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PROJECT NOTE

Project no:	140352
Project:	**Sondheim (Ambassadors) Theatre, West Street, London WC2H 9HD**
Date:	10 Mar 2016
Author:	Chris Boydell
Subject:	**BIA Pre-application Audit Query Tracker Response**

Query 1 BIA - Scope

Discrepancy between BIA and SSDR regarding depths of basement.

Response - The excavation is referred to consistently and RSK have re-run their analytical models to reflect this – see appendices C-E of revised BIA document

Query 2 BIA - Screening

Map extracts required from CPG4 source documents showing site location

Response – Source documents now located referencing the site in RSK's BIA figures 4 -10

Query 3 Hydrogeology

Monitoring of site water levels to inform potential effect on adjacent basement. Discrepancy in ground water strike levels in GGSA to be resolved.

Response – Further ground water monitoring has been undertaken as identified in RSK's BIA report section 4.1.1 pp16/17. The ground water clearly fluctuates within the Hackney Gravel which is underlain by impermeable London Clay, into which the underpinning and piles will be founded. This is coincidental with the basement level of the Ambassadors Theatre. The

basement of the St Martin's Theatre appears to suffer water ingress despite being slightly higher than the Ambassador Theatre. This is likely to be a phenomenon of the quality of the original tanking as all London theatres of this age suffer water ingress and rely on a sump pump to some degree. The Ambassadors has a sump and pump. The St Martin's theatre is marginally 'downstream' of the Ambassadors' in terms of land slope and ground water flow so will be offered some protection by the later.

Query 4 Stability

Underpinning details and indicative temporary works scheme for facade and piled retaining walls

Response –The suggested construction sequence has been developed in greater detail as illustrated on sketches SSK101-108, with explanatory notes, and the narrative within the Conisbee Stage D report section 4.0 has been adjusted to complement the sketches. This clearly demonstrates an achievable methodology for each boundary condition which the contractor can use as a basis to develop their detailed construction sequence.

The party wall underpinning and piling will be founded in the London Clay as identified on SSK103 and 107.

A secant perimeter piling system will be adopted to provide resistance to perched ground water inflows during construction. The individual underpins to the party wall are generally small local excavations that will be addressed using conventional sump and pump methods for removing ground water, if it is an issue.

Query 5 Stability

Statutory buried services report below Tower Court requested

Response – RSK undertook a utilities search in advance of their ground investigation and the responses provided in their Desk based utilities report did not identify any significant services or conflicts.

A Ground Penetrating Radar scan was undertaken during the topographic survey which identifies some services that will conflict with the anticipated works and protection or relocation will be required.

The MEP Consultants Power Plan Solutions have written a short note confirming they will undertake negotiations with the Utility Companies at the appropriate stage of detailed design development and the client is aware of the potential risks associated with this.

Query 6 Stability

Measures to control the removal of fine materials from ground water seepages

Response – A secant perimeter piled wall solution will be adopted to reduce the risks associated with perched ground water during the works. The underpinning pits will be local excavations and relatively small so the risks of loss of fines is nominal for these short term excavations which will only be open for the course of a single day. Any ground water will be caught in a sump and pumped away to keep the excavation dry.

Query 7 Stability

Clarifications required to GMA and building damage assessment as described in section 4

Response – The GMA takes into account the more detailed construction sequence and the analysis in appendices C - E of RSK's BIA report demonstrate the approach.

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