



Application for Development Consent

Application Reference Number: WWO10001

Examining Authority's Second Written Round of Questions and Requests for Information

Supporting Appendices

Meeting Minutes

Doc Ref: **APP64.01.01**



APP64.01.01 Review of potential barging to Abbey Mills



Meeting minutes

Subject:	Abbey Mills Pumping Station Worksite– Bow Creek River Access
Purpose:	Review of potential barging to Abbey Mills
Date and time:	14:15 – 16:00 28 November 2013
Location:	PLA Office , Bakers Hall London
Attendees:	<u>Port of London Authority</u> Captain Terry Lawrence - Harbour Master (Upper) James Trimmer – Director of Planning and Environment
	<u>London Borough of Southwark</u> David Cliff –Southwark Planning – Team Leader (Major Applications) Andy Twyford – Pell Frischmann (Assisting Southwark)
	<u>Thames Water – Thames Tideway Tunnel team</u> Stephen Thompson – Construction and Logistics Lead James Spikesley – Early Works PM – Marine issues Alex Seibicke – Logistics Engineer Elisabetta Torricetti – Environment Team David Allen – Marine Consultant
Apologies:	
Distribution	Attendees.
Minute taker:	James Spikesley
Doc ref:	100-OM-CNL-PLOND-000010 AB

Item	Action item/Notes for the record	By who	By when
1	Introductions		
1.1	Brief overview from James Trimmer stating that the meeting was proposed by the PLA at the Examination Hearings to assist the Planning Inspectorate in reaching the consensus on the potential barging on Bow Creek.		
2	Lee Tunnel Project Experience		
2.1	<p>The Lee Tunnel barging operation at Abbey Mills,(AM) has undertaken the removal of material produced in the construction of Shaft F. This is the reception shaft for the Lee tunnel project, The project is currently in operation removing material from the construction of shaft G, the proposed reception shaft for the Thames Tideway Tunnel. These works are being undertaken under approved planning applications by the London Legacy Development Corporation</p> <p>The materials removed from site are diaphragm walling and the shaft excavation arisings.</p> <p>The current operation can consist of up to two tugs with a single barge each.</p> <p>TL described the operation. The barges enter the creek at</p>		

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	<p>approximately 3.5 hours before high water when there is enough water but the channel is very narrow, so the barge will stay its course and are likely to bump off the muddy sides to the channel.</p> <p>Once they arrive at Abbey Mills the first tug pulls the barge into the Prescott channel alongside the Abbey Mills Wharf. The tug will peel off and sit on the western side of the Prescott channel with the barge as near to the lock as possible, to make room for the second barge.</p> <p>The second tug then follows the same manoeuvre by pulling the barge into the channel, then peeling off to the western side of the Prescott Channel to allow both barges to be accommodated at the wharf.</p> <p>The barges are then loaded over the high tide by long reach excavator with as much as they can before they need to depart the berth. This is typically between 280t and 320t. The final quantities are unknown as the material is not being weighed</p> <p>TL stated barges left AMPS at approximately half an hour after high water to allow them to clear the railway bridge.</p> <p>Once out of the creek the barges are strapped together and towed to downstream to Mucking and other receptors for unloading.</p> <p>The grounding incident occurred at the start of the project with the contractor leaving Abbey Mills too late. The barge re-floated on the following tide, but the potential for blocking the creek was high. There have not been any other reported incidents. The incident should not reoccur if passage plans are followed.</p> <p>The recovery of a vessel that grounds and subsequently sinks, whether through suction of the bed material or breaking its back, is extremely problematic. First of all you have to find a jack up barge that can access the area and set up in such a way that it can access the hold of the barge. Barges would then need to be taken upstream to the area, to allow a transfer of the sunken barges load. These barges would have to be removed to prevent further grounding.</p> <p>Finally, trying to re-float the barge, or remove it using a crane, could cause further problems.</p> <p>The outcome is that the creek could be closed for weeks/months.</p> <p>The current service is an ad hoc- service as the production rate of excavation means that material doesn't need to be removed straight away. It can be stockpiled and barges ordered as required.</p>		
3	<p>Review of Potential Barging Operation</p>		
3.1	<p>TL has looked at the Southwark proposal for having the four barges in the Prescott Channel at the same time and cannot see how it would work, in light of the way the current operation runs. As there would not be enough room for the tugs and barges in the Prescott Channel to allow them to be moved.</p> <p>However TL also stated that he wasn't sure that a tug could pull two barges safely up to AM, therefore moving forward it should be assumed that the standard working practice would replicate the current operation of a single tug towing a single barge.</p> <p>TL considered there was no reason why barging at night was not feasible on the basis of one tug to one barge.</p> <p>The PLA didn't believe that extensive dredging along Bow Creek as included in the Pell Frischmann report was required and considered that it is likely to cause a greater issue by increasing the likelihood</p>		

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	<p>of a barge breaking its back if it was grounded.</p> <p>The current barge operation had used 350 tonne barges and 500 tonne barges. but it must be noted that the 500t barges are not fully laden. TL considered 350 tonne barges or modified barges with similar draft and freeboard would be appropriate to clear the bridges and have sufficient water depth below the keel.</p> <p>Barges are likely to be required to be manufactured as 350 tonne barges are uneconomic on the Thames and are no longer readily available. Tugs should be available.</p>		
4	Other precedent of Bow Creek use		
4.1	<p>In addition to the current use of on the Lee Tunnel Project, Bow Creek and the reaches upstream of Three Mills Lock were briefly used by the Olympics project for the transfer of waste however, these operations carried much lighter loads, were short term and are not comparable to operations required to service a main tunnel drive site.</p>		
5	Navigational Risk Items		
5.1	<p>There is currently impact protection for some of the structures, such as bridges, however TL stated it would be advisable to enhance these to provide a greater level of protection, as the contact between barge and bridge supports will happen.</p> <p>The PLA stated that it is unlikely that they would seek to change the current limits of responsibility as occurred during the Olympics, and therefore would have to meet with the Canal and River Trust.</p> <p>Bridge inspections – as the bridges are single span and there are no alternative navigational routes, there would need to be work done with the asset owners to ensure inspections and maintenance are planned to be carried out in advance to prevent the possibility of impacting on the use of the creek.</p> <p>It was felt that some navigational equipment would be required, such as reflectors on the bridges particularly for night movements, but these are not expected to be substantial or expensive solutions. Anything that was placed into the creek to mark a channel is unlikely to last for long. TL considered that subject to installation of equipment night time barging would be unlikely to carry additional risk.</p> <p>Other river users are also unlikely to be an issue, as it is used infrequently by recreational users, and it is felt that the issues could be managed at a local level of communication on Bow Creek</p>		
6	Infrastructure Requirements		
6.1	<p>ST explained that if barging could be used at AM the current loading arrangements would not be appropriate. Barges needed to be loaded and ready to be removed when water was available and so in the response to the Planning Inspectorate TTT had indicated that two sets of campsheds could be needed to deliver empty barges and then pick up the loaded barges. TL confirmed this would be appropriate.</p> <p>DC raised that at 1260t/day the average tunnelling rate the vast majority of excavated material could be removed and asked if, as Abbey Mills is a larger site, any increase in production rates can be absorbed within the site boundary, and indeed is there not the opportunity to make use of some of the other space adjacent to the</p>		

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	<p>worksite.</p> <p>ST state that Abbey Mills site was only 1000m² bigger than Chambers Wharf, at 21,000m² and due to the shape and configuration of the site it wasn't really feasible to accommodate a larger useable storage area. The storage area would be similar at Abbey Mills to the Chambers Wharf requirements.</p> <p>It was not possible to utilise any potential areas within the existing pumping station as the station is a critical item of infrastructure and it is not possible to encroach within the secure AMPS site boundary. The area of land which runs between the Pumping station and Channelsea River is the location of the new diverting culverts for the Lee tunnel with some above ground structures and is therefore unsuitable for storage use.</p> <p>Additionally, the shaft and surrounding structures being put in place by the Lee Tunnel are reducing the potential operational area on site.</p>		
7.0	Summary of meeting		
7.1	<p>It was considered that the maximum daily feasible would be 4 No 350 tonne barges. This would be 2 on each tide.</p> <p>Any towing will be undertaken as a single tug towing a single barge. A bespoke barge may be able to increase capacity, but not to any substantive degree.</p> <p>The maximum quantities of materials that could therefore be transported would be between 1190t per day and 1,260t depending on how full the barge could be loaded.</p> <p>Additional in river infrastructure in the form of campsheds and dredging would be required at Channelsea River to allow the possibility of 4 barges a day.</p> <p>There was no benefit to dredge the length of the Bow Creek downstream of the District Line bridge.</p>		

Next meeting (date, time, location):	
Next minute taker:	

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