connecting London with the English Channel port of Dover in Kent.
Application Document		In the context of the Project, a document submitted to the Planning Inspectorate as part of the application for development consent.
Construction		Activity on and/or offsite required to implement the Project. The construction phase is considered to commence with the first activity on site (e.g. creation of site access), and ends with demobilisation.
Design Manual for Roads and Bridges	DMRB	A comprehensive manual containing requirements, advice and other published documents relating to works on motorway and all-purpose trunk roads for which one of the Overseeing Organisations (National Highways, Transport Scotland, the Welsh Government or the Department for Regional Development (Northern Ireland)) is highway authority. For the A122 Lower Thames Crossing the Overseeing Organisation is National Highways.
Development Consent Order	DCO	Means of obtaining permission for developments categorised as Nationally Significant Infrastructure Projects (NSIP) under the Planning Act 2008.

Term	Abbreviation	Explanation
Development Consent Order application	DCO application	The Project Application Documents, collectively known as the 'DCO application'.
Environmental Statement	ES	A document produced to support an application for development consent that is subject to Environmental Impact Assessment (EIA), which sets out the likely impacts on the environment arising from the proposed development.
Highways England		Former name of National Highways.
M2 junction 1		The M2 will be widened from three lanes to four in both directions through M2 junction 1.
M2/A2/Lower Thames Crossing junction		New junction proposed as part of the Project to the east of Gravesend between the A2 and the new A122 Lower Thames Crossing with connections to the M2.
M25 junction 29		Improvement works to M25 junction 29 and to the M25 north of junction 29. The M25 through junction 29 will be widened from three lanes to four in both directions with hard shoulders.
National Highways		A UK government-owned company with responsibility for managing the motorways and major roads in England. Formerly known as Highways England.
National Planning Policy Framework	NPPF	A framework published in March 2012 by the UK's Department of Communities and Local Government, consolidating previously issued documents called Planning Policy Statements (PPS) and Planning Practice Guidance Notes (PPG) for use in England. The NPPF was updated in February 2019 and again in July 2021 by the Ministry of Housing, Communities and Local Government.
National Policy Statement	NPS	Set out UK government policy on different types of national infrastructure development, including energy, transport, water and waste. There are 12 NPS, providing the framework within which Examining Authorities make their recommendations to the Secretary of State.
National Policy Statement for National Networks	NPSNN	Sets out the need for, and Government's policies to deliver, development of Nationally Significant Infrastructure Projects (NSIPs) on the national road and rail networks in England. It provides planning guidance for promoters of NSIPs on the road and rail networks, and the basis for the examination by the Examining Authority and decisions by the Secretary of State.
Nationally Significant Infrastructure Project	NSIP	Major infrastructure developments in England and Wales, such as proposals for power plants, large renewable energy projects, new airports and airport extensions, major road projects etc that require a development consent under the Planning Act 2008.
North Portal		The North Portal (northern tunnel entrance) would be located to the west of East Tilbury. Emergency access and vehicle turn-around facilities would be provided at the tunnel portal. The tunnel portal structures would accommodate service buildings for control operations, mechanical and electrical equipment, drainage and maintenance operations.
Operation		Describes the operational phase of a completed development and is considered to commence at the end of the construction phase, after demobilisation.

Term	Abbreviation	Explanation
Order Limits		The outermost extent of the Project, indicated on the Plans by a red line. This is the Limit of Land to be Acquired or Used (LLAU) by the Project. This is the area in which the DCO would apply.
Planning Act 2008		The primary legislation that establishes the legal framework for applying for, examining and determining Development Consent Order applications for Nationally Significant Infrastructure Projects.
Project road		The new A122 trunk road, the improved A2 trunk road, and the improved M25 and M2 special roads, as defined in Parts 1 and 2, Schedule 5 (Classification of Roads) in the draft DCO (Application Document 3.1).
Project route		The horizontal and vertical alignment taken by the Project road.
South Portal		The South Portal of the Project (southern tunnel entrance) would be located to the south-east of the village of Chalk. Emergency access and vehicle turn-around facilities would be provided at the tunnel portal. The tunnel portal structures would accommodate service buildings for control operations, mechanical and electrical equipment, drainage and maintenance operations.
The tunnel		Proposed 4.25km (2.5 miles) road tunnel beneath the River Thames, comprising two bores, one for northbound traffic and one for southbound traffic. Cross-passages connecting each bore would be provided for emergency incident response and tunnel user evacuation. Tunnel portal structures would accommodate service buildings for control operations, mechanical and electrical equipment, drainage and maintenance operations. Emergency access and vehicle turn-around facilities would also be provided at the tunnel portals.

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