

From: Williams Tim (TFL) [mailto:timwilliams@tfl.gov.uk]
Sent: Friday, January 10, 2014 5:12 PM
To: Thames Tunnel
Subject: Thames Tideway Tunnel - Examining authority's second written questions.
Response from Transport for London, unique reference number 10018167

Dear Sir / Madam

The Infrastructure Planning (Examination Procedure) Rules 2010 (as amended)

Application by Thames Water Utilities Limited for an Order Granting Development Consent for the Thames Tideway Tunnel

Examining authority's second written questions

I am writing in response to the letter from Jan Bessel (dated 19 December 2013, ref WW010001) which was contained within the email below, and to the Second Written Questions from the Examining Authority as follows:

[http://infrastructure.planningportal.gov.uk/wp-content/ipc/uploads/projects/WW010001/2.%20Post-Submission/Procedural%20Decisions/131219_W010001_Panels_Second Written Questions.pdf](http://infrastructure.planningportal.gov.uk/wp-content/ipc/uploads/projects/WW010001/2.%20Post-Submission/Procedural%20Decisions/131219_W010001_Panels_Second_Written_Questions.pdf)

Please find attached written comments submitted on behalf of Transport for London, Unique Reference Number 10018167, in response to the following written questions from the Examining Authority:

- those posed in section 22
- 24.4
- those posed in section 25
- 27.2
- 27.6
- 27.7
- 27.8
- 27.15
- 27.16
- 34.1
- 34.2 and
- 34.18

Yours faithfully

Tim Williams

Tim Williams

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From: thamestunnel@infrastructure.gsi.gov.uk
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Sent: 18 December 2013 15:37

To: Williams Tim (TFL)

Subject: Thames Tideway Tunnel - WW010001 - This email is not a circular

Please see attached PDF.

**The Infrastructure Planning (Examination Procedure) Rules 2010 (as amended)
Application by Thames Water Utilities Limited for an Order Granting Development
Consent for the Thames Tideway Tunnel**

Examining authority's second written questions

Further to the letter from Jan Bessel dated 19 December 2013, ref WW010001, please find below written comments submitted on behalf of Transport for London, Unique Reference Number 10018167, in response to the following questions:

- those posed in section 22
- 24.4
- those posed in section 25
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- 34.1
- 34.2 and
- 34.18

Reference	Question
22 Coastal / River Change	The questions posed in section 22 relate to the effects of scour and deposition.
	<p>Answer</p> <p>TfL will (in due course) require TWUL to submit detailed scour studies for all areas in the vicinity of London Underground Limited (LUL) tunnels, where foreshore works may affect scour within the Thames.</p> <p>As an example LUL will need to be satisfied that works at Victoria Embankment do not cause increased scour to Hungerford Bridge - concerns arise from the fact that the Bakerloo Line is shallow at this location and it may be affected by scour.</p> <p>TWUL need to be aware that if these detailed studies demonstrate an unacceptable level of scour above LUL tunnels then they will need to mitigate this (possibly by changing the design of the infrastructure in the foreshore). LUL has previously raised this point with TWUL designers when looking at their initial impact assessment</p>
Q24.4	Question
	In relation to Blackfriars Bridge Foreshore Note 6 to drawing DCO-PP-17X-BLABF-190016 revision 1 indicates that the means of modifying the BT cooling water tunnel is to be confirmed. How is the cooling water tunnel proposed to be modified? Has the proposed modification been agreed by BT, Transport for London (TfL) and the Port of London Authority (PLA)?

	<p>Answer</p> <p>TfL last met with TWUL on 20 December 2013 to discuss this issue, with BT and the PLA also in attendance. There are 2 options being considered. An option B which moves the outflow pipe further into the river, and an option C which modifies the existing outflow pipe. A previous option 'A' is no longer being considered.</p> <p>TWUL will need to decide which is the best option for them in the long term, but both options B and C are acceptable to TfL, with option B being slightly preferable as the outflow pipe will be further from the Pier.</p> <p>However it should be noted that any costs incurred by TfL with regard to damages / changes to its assets and /or operations to facilitate the BT cooling tunnel (and its ongoing maintenance) will need to be recoverable from TWUL.</p>
<p>25 Development Consent Order Drafting and Related Matters</p>	<p>Question</p>
	<p>TfL wishes to respond to the point made in this section regarding the revised version of the draft CoCP, rather than to the specific questions within this section.</p> <p>Answer</p> <p>TfL has reviewed the revised CoCP documents dated December 2013 and has the following comments to make.</p> <p>In our written summary of 2 December 2013, in response to a previous revision of the CoCP submitted to PINs on 23 September 2013, we said:</p> <ul style="list-style-type: none"> • Paragraph 5.1.5 of the CoCP Part A states that... <i>“For each worksite, a site-specific traffic management plan will be produced, co-ordinated and then implemented by the contractor. The plan will be prepared in consultation with highway and traffic authorities and the emergency services. The plans will need to be approved by the relevant local authority in consultation with the relevant highway and traffic authority”</i>. [Our italics] • TfL requests that this paragraph is amended to read <i>“the plans will need to be approved by the relevant highway and traffic authorities”</i>, rather than <i>“the plans will need to be approved by the relevant local authority in consultation with the highway authority and TfL”</i>. <p>The request change was not accepted by TWUL as part of their latest revision to the CoCP part A, and TfL therefore requests once more that it is accepted in a further revision.</p> <p>Paragraph 5.1.5 also states that the traffic management</p>

plans will show how the contractor will meet the requirements of the Transport Assessment – however there is currently no agreed approvals process, and there are still a number of outstanding issues which TfL are working through with the TTT Project Team. With regard to sub-section i: the interfaces and effects with adjacent developments are likely to change, and as such are not necessarily adequately identified within the existing assessments.

Our other comments on the CoCP documents are:

Part A

- Paragraph 1.1.4 subsections 'a' and 'b' suggest that there is an established mechanism to manage the impacts of the works. TfL's current position is that the CoCP still does not fully take our concerns into consideration (as per paragraph 5.1.5 as detailed above) and there remains the key outstanding matter of agreeing an approval process / mechanism that will ensure that the impacts of the TTT works will be identified and managed effectively during construction
- Paragraph 1.1.7 says that the CoCP has established the basis for a consistent approach to the management of construction impacts across local authority boundaries, and that any construction codes or guidance documents relating to construction that have been produced by the local authorities were considered. These may have been considered but there is no indication in the CoCP that TWUL has taken on board TfL's suggested approvals process. See our response to Q34.2 - specifically the fact that on 7 November 2013 TfL submitted to TWUL a proposed approvals process for highway works operating within the existing statutory framework, and that a response is still awaited.
- Paragraph 1.1.12 states that further specific measures for each site may be made through amendments to the COCP Part Bs in agreement with relevant local authority and in consultation with key stakeholders, including TfL. It is difficult to see how this would work from the TfL perspective, given that there is no clear agreement between TfL and TWUL on an appropriate approval process. There is also the issue that TfL is still regarded as a consultee rather than an approving authority – again as detailed above with regard to paragraph 5.1.5.
- Working hours - section 4.2. TfL's influence in this area will depend on how robust the approval process adopted is - as stated previously this is still being discussed with TWUL.

	<ul style="list-style-type: none"> • Paragraphs 5.3.1- 5.3.6. There are serious implications for TfL from what is being suggested, <i>unless</i> we reach agreement on a robust approvals process. For example the term <i>as short a time as practicable</i> is very subjective, and as it stands is deemed to be defined by the contractor. <p><u>Part B</u></p> <p>This sets out site specific requirements. TfL’s main concern is that the highway network when the works actually take place at each specific site is likely to be different from the situation currently being considered by TWUL. For example, and as stated in our response to Q34.21, TfL is concerned about the traffic modelling which has been undertaken as part of the transport assessments – hence we are concerned as to how effectively the impacts on the highway will be managed <i>unless</i> (as per our response to Q34.2) a robust and effective approval process is established, and is in force during the period when the works will take place.</p>
Q27.2	Question
	<p>How would the Applicant manage a red / amber / green alert system when tunnelling under or near heritage assets?</p> <p>Answer</p> <p>This question is directed at TWUL, and TfL has also chosen to respond.</p> <p>The requirement to provide and manage suitable mitigation measures for red/amber/green alerts, tunnel boring methodology, stability and settlement and mitigation due to exceeding predicted settlement would apply not just to heritage sites, but also to TfL assets - most specifically London Underground Limited (LUL)’s infrastructure. The LUL view is that during its continued and ongoing communications with Thames Water - and in its review and approvals of working methods - LUL will agree and produce a ‘Monitoring Action Plan’ which will clearly define: a suitable monitoring regime; mitigation measures; and possibly compensation grouting should this be required in the event of excessive settlement.</p>
Q27.6	Question
	<p>Can the Applicant advise on the implications of reducing the heights of the ventilation columns at Putney Embankment Foreshore, Chelsea Embankment Foreshore, Albert Embankment Foreshore, Victoria Embankment Foreshore and Blackfriars Bridge Foreshore to 5.5m, as suggested by EH?</p> <p>Answer</p>

	<p>This question is directed at TWUL, and TfL has also chosen to respond.</p> <p>TfL were present at a Chelsea Embankment Foreshore - Design Workshop on Tuesday 10th December. TWUL has subsequently circulated their design options for their proposal at this location, which TfL is currently considering.</p> <p>Note also that on 19 December 2013 TWUL issued a revised version of their <i>Design Principles</i> document seeking comments by the close of play on 31 December 2013 in advance of them submitting it to the Examining Authority on the 13 January 2014. Given the time of year and the availability of people to comment on the document, TfL has not yet responded to TWUL.</p> <p><i>However</i>, the point TfL wishes to make is that any proposals which affect TfL's assets, and / or our ability to discharge our duties as a highway and public transport authority, will need our full agreement. We will continue a dialogue with TWUL to help progress the TTT Project, whilst ensuring we adequately safeguard our interests.</p>
Q27.7	Question
	Can the Applicant, LB Lambeth and EH provide further analysis of the effect of the proposed interception structure on the setting of Vauxhall Bridge, having regard to the photomontages?
Q27.8	Question
	With regard to the view from the eastern side of Vauxhall Bridge, can the Applicant review the proposed design considering particularly whether there would be an opportunity to reduce the bulk of the structure, for example by omitting or modifying the tidal terraces? What effect would such a change have on the setting of Vauxhall Bridge?
	Answer (to Q27.7 and Q27.8)
	These questions are directed at TWUL and others, and TfL has also chosen to respond. <p>Vauxhall Bridge is a TfL asset, and as such any proposals which affect it will need our full agreement.</p>
Q27.15	Question
	Has the monitoring survey of Tower Bridge, to check the size of the gap between the bascule leaves, and its variation over time, commenced? If so, what were the findings and, if mitigation is likely to be needed, what measures would be proposed?

Q27.16	Question
	Can EH, TfL and City of London comment on the consultant's report (AECOM, dated 7 Feb 2013) and the recommendations given in section 8?
	Answer (to Q27.15 and Q27.16)
	Tower Bridge is a City of London (CoL) asset and so TfL believe this issue mainly concerns them. However Tower Bridge is on the Transport for London Road Network (TLRN) and is therefore of strategic significance. TfL wants to ensure that the TLRN is secure, and if the CoL responds to say that the monitoring recommended by AECOM is required to ensure that this is so (or indeed if they make any other recommendations to ensure that the bridge remains fully functional) then we would support their view.
Q34.1	Question
	Can the Applicant and each highway authority, (jointly if possible but if not separately), provide an update on what issues now remain outstanding? For any remaining outstanding issue, where it is anticipated that the issue will in due course be resolved, provide a programme for its resolution. For any issues where it is not expected that the matter will be resolved in the near future provide a statement summarising the differences between the views taken by the highway authority and the Applicant respectively.
	Answer
	<p>This question relates to Transport Assessments (TAs).</p> <p>TfL has continued to work with TWUL and we have made some progress on issues related to the TAs. Since we made our previous written representations the issues have been discussed and <i>consolidated</i> into a more manageable format. The aim being that that this would then be used within the draft SoCG.</p> <p>Following further information provided by TWUL, and joint workshops throughout December 2013 and early January 2014, the number of outstanding issues has been reduced to 81. It should be noted that this reduction in the number of issues from the previous 480 was partly due to the <i>consolidation</i> mentioned above: e.g. a number of detailed traffic modelling issues were consolidated under the headings of one or two 'modelling' issues for a number of sites.</p> <p>It should also be noted that further work is required before TfL can agree exactly what we wish to say with regard to the TAs within the SoCG.</p> <p>Many of these 81 issues are similar in nature and can be aggregated into a number of broader issues, such as the</p>

	<p>fact that significant concerns still remain with regard to traffic modelling: most specifically TfL does not believe that TWUL is currently in a position to robustly assess the effects of their proposals on roads for which TfL is the highway authority (for example at Victoria Embankment) and nor will it be before the end of the current DCO examination period.</p> <p>The other main areas of concern for TfL are:</p> <ul style="list-style-type: none"> • Road Safety Audits • Travel Plans and • The lack of a commitment to the provision of Lorry Holding Areas for some sites, where the queuing / waiting of construction vehicles would be of particular detriment to the highway network <p>TfL will continue to work with TWUL to resolve the outstanding issues, but we wish to reiterate the point we made in our written summary of 2 December 2013. This is that TfL believes that the fact that there are still such unresolved issues, this late into the process, gives further credence to our view that the TMA / NRSWA powers should not be disapplied. The retention of these powers is the only way that TfL can ensure that it maintains adequate control of works which affect our ability to discharge our duties as a highway and public transport authority. See also our response to Q34.2.</p>
Q34.2	Question
	<p>Can the Applicant explain why it is developing a bespoke transport permit scheme when there is an existing London Permit Scheme in place?</p> <p>Answer</p> <p>This question is directed at TWUL, and TfL has also chosen to respond.</p> <p>Note that TWUL addressed the issue of highways powers in document reference: APP30.15, which is their response to the Local Impact Report from the Mayor of London. Our response to this question is based on what TWUL said in this document.</p> <p>Note also that, as we stated in our written summary of 2 December 2013, TfL submitted to TWUL on 7 November 2013 a proposed approvals process for highway works operating within the existing statutory framework, and a response is still awaited.</p> <p>In Appendix A of document reference APP30.15 TWUL state that:</p> <ul style="list-style-type: none"> • A.1.1... “The provision to dis-apply certain sections of

	<p>the Traffic Management Act 2004 (TMA) and New Roads and Street Works Act 1991 (NRSWA) is contained in the DCO. This is a standard process for complex major infrastructure projects. This includes recent projects in London including Crossrail, Channel Tunnel Rail Link and is part of the current Transport and Works Act Order application for the Northern Line Extension (NLE). Our response reviews the current process undertaken on Crossrail and reviews the proposals in the NLE application”.</p> <p>TfL’s response to this is that it is too strong to say that ‘disapplication’ is a standard process for complex major infrastructure projects. It does happen, but has occurred more through circumstance than design.</p> <p>The approach being adopted for Crossrail is more robust than TWUL’s suggested approach in that TfL’s TMAN Notification procedure is being used together with the lodging of Permits for visibility purposes. This has the distinct advantage that it is a tried and tested approach, and is being adopted for works that are about to happen in the foreseeable future.</p> <p>It is also worth noting that for the London Underground sponsored Victoria Station Upgrade (VSU) project there is a similar approach and level of engagement as for Crossrail. For the VSU project the goal is to deliver the project on time and to budget with minimum disruption on the highway network. Regular technical and strategic meetings take place to achieve this goal. A common factor for Crossrail and VSU is the role of Sir Peter Hendy, Commissioner of Transport for London, who would act as final arbiter if there were serious areas of disagreement. This would not apply to the TTT project</p> <p>In respect of the Northern Line Extension, TfL has made clear its willingness to engage in a process similar to that which is being used for VSU. As for the VSU project, the Northern Line Extension is also a London Underground Limited (hence TfL) project, and we will be able to agree internally how highway issues are handled, even if some powers are disappplied. The scale of the project also distinguishes it from the TTT project - e.g. the latter’s geographical scope covers 14 local authorities.</p> <ul style="list-style-type: none"> • A.2.1... “We have, in line with other projects, introduced the bespoke system of submitting Traffic Management Plans (TMPs) for approval. We have also developed in consultation with TfL and local authorities the content for the plans and the need to submit individual Traffic Management Schemes (TMSs) for approval by the highway authority”. <p>TfL’s response to this is that while TWUL are seeking a</p>
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bespoke system, it has not been 'introduced'. TfL remains concerned about the shortcomings of what is being proposed, and hence has not agreed to it.

The real test of TMPs and TMSs is whether or not adequate and robust information is being provided, and also what is meant by 'approval'. If the information to be provided covers scheme layouts and impacts (supported by robust modelling – see our response to Q34.1), then it is going a long way towards being a 'business as usual' (i.e. an 'applied powers') approach.

The suggested bespoke system of submitting TMPs for approval is not recognised by TfL as an acceptable approach. It is accepted that information has been submitted through the Traffic Assessments and Site Specific Requirements reports, and whilst this approach can address some of the physical / layout issues relating to the work sites, it cannot, at this point in time, predict what traffic conditions and road layouts will be some years into the future when the actual TTT works will take place. In the coming years London's strategic road network is expected to go through some significant changes, but what is not yet known is the full extent or implications on traffic conditions of these changes.

- A.2.4..... “ We have already submitted significant amount of detail within the Traffic Assessments including detailed modelling and safety audits. We have engaged in extensive reviews by the authorities. The pre-application work for the DCO has effectively undertaken the application process up to the stage of submission of the Provisional Advanced Authorisation. The early engagement has given TfL the opportunity to start considering the impacts of the development works on road space and other long term programmed works enabling them to meet their traffic management duties set out within the TMA.

TfL's response to this is that the starting point for any impact assessment review has not yet been agreed because (as we say in response to Q34.1) the 'base traffic model' is not sufficiently robust in reflecting existing on-street traffic conditions. The next stage in the process is to gain an indication of what road layouts and traffic conditions might be in the future, to enable a comparison to be made between the existing and future scenarios. As stated the base traffic model has not been agreed, and we are not fully sighted on what the future road network will look like in the coming years. On that basis it is incorrect to say that “The pre-application work for the DCO has effectively undertaken the application process up to the stage of submission of the Provisional Advanced Authorisation”. The statement also misrepresents what TfL are seeking in a PAA, which is a good assessment of impacts and mitigation measures at the

	<p>time the works are going to be carried out, i.e. a matter of months into the future, not years into the future as is the case for the TTT project. Providing assessments so far in advance of when works are to be actually undertaken opens up the risk that the works layouts, and the mitigation measures which are identified to minimise disruption on the highway network, will not be fit for purpose at the time the works are actually carried out.</p>
Q34.18	Question
	<p>Can the Applicant provide an assessment of the amount of exported and imported materials which could be moved by barge from the Greenwich Pumping Station drive site using Deptford Creek?</p> <p>Answer</p> <p>This question is directed at TWUL, and TfL has also chosen to respond.</p> <p>TfL commissioned Pell Frischmann to undertake a study into the potential for the use of barging at the TTT Greenwich Pumping Station site. They produced a report in October 2013 titled 'TTT Greenwich Pumping Station - Waterborne Logistics Feasibility Study' which concluded that:</p> <ul style="list-style-type: none"> • Based on the robust assumption that a tunnelling rate of 200m per week will be achieved, 1,850 tonnes of material will be excavated per day • Once an anticipated reasonable level of dredging has been undertaken it appears feasible that a waterborne logistics strategy could be created, so that during each Neap or Spring Tidal window 4 x 350 tonne barges could serve the site. Assuming a loading of 90% capacity per barge this would equate to a maximum disposal rate of 2520 tonnes, which is greater than the daily amount of excavated material • To enable agreement for the necessary dredging to take place an EIA would need to be prepared and approved prior to dredging operations being undertaken during the winter months - an anticipated minimum period of 18 months <p>This report has not yet been discussed in detail with TWUL. However TfL sent them the report on 2 January 2014, and anticipates such discussions taking place in the near future.</p>