

Document Review Sheet

Originator:	Contract Number: CRL1	Comment Sheet Document Number:	Revision: A
Document Title: 11-14 Greville Street Crossrail Infrastructure Protection Demonstration Submission comprising various documents		Document Number: Various	22 July 2016

Reviewer Details			Originator Details		
Lead Reviewer: Geoff Rankin		Reviewers Initials: GR		Name:	Date:
Company: Crossrail		Date: 4 March 2019	DECAL Code:	Company: Campbell Reith	Signature:
Position: 3 rd Party Developments Manager	Recommended Action: Objection <input type="checkbox"/> No Objection <input type="checkbox"/> No Objection (Revise as indicated below) <input type="checkbox"/>			Position:	

Reviewer Comments				Originator Response	
Comment Code Legend: A = action required on this issue B = action required for next issue C = advisory comment				Status Code Legend: i = incorporated ii = open/under review iii = evaluated/not incorporated	
Comment number	Comment Code	Document Reference	Review Comment	Status Code	Originator Comments
Document: GREVILLE-MS-03 Rev 01 18/02/2019 by M. O'Donnell Method Statement in Relation to the Demolition At 12-14 Greville Street, London, EC1N 8SB Prepared by Ciku Construction					
1	B	general	CRL have no objection subject to acceptance of responses to below comments:		No response reqd.
3	B	general	CRL would have cause to object to methods of construction carried out within 15m plan distance of its assets with potential to transmit heavy vibration (dynamic force) into the ground. As a guide the maximum intensity of continuous vibration should not exceed 15mm/s PPV (applying this criterion to the nearest source of activity). Please advise how will the contractor evidence that it not exceeding these vibration limits?		See page 9 of document GREVILLE-MS-03 Rev 04

3	C	general	Please confirm no deep excavations including temporary piles will be undertaken during the demolition phase. If this is not the case then please may we see details confirming these will not impact on Crossrail's Exclusion zone.		See page 9 of document GREVILLE-MS-03 Rev 04
Document: General Methodology Revision 02 Prepared by O'Halloran & O'Brien Ltd. Date 18/02/2019					
1	B	general	CRL have no objection subject to acceptance of responses to below comments:		
2	B	general	CRL would have cause to object to methods of construction carried out within 15m plan distance of its assets with potential to transmit heavy vibration (dynamic force) into the ground. As a guide the maximum intensity of continuous vibration should not exceed 15mm/s PPV (applying this criterion to the nearest source of activity). Please advise how will the contractor evidence that it not exceeding these vibration limits?		See page 22 of document General Methodology Revision 04
3			Please confirm no deep excavations including temporary piles will be undertaken during the demolition phase. If this is not the case then please may we see details confirming these will not impact on Crossrail's Exclusion zone.		See pages 22/23 of document General Methodology Revision 04
4			Would it be possible for Crossrail to receive regular (suggest monthly) progress updates covering demolition, foundations, shell and core construction?		See page 23 of document General Methodology Revision 04
Document: Structural Calculations for Crossrail submission Prepared by Tom Matsuzaka, Price & Myers Date 18/02/2019					
1	A	general	The findings in the summary table appear not to accord with Crossrail's guidance, which requires that the overall loading imposed on the tunnels does not exceed the existing overburden plus the load from the existing development or The existing ground overburden + 50kPa The load take down summary appears to suggest that the proposed loads (incl. reduction of overburden) is 30kPa greater than existing (which happened to exceed 50kPa, ignoring any existing basement). If that is the case then it is not acceptable. CRL would be prepared to consider a concession if the live load factored into the equivalent surcharge pressure included a live load reduction factor, in acc. With BS6399 Parts 1,2,3		See Loading Calculations Ver.2 which incorporate these comments.

			Please review and advise.		
Document: Price & Myers Calculations for prediction of transmitted groundborne noise & vibration for 12-14 Greville Street Dated 06/09/2018					
1	A	general	It would seem Rupert Taylor's advice discussed in 18 Sept 2018, appears not to have been incorporated in the submission. Thus the predictions may not be correct. Please advise and re-issue		See calculation for groundbourne noise and vibration Ver. 2 which incorporate these comments.
Document: Basement Impact Assessment Report, 12-14 Greville Street, prepared by Geotechnical & Environmental Associates Document no: J15340A Issue no. 4, 19 December 2017					
1	A	11.0	Given the tunnel location is known to yourselves this section ought to be updated, and a table produced showing displacements at tunnel crown and invert level, thus demonstrating that ovalisation is not significant,		We understand that this matter has already been discussed with Price & Myers. However, we confirm that we do not consider further analysis to be necessary, as whilst the exiting analysis did not explicitly model the tunnel beneath the site, it does show that the threshold value of 0.3 mm (below which the effects of the movements on the tunnels are considered to be negligible) occurs at a depth of 6.5 m to 5.0 m above the tunnel crown in the short and long-term respectively, such that the tunnel itself will experience movement significantly less than this value and will not therefore be subject to any total or differential movements that could have a detrimental impact.
2	A	general	Pls refer to comments in load takedown – as the proposed loads are higher than guidance recommendations CRL would like confirmation that the stresses induced in the tunnel lining will not exceed the design envelope. (stay inside the M-N interaction diagram curve) As discussed GR/TS on 05/03/2018, please respond to quotation provided by Crossrail tunnel designers, to carry out this check.		We understand that this has been discussed and resolved with Price & Myers.
3	C	PDISP	Pls provide definitive evidence that the PDISP analysis has been checked for its numerical accuracy and input assumptions, and that it reflects the designer's intent.		Refer to Cat II check undertaken on the assessment.