MichaelAlexander

Foundation House
4 Percy Road
London N12 8BU

tel +44 (0)20 8445 9115
email mail@maengineers.com
web www.maengineers.com

23 July 2018

Simon Judd
Judd Architecture Ltd.
10 Tonbridge Road
Barming
Maidstone
Kent
ME16 9NH

Our Ref: ARC/P4191

Dear Simon,

RE: NETLEY COTTAGE, 10 LOWER TERRACE, LONDON NW3 6RR
STRUCTURAL REPORT

Michael Alexander Consulting Engineers have been commissioned by Judd Architecture Ltd, on behalf of the owner of Netley Cottage, to prepare Structural Engineering advice for the proposed re-modelling of Netley Cottage and its impact on the party garden wall between Netley Cottage and the neighbouring Grove Lodge. Also to consider whether the proposed works to Netley Cottage will adversely impact on the planning approved works at the adjoining property of Grove Lodge

We have reviewed the documents and drawings submitted along with the trial pit information. The trial pits indicate that the structure to the boundary wall is a traditional London Stock Brick wall with corbelled footings founded at approximately 750mm below existing ground level;. There is little evidence of any lime or concrete foundation beneath the corbelled footings, which is not uncommon for properties built in the early 18th Century. Grove Lodge is a Grade II Listed building. Netley Cottage, which is also a Grade II Listed building appears to have been added in the later 18th Century (c.1779) and is an independent building tucked in behind Admiral's House, which is the adjoining property to Grove Lodge.

The Netley Cottage proposed development is to extend the existing cottage at ground floor level into the rear garden as a low level 'link structure' with flat roof. The main extension, which is 4 metres from the existing cottage will have a two storey element in the rear garden. The link extension will be constructed close to the existing boundary wall, whilst the extension in the garden will be approximately 600mm from the wall. The close proximity of the single storey extension will necessitate the requirement for cantilevered foundations in order to avoid surcharging the existing boundary wall. The loads from this link extension will be small and should not pose a problem for the boundary wall. The two storey element will be constructed on traditional strip footings which will be far enough away from the boundary so that the 45 degree spread will not surcharge the wall. We do not foresee any issues with this construction either and will design the footing depth in accordance with NHBC guidance and to a depth that will not unduly affect the boundary wall. Refer to the enclosed sketch 01.

We understand that the development at Grove Lodge will involve the extension of their basement and ground floor into their rear garden. Their basement will be approximately 3.5metres deep from a 900mm lowered garden ground level. The lowered garden level will expose the existing corbelled foundation on the boundary wall. The Grove Lodge development have proposed

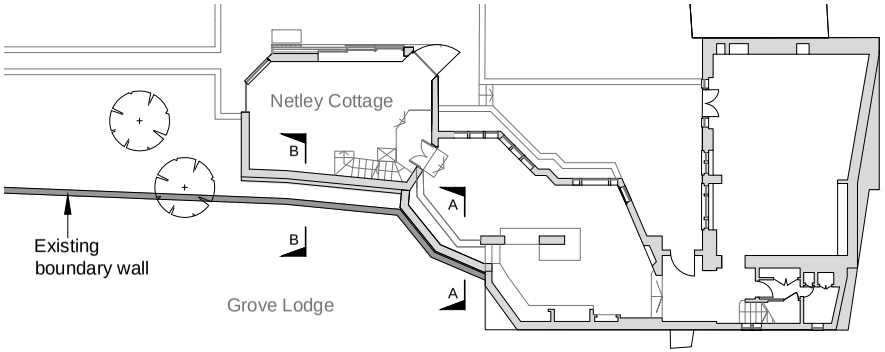
underpinning of the boundary wall. We consider this proposal to be appropriate in this instance to provide a deeper foundation to the wall thereby removing the concerns of undermining the wall foundations. We note however that the surcharges from our relatively shallow new footings to the Netley Cottage extension will “pass through” the new underpinning into the ground on the Grove Lodge side. Provided the underpinning is designed to take this into account in the temporary case, if the works at Netley Cottage are completed first, then there is no reason that the proposal would not be successful. Provided the construction process of underpinning is well controlled and carried out in a traditional “Plank and Strut” method and the ground is re-compacted after excavation, the underpinning should not have a detrimental effect on the boundary wall or new foundations to Netley Cottage. Refer to enclosed sketch 02.

We trust that the above provides an adequate summary of our findings, however if you require any further information at this stage, please do not hesitate to contact us.

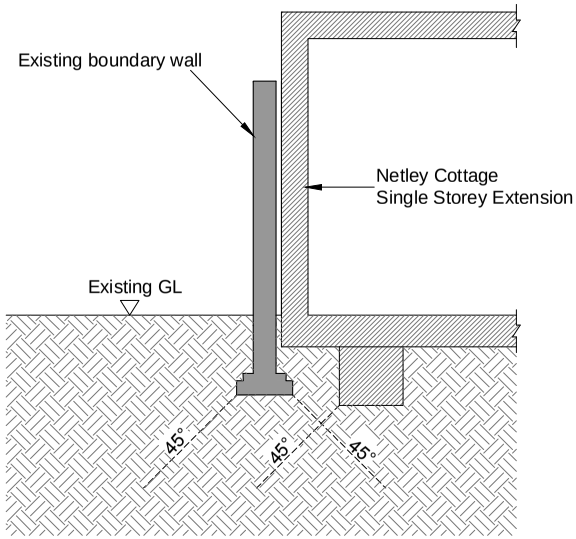
Yours sincerely

Aidan Rivett-Carnac
BEng(Hons) CEng MIStructE
aidan@maengineers.com

Encl. Two sketches indicating the conditions between neighbouring properties.



KEY PLAN



SECTION A-A

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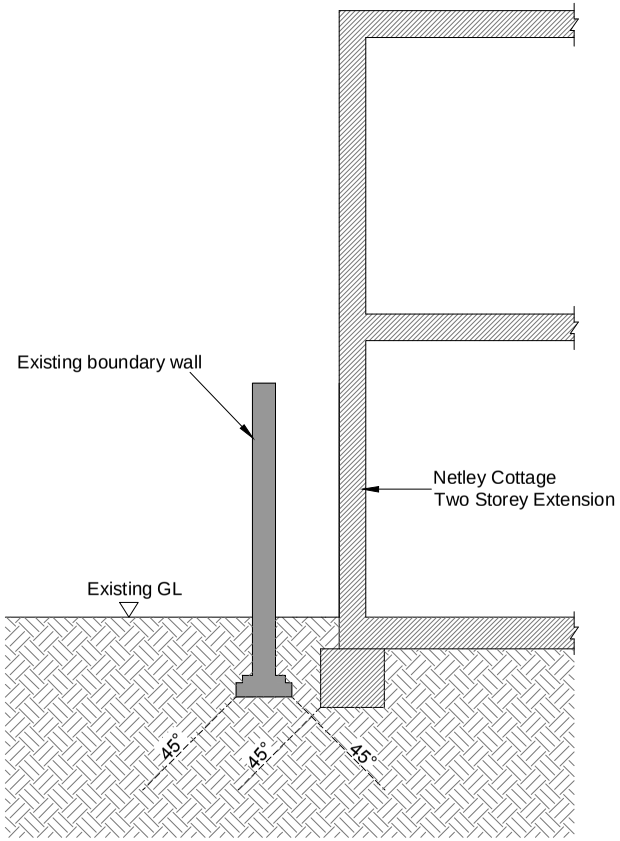

SECTION B-B

Scale 1:50

NOTES

1. This drawing shall be read in conjunction with all relevant Architects & Engineers drawings and specifications.
2. Do not scale any dimensions. All dimensions to be checked on site.

PRELIMINARY

Rev.	Date	Description	By
P1	23.07.2018	ISSUED FOR REPORT	SP

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Architect: JUDD ARCHITECTURE

Project Title: NETLEY COTTAGE
LONDON, NW3 6RR

Drawing Title: PROPOSED SECTIONS WITH NO GROVE LODGE WORKS

Drawn: SP July 2018

Checked: IH July 2018

Scale: 1:50 Size: A3

Project No.: P4191 Drawing No.: SK-01 Rev.: P1

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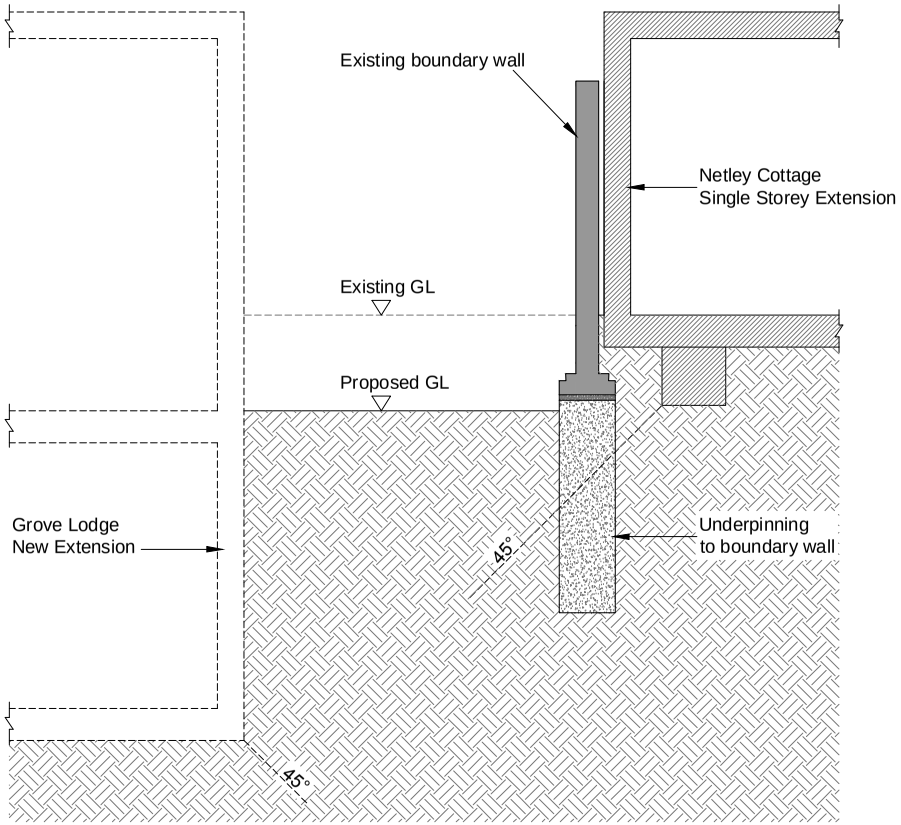
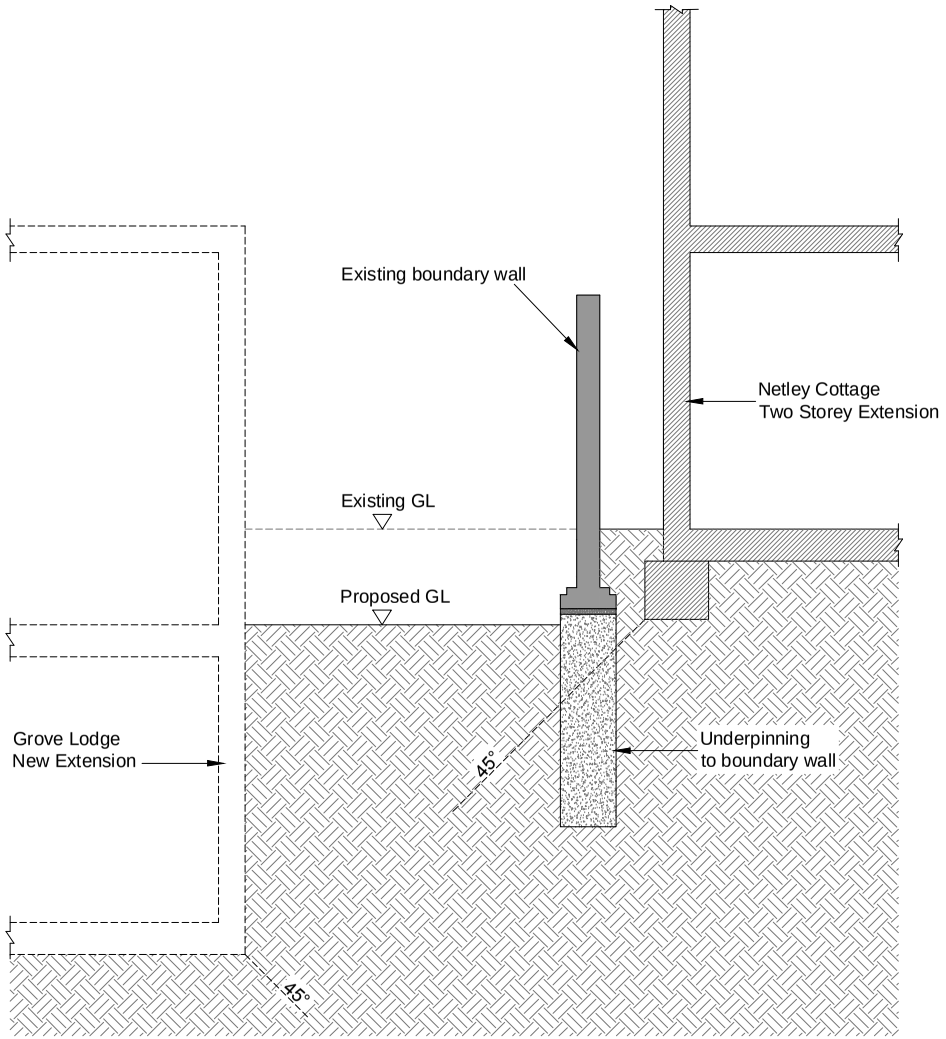


SECTION A-A

Scale 1:50



SECTION B-B

Scale 1:50

FOR KEY PLAN REFER TO
DRG No. P4191 SK-01

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Scale	Size
1:50	A3

Project No.	Drawing No.	Rev.
P4191	SK-02	P1

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