27 February 2015

Our ref J14340/MC/2

Geotechnical & Environmental Associates

Unit 1, Church Farm
Gotham Road, Kingston on Soar
Notts NG11 0DE

tel 01509 674888
fax 01509 674950
email mail@gea-ltd.co.uk
web www.gea-ltd.co.uk

Angela Ryan
Regeneration and Planning
London Borough of Camden
Town Hall
Argyle Street
London WC1H 8ND

Dear Angela

Re: AUDIT OF BASEMENT IMPACT ASSESSMENT FOR 50 AVENUE ROAD NW8 6HS (2014/4573/P)

Further to our review of the Basement Impact Assessment (BIA) relating to basement construction at the above site we have received further information from the parties involved and this letter provides our comment on the revised documents.

1.0 INTRODUCTION

Geotechnical and Environmental Associates Limited (GEA) was instructed by London Borough of Camden (LBC) to undertake an independent audit of a BIA for the above site and an assessment of the completeness of the submission in satisfying the requirements of Camden Planning Guidance 4.

The review found that the Basement Impact Assessment, when read in conjunction with the various appendices of the Elliott Wood report, was a relatively thorough assessment of the impact of its construction.

There were, however, a number of items that warranted further consideration or clarification to confirm that the requirements of CPG4 have been met.

In summary, the impact on surface waters was considered to have been satisfactorily addressed but the impacts on groundwater flow and stability aspects required a little more detail.

It was recommended that the BIA should be resubmitted with further information in respect of groundwater inflows and ground movements during piling and excavation. It was also noted that the resubmission should also provide evidence of the input of appropriately qualified persons, all in accordance with CPG4 and the Arup document.

2.0 REVISED DOCUMENTS

A revised BIA was issued and referenced 13/20821-3, dated January 2015. The following changes have been made in response to the queries raised regarding the original BIA.

Section 1.3 lists the professionals who have contributed to the BIA along with their qualifications and adequate justification has been provided that the requirements of CPG4 have been met.

Rising head permeability testing has been undertaken along with additional groundwater monitoring during December 2014. Groundwater was measured at 3.19 m and 3.2 m compared with 3.49 m and 3.67 m when last measured in the Summer of 2013. The difference of 0.3 m or so is considered to be appropriate for seasonal variation and the findings and recommendations set out in the BIA are considered to appropriately deal with the impact of such groundwater ingress.

Additional information has been supplied in respect of the ground movements and damage assessment undertaken by Applied Geotechnical Engineering (AGE). The additional plots, plans and narrative clarify the movement assessments although a plan of the movements relating to pile installation would still have been useful. We have undertaken a simple X-Disp analysis of the ground movements arising from the piling and excavation at the rear of the No 50 to review the impact on the adjacent No 52. The output is appended but we concur with the AGE report in that the maximum level of damage predicted for the adjacent buldings is Category 1 'very slight' and lies within the limits acceptable to LBC in CPG4.

3.0 REVISED DOCUMENTS

On the basis of the above, we confirm that we are satisfied that the potential impacts of the construction of this basement have been adequately considered according to the requirements of LBC as set out in CPG4.

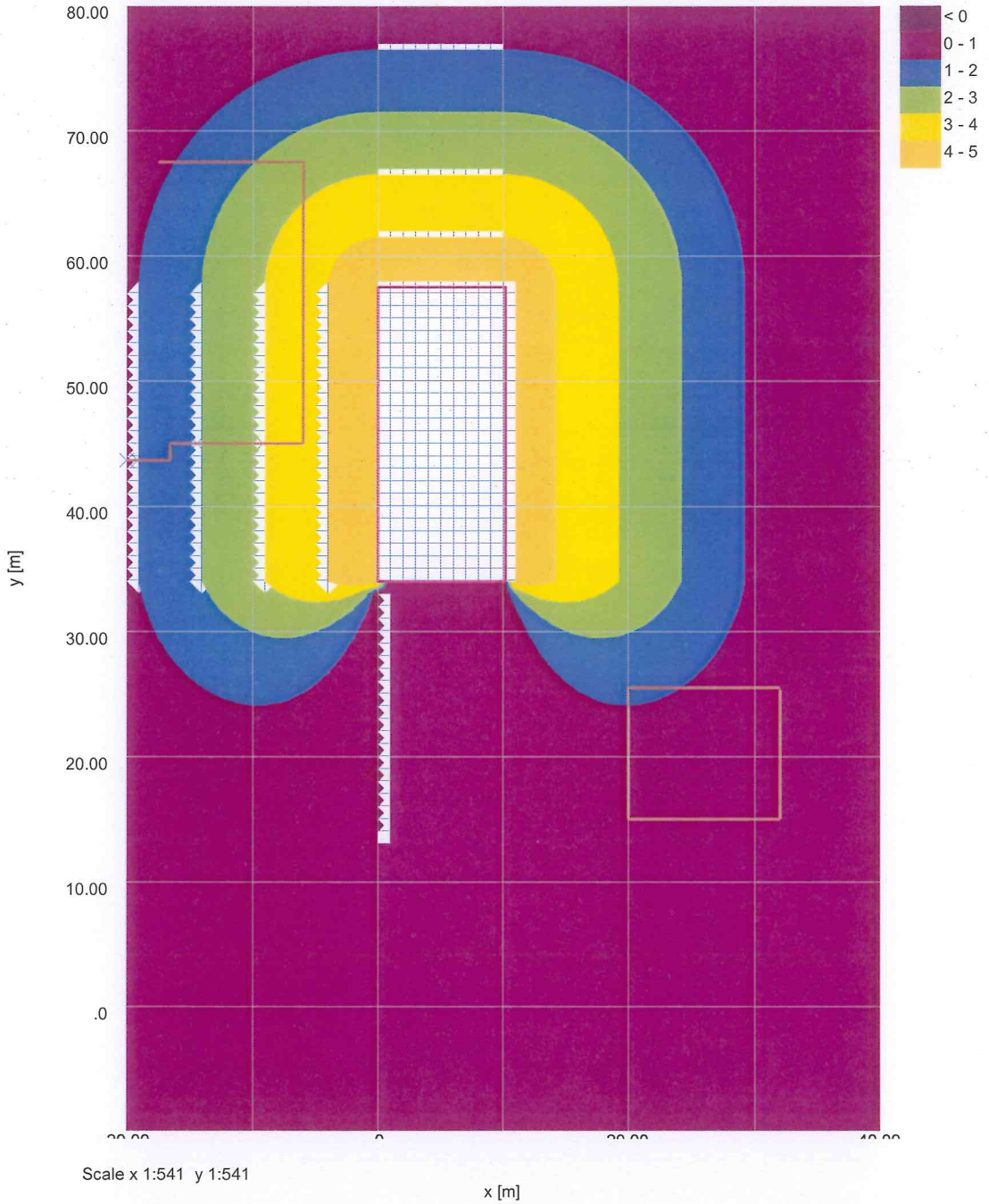
We trust that the foregoing comments are sufficient for your needs.

Yours sincerely
GEOTECHNICAL & ENVIRONMENTAL ASSOCIATES

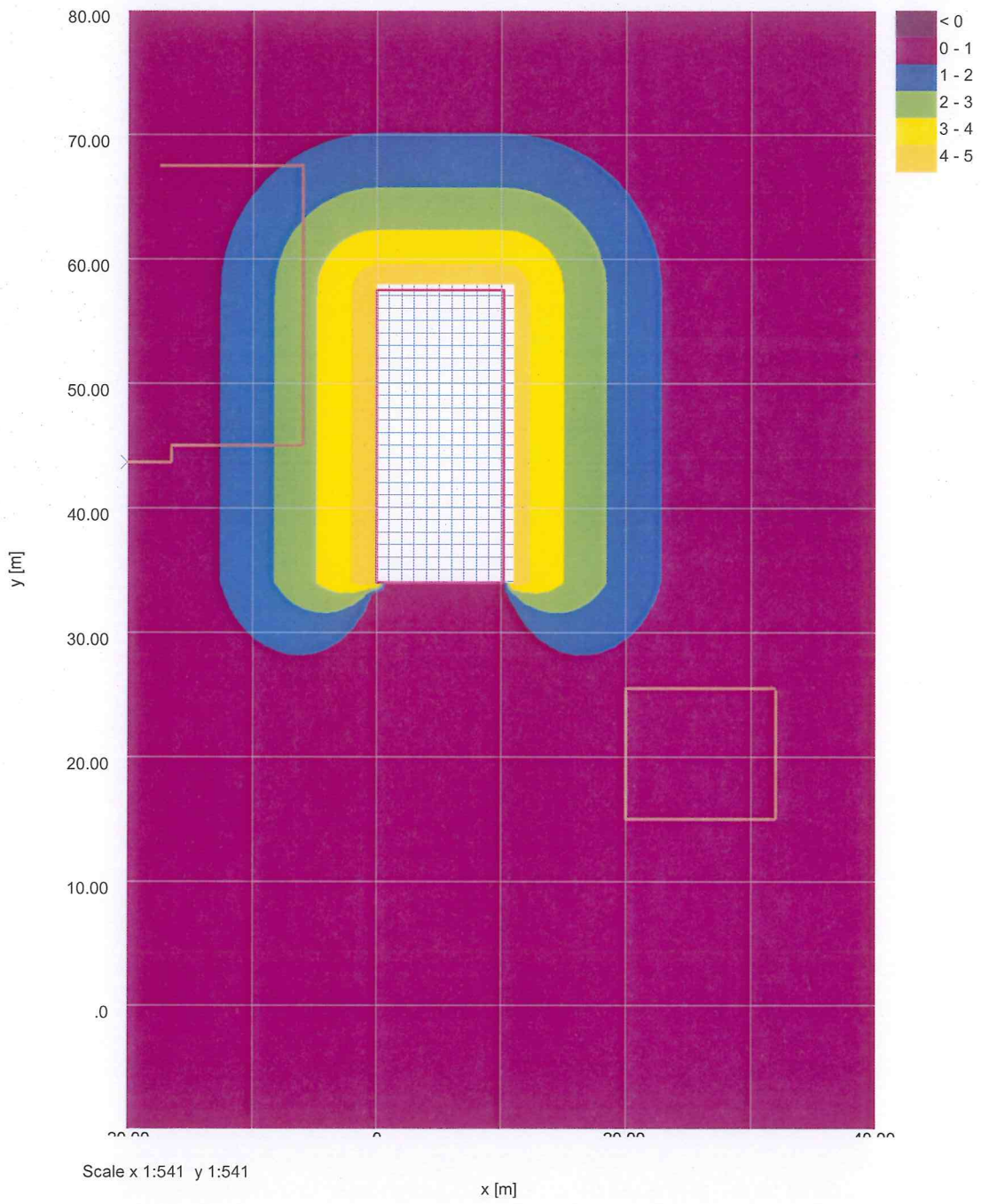
Martin Cooper
BEng CEng MICE FGS

Steve Branch
BSc MSc CGeol FGS FRGS MIEnvSc

Vertical Settlement Contours: Grid 1 (level 44.400m) (Interval 1mm)

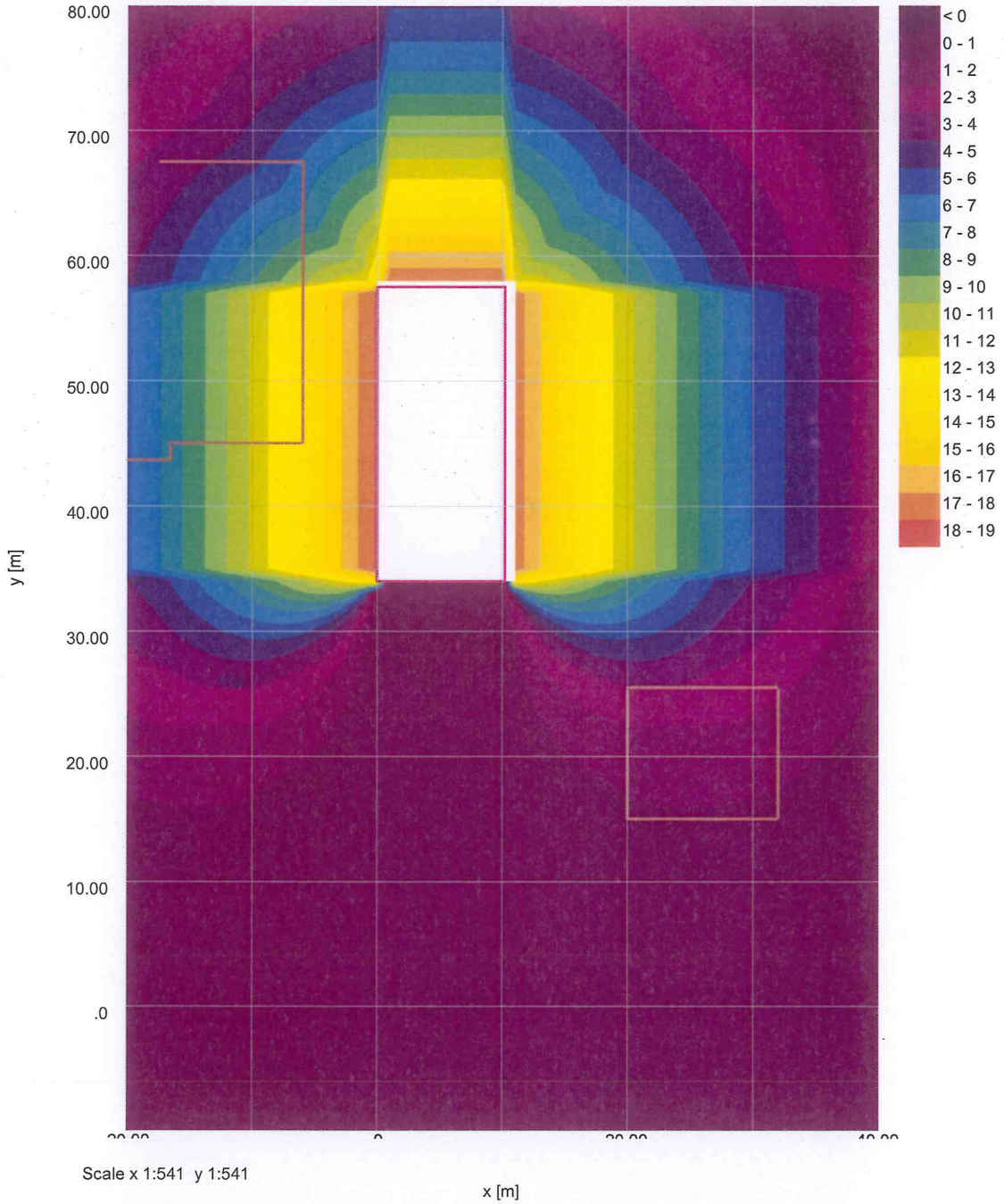


Horizontal Displacement Contours: Grid 1 (level 44.400m) Interval 1mm

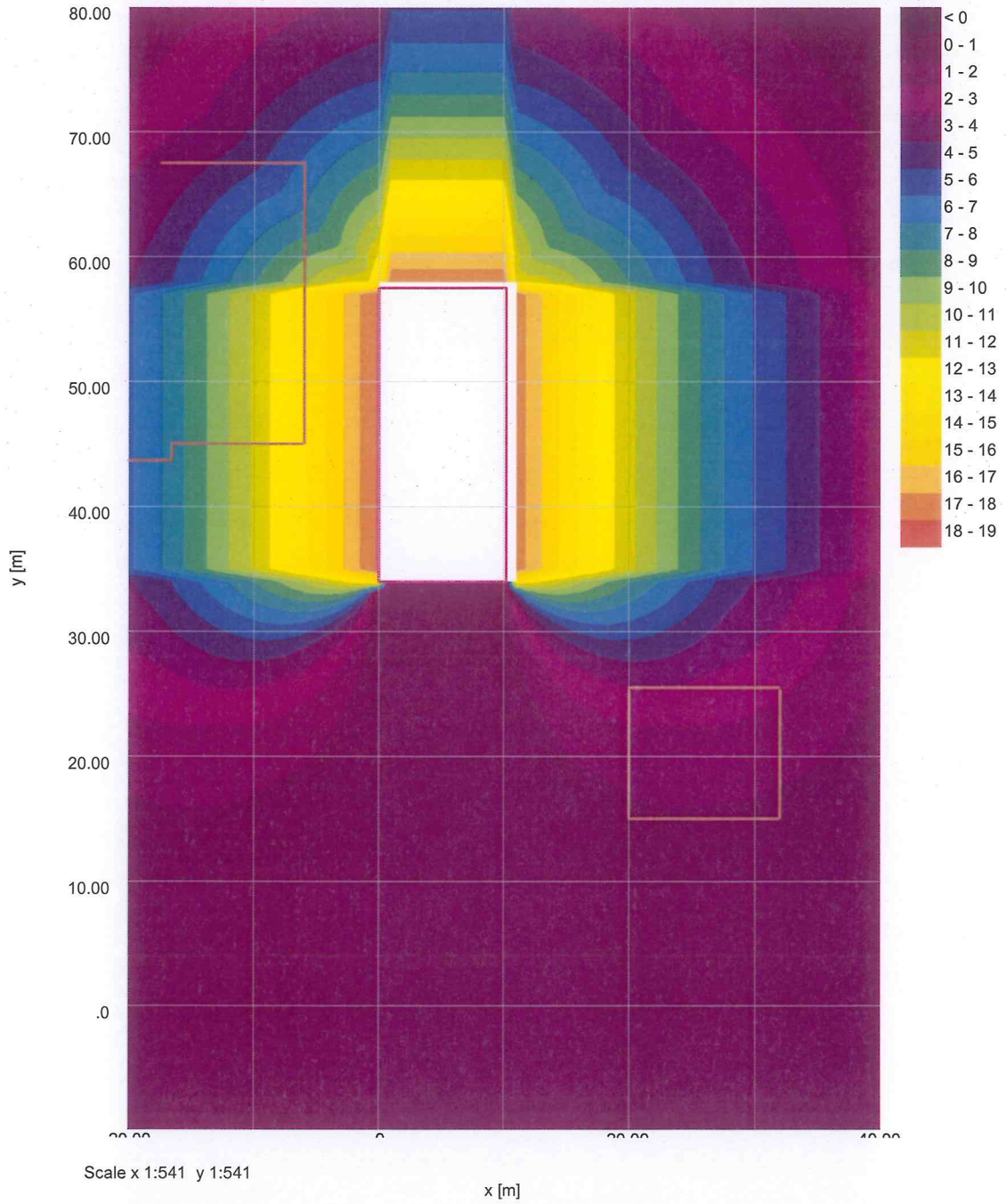


Scale x 1:541 y 1:541

Horizontal Displacement Contours: Grid 1 (level 44.400m) Interval 1mm



Horizontal Displacement Contours: Grid 1 (level 44.400m) Interval 1mm



Scale x 1:541 y 1:541