

Category II Check Certificate for 12-14 Greville Street, London EC1N 8SB

Category II (Competent Independent Team in same Organisation) Check Certificate for the validation of the 3rd Party Developer's proposals for protection of Crossrail Infrastructure at risk within the Zone of influence of works

3rd Party Development: 12-14 Greville Street, London EC1N 8SB

Category II Checking Organisation: Geotechnical & Environmental Associates (GEA) Ltd

Designer for 3rd Party Development: Price & Myers

Category II Check Scope:

- Assessment of Ground Movement Impact on Crossrail Infrastructure, predicted to result from implementation of the design for development
- Calculation of load take down before, during and on completion of development

Brief description of the subject of Category II Check including all disciplines covered and geographical extent:

Basement Impact Assessment & Ground Movement Assessment for 3rd Party Development at 12-14 Greville Street, London EC1N 8SB

Documents Checked:

J15340A – Rep Issue 4 – BIA & GMA – GEA – Dated, December 2017

Requirements, Standards and Codes applied in this Check

Crossrail (2016): *A technical guide for developers*. Crossrail Ltd

Gaba, A, Simpson, B, Powrie, W and Beadman, D (2003): *Embedded retaining walls – guidance for economic design*. CIRIA Report C580.

Haslam S, O'Connor L (2013): *Guidelines on safe and efficient basement construction directly below or near to existing structures*. ASUC

Any other relevant details: N/A

Declaration by Checking Organisation:

By Validation Team Leader of the Organisation undertaking Category II Check:


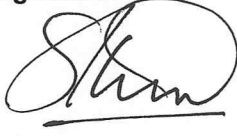
I certify that, exercising reasonable professional skill and care, consistent with the agreed professional services, I have checked the Design of the 3rd Party Development identified above, with the objective of ensuring that the predicted ground movement impact on Crossrail's infrastructure resulting from implementation,

- complies with the Requirements, Standards, Codes and any other relevant details stated above;
- does not exceed the minimum acceptance criteria specified in Crossrail guidance for the protection of its infrastructure against the effects of the Development works.
- Is accurate in its adoption of correctly calculated surcharge loading, interpreted soil parameters and intended construction sequences applicable to this development

In my reasonable opinion, the provisions made to protect Crossrail Infrastructure are considered to be satisfactory.

I confirm that the Category II check was undertaken by a team wholly independent of the team responsible for the assessment and design of infrastructure protection to mitigate the 3rd Party Development impact on Crossrail infrastructure.

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Name: Matthew Penfold	Position: Principal Geotechnical Engineer	Signature: 	Date: 28/11/18
By Project Director of the Organisation undertaking Category III Check:			
I certify that the staff who have completed the above check are competent to carry out their duties and that they have used reasonable skill and care, and that inter-discipline interfaces have been managed and coordinated appropriately			
Name: Steve Branch	Position: Managing Director	Signature: 	Date: 12.12.18
Acceptance by Crossrail: The certificate is accepted by CRL's Safeguarding team			
Name	Position	Signature	Date