DESCRIPTION OF EXISTING STRUCTURE

And

METHOD STATEMENT FOR
FOR CARRYING OUT INTERNAL ALTERATIONS AND EXTENSIONS

To

No 32 PERCY STREET
LONDON W1T 2DE

On behalf of

Trophaeum Asset Management

for

Messrs Rivendale Properties Ltd

Dated August 2016

Equicom Structural Design (ESD) Limited
Consulting Civil and Structural Engineers

2 River Court
Albert Drive
Woking
Surrey
GU21 5RP

Prepared by: A.P Bradbury C Eng M I Struct E

Introduction

The existing terraced dwelling house at No 32 Percy Street is to be generally refurbished and modified internally to reinstate original features. In particular it is proposed to remove the brick pier located behind the existing shopfront at ground floor and to lower the floors of the front under pavement vaults to provide space for incoming services, plant and bicycle storage etc. It is further proposed to partially demolish the existing single storied rear extension together with the brick vaults beneath it and to reconstruct it to include a new basement over the full width of the property which will extend rearwards to the existing boundary wall.

The Property

No 32 is a mid to late Georgian terraced dwelling house situated on the north side of Percy Street W1 a road which is located in the area known as 'Fitzrovia'. Percy Street runs in an approximately north east/south west direction connecting Tottenham Court Road at its north east end to Charlotte Street at the south west. The property, which is Grade II listed, is located within The Charlotte Street conservation area and comprises five stories including a sub- basement and a slate clad double mansard at roof level. The front elevation of the property which is of conventional stock brickwork construction is masonry painted at sub-basement level and has red brick soldier arches to the upper floor windows with a continuous rendered and painted window cill at first floor level. The front entrance which is approached via a tiled stepped access way at ground floor has a rendered and painted surround with projecting moulded cornice work with decorative pilasters at each side of the arched front door. The remainder of the ground floor storey is occupied by a projecting glazed shop front with similar rendered and painted surround and projecting decorative entablature and cornice work. This shopfront is bordered by an open light well at street level with decorative iron railings and an iron stair to the service entrance in the sub-basement below giving access to under pavement brick vaults occupying the full width of the property.

The rear elevation, which has a single storied extension over its full width at ground level, is also of conventional stock brick construction which rises to a parapet at third floor level with the tile hung mansard rising above it. Below this rear extension which is separated from the main building by a narrow glazed roofed light well are further brick vaults at sub-basement level occupying the full width of the property and extending approximately 1/3 of the depth of the rear extension above.

The structure of the property is fairly typical of the period and appears to comprise a main load bearing transverse walls carrying the front to back spanning timber floors. The principal joists of these floors appear to span from side to side and it is likely that they are carried at the approximate centre of the property by a longitudinally spanning timber 'spine' beam supported, in turn, by this transverse wall and the front and rear external walls of the property. The transverse wall, which is situated approximately mid-way within the depth of the house, appears to be of brick construction at the lower levels but largely of timber construction above and has had a substantial opening created in it at ground floor in the past.

On a visual inspection no serious cracking of a structural nature or any excessive deflections or displacements were observed and, whilst the property has obviously been subjected to some Ad-hoc alterations to its internal layouts in the past, it is considered to be in a relatively sound and stable structural condition.

The single storied rear extension which, in its present form, is almost certainly a later addition (probably dating from the 1980's) is also of conventional stock brick construction with a solid concrete ground floor and a roof comprising timber joists supported by steel beams.

The Proposals.

As part of a general refurbishment of the main house involving minor alterations, both internally and externally, to reinstate original features it is proposed to remove the brick pier located behind the existing shop front at ground floor level and to lower the front vault floors to provide space for incoming services, plant and bicycle storage etc. As the refurbishment works progress the existing timber structure will be thoroughly inspected to ascertain its condition. The floors will be strengthened if it is found to be necessary and levelled if unacceptable deflections are found to be present.

It is further proposed to partially demolish the existing single storied rear extension together with the brick vaults beneath and to reconstruct it to include a new basement over the full width of the property and extending rearwards to its existing boundary wall. This new extension is to incorporate an enlarged light well adjacent to the rear façade of the main house at basement level with large areas of glazed walling together with a metal clad roof of 'sculptured form' with further large areas of glazed roof lighting.

The structural works associated with these alterations and the methods proposed for carrying them out are outlined as follows.

1)..Alterations to the main house.

It is proposed to carry out various alterations within the main house to reinstate original features including minor alterations to some doors and window openings, the removal of some non-load bearing internal walls, and the removal of the brick pier behind the existing glazed shop front at ground floor level. This pier removal will be effected by the temporary needling of the brickwork above, dead shoring from basement level with the installation of a steel 'portal' structure to provide support to the brickwork in the permanent condition.

It is also proposed to lower the existing floors of the brick vaults beneath the front pavement. The walls of these vaults will be underpinned in strict sequence and be propped laterally in the temporary condition whilst the construction of new reinforced concrete floor slabs and up stand kerbs providing permanent lateral restraint is carried out

2) Re Building of Existing Rear Extension and Creation of new Basement Beneath.

It is proposed to partially demolish the existing single storied rear extension together with the brick vaults beneath it and to reconstruct it to include a new basement over the full width of the property and extending rearwards to its existing boundary wall.

The external walls of the existing extension appear to form party walls with the building's neighbours on the western side and at the northern end and these will need to be retained. The flank wall of the existing extension on its eastern side is placed either on the boundary between the properties or straddling it forming a 'party wall' with No31 Percy Street where it flanks an open

yard at the rear of that property Both Nos31and 32 Percy Street are in the same ownership ie Messrs Rivendale Properties Limited and it is intended either to retain this wall and incorporate it into the new construction where its load carrying capacity and lateral stability will be assessed as part of the structural design of the new extension or, if necessary, to replace it in its entirety. In the temporary (demolition/re-construction) phase it is proposed that this wall and the party walls with the western and northern neighbours are laterally stabilised by scaffold flying and raking shores installed sequentially as sections of the existing roof are dismantled

It is proposed to construct the new basement sub structure partially in open cut (in the existing vaulted area) and partially in the 'top down' form of construction in the area to be excavated to the rear of the property. Prior to any excavation taking place the walls on all sides of the excavation will be underpinned to a depth below that of the new basement floor. This underpinning will be propped laterally as general excavation progresses by temporary flying shores in the vaulted area and by elements of the permanent 'top down' construction to the rear. The new basement and ground floors will comprise reinforced concrete slabs with integral reinforced concrete walls spanning vertically between them and designed to resist lateral pressure from retained material and any superimposed loadings where appropriate. Water/damp proofing of the new lower ground floor areas will be by a proprietary impervious membrane.

Spoil from the basement excavation will be transported to skips at road level by means of a mechanical conveyor installed through a temporary opening to be created in the ground floor. This conveyor will discharge at high level ground floor through the temporarily dismantled shop front on a gantry to be erected above the external pavement.

All of these works will be carried out to detailed method statements and in a strict sequence in order to maintain the structural integrity of the building and its neighbours at all times

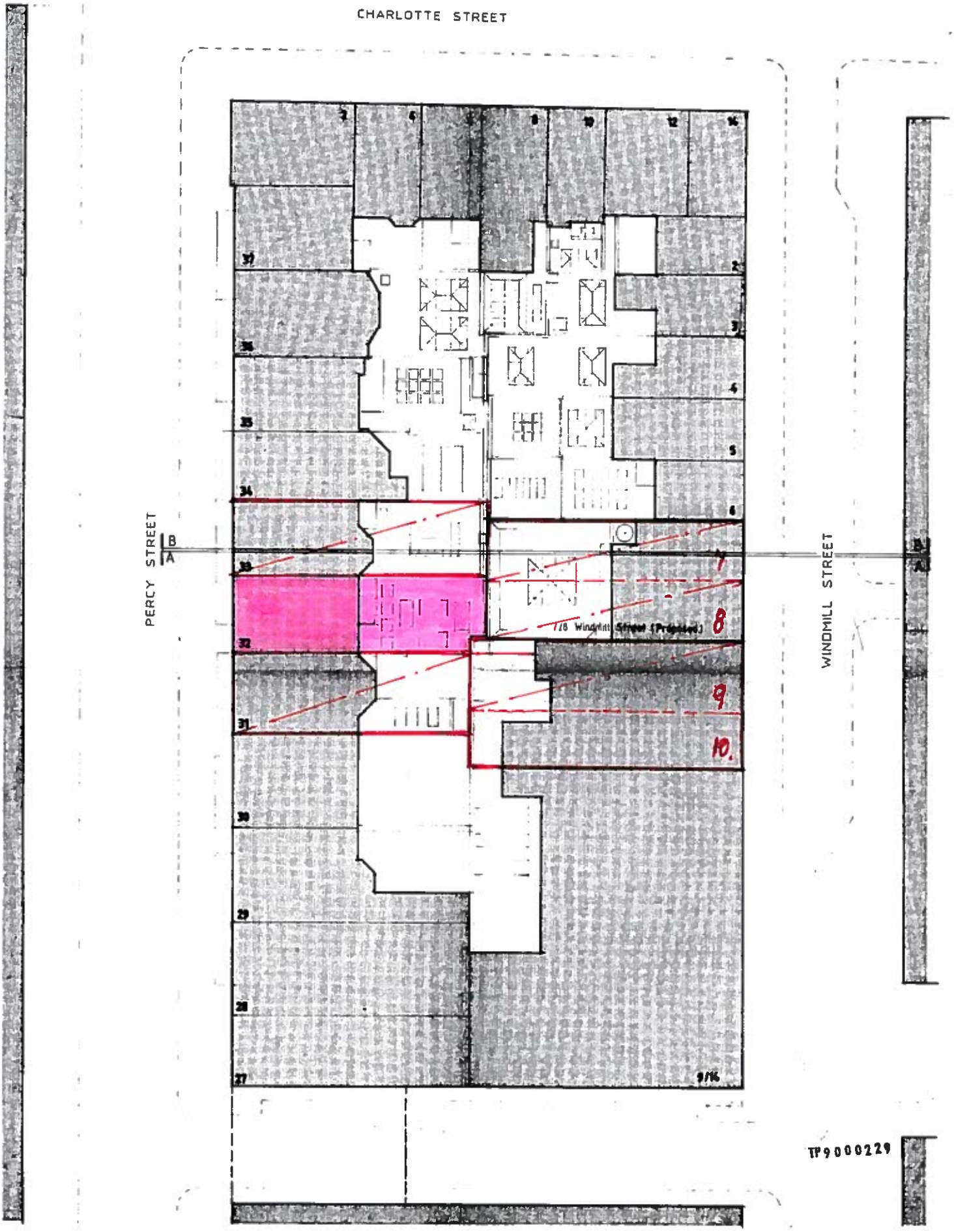
In order to validate and develop these proposals, any structural design will be preceded by detailed investigations of the site sub soil conditions,the existing foundations and the building superstructure where appropriate. The results of a site investigation borehole carried out on 23rd October 2015 together with a desk study including a review of available geological maps for the area are included as part of a Basement Impact Assessment prepared by Messrs Jomas Associates Ltd which is to be part of the planning application submission to the London Borough of Camden.

Specialist contractors will undertake all subterranean construction. Ground conditions will be assessed as work proceeds and any variation to the design that may be necessary will be considered and made as appropriate.

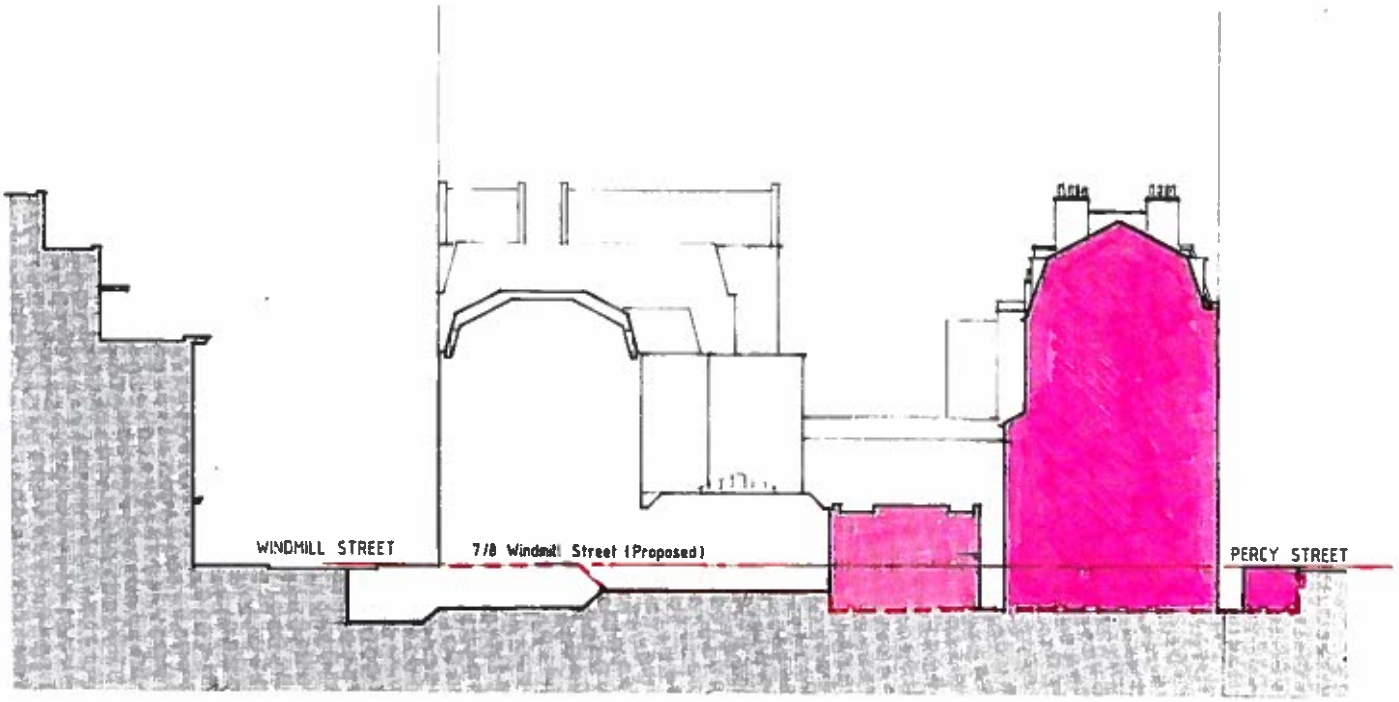
In due course the finalised design and working drawings together with those of the temporary supports will be the subject of party wall awards and be submitted to the Local Authority for Building Regulations approval. Details of the existing and the proposed alterations/extension are indicated on Garnett and Partners (the project Architects) drawings

Appendix A

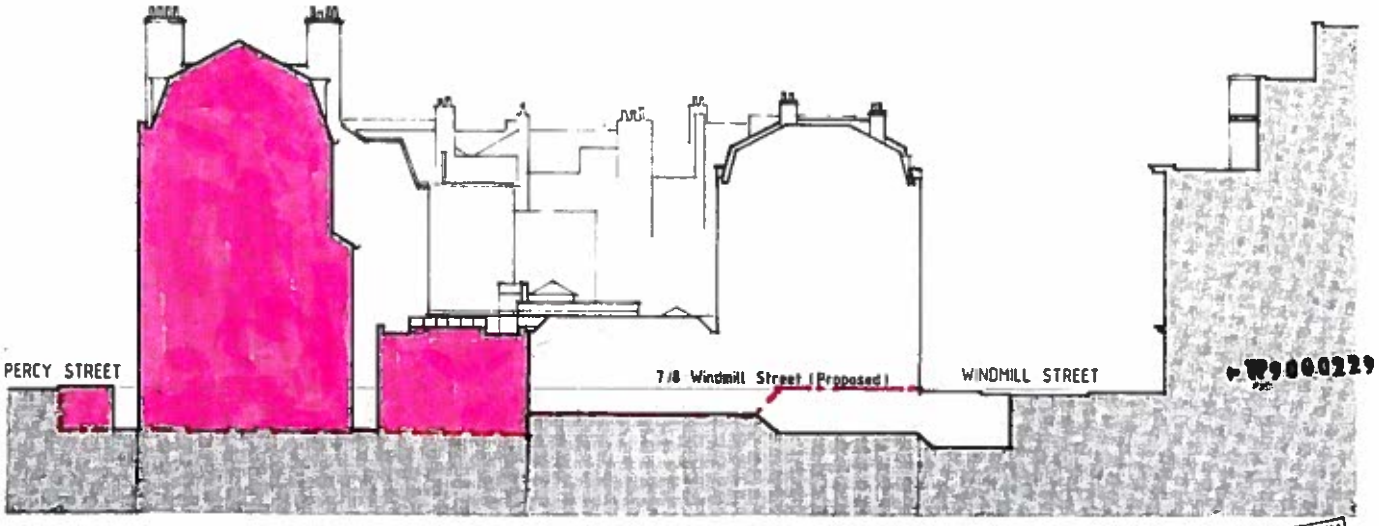
Location Plan and Sections



AP Blenkinsop RIBA Architect 8 Windmill Street London W1P 1HF 01-637 3103/4	TITLE : LOCATION PLAN (THROUGH FIRST FLOOR LEVEL) JOB : 7/8 WINDMILL STREET LONDON W1 SCALE : 1:200 DATE : APRIL 1990	N	525 / 41



SECTION A—A

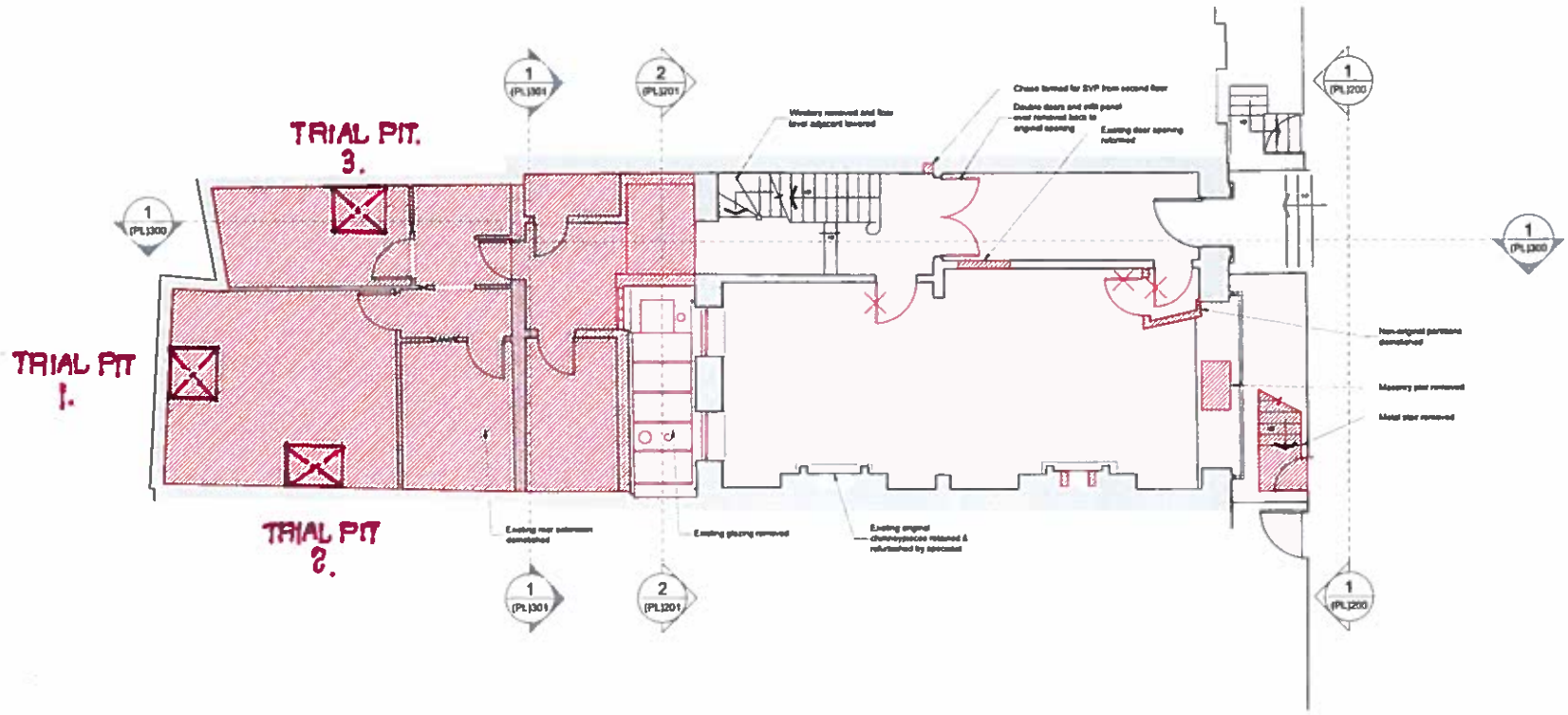


SECTION B—B

A P Blenkinsop RIBA Architect 8 Windmill Street London W1P 1HF 01-637 3103/4	TITLE : SECTIONS SHOWING LOCATION JOB : 7/8 WINDMILL STREET LONDON W1 SCALE : 1:200 DATE : APRIL 1990	525 / 42

Appendix B

Trial Pit Locations
&
Trial Pit Logs



01 Ground Floor Plan
As Existing with Demolitions

0 1 2 3 4 5 10
METERS

KEY

EXISTING FABRIC

DEMOLITION

Notes

1. Existing lath & plaster ceilings/wall linings will be retained where existing and repaired where damaged with materials to match existing
2. Plaster will be removed to the basement walls to enable dampproofing work to be carried out
3. Where ceilings/wall linings are found to be plaster board these will be replaced with new plasterboard & joint if removed for services or structural works etc
4. Existing decorative plasterwork will be retained and refurbished throughout. Heavy build up of paint is to be removed by a specialist using poultices
5. Wherever possible original joinings, architraves, shutters, dado panelling and other decorative joinery will be retained, stripped of paint, repaired and redecorated
6. The existing basement floor slab will be retained throughout
7. Where floors are found to be out of level these will be levelled by removing the existing floorboards, fixing the joists and relaying the original boards
8. Services will be run within floor voids and use existing switches wherever possible to avoid damage to the historic fabric
9. Existing mortises will be draft proofed where retained

PLANNING

Garnett+Partners LLP
Holborn Hall
195 High Holborn
London WC1V 7BD
Tel +44 (0)20 7404 7677
Fax +44 (0)20 7404 6548
mail@garnettpartners.com
www.garnettpartners.com

GARNETT +PARTNERS

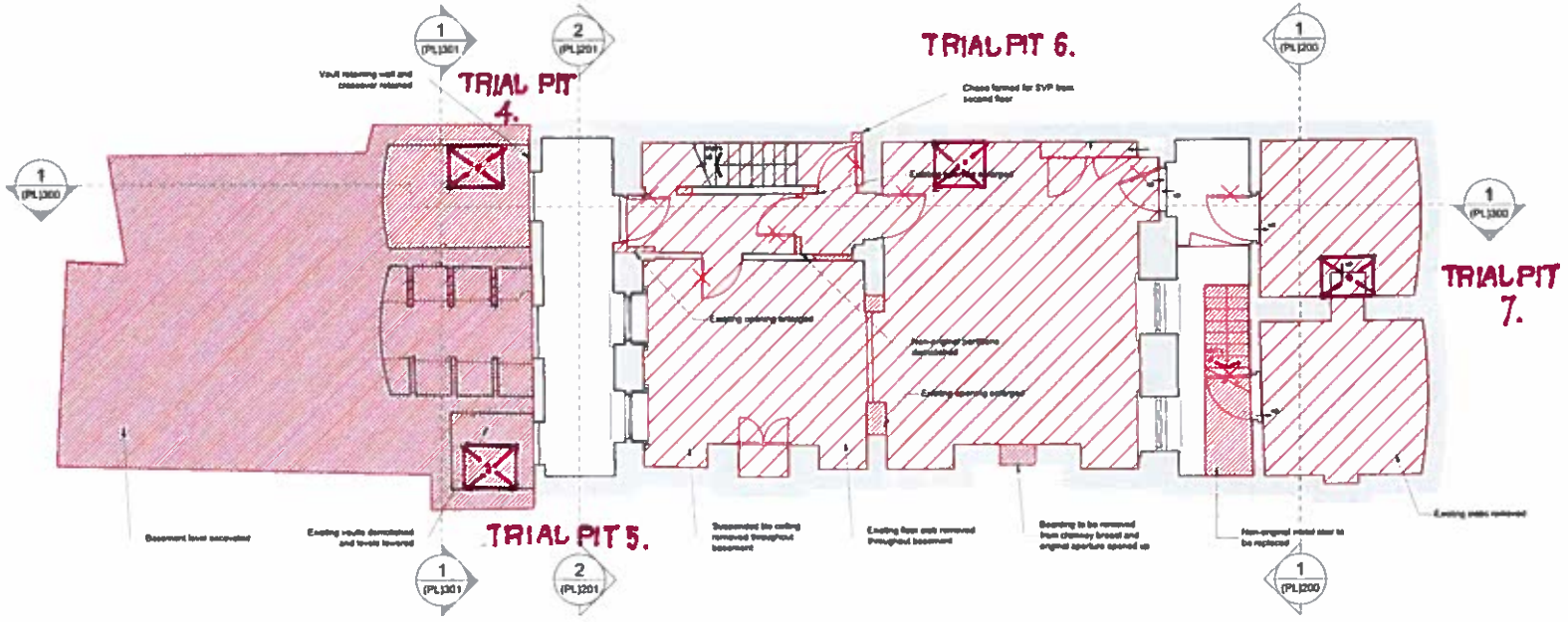
Client
Rivendale Properties Ltd

Project
32 Percy Street
London, W1T 2DE

Drawing title
Ground Floor Plan
As Existing with Demolitions

Scale 1:50@A1 Date August 2015

Job no. 806 | Drawing no. (PL)101 | Rev -



01 Lower Ground Floor Plan
As Existing with Demolitions

0 1 2 3 4 5 10
METERS

KEY

EXISTING FABRIC

DEMOLITION

Notes

1. Existing lath & plaster ceilings/wall linings will be retained where existing and repaired where damaged with materials to match existing.
2. Plaster will be removed to the basement walls to ensure damaproofing work to be carried out.
3. Where ceilings/wall linings are found to be plaster board these will be replaced with new plasterboard & skim if removed for services or structural works etc.
4. Existing decorative plasterwork will be retained and refurbished throughout. Heavy build up of paint to be be removed by a specialist using poultices.
5. Wherever possible original skirtings, architraves, shutters, dado panelling and other decorative joinery will be retained, stripped of paint, repaired and redecorated
6. The existing basement floor slab will be replaced throughout.
7. Where floors are found to be out of level these will be levelled by removing the existing floorboards, lining the joists and relaying the original boards
8. Services will be run within floor voids and use existing notches wherever possible to avoid damage to the historic fabric.
9. Existing cornices will be draft proofed where retained.

11.11.2015 Issued for Planning

GENERAL NOTES

Do not scale. All written dimensions must be checked on site before work commences on site or in shop. Figured dimensions only to be taken from this drawing. Any discrepancies must be reported to the Architect immediately.

Any areas indicated on this drawing are for guidance purposes only. No responsibility is taken for their accuracy.

All work must be carried out in accordance with the Building Regulations and to the satisfaction of the Local Authority.

STATUS

PLANNING

Garnett+Partners LLP
Holborn Hall
193 High Holborn
London WC1V 7BD
Tel +44 (0)20 7404 7677
Fax +44 (0)20 7404 6648
mail@garnettpartners.com
www.garnettpartners.com

architects / planners / designers

GARNETT +PARTNERS

CLIENT
Rivendale Properties Ltd

PROJECT
32 Percy Street
London, W1T 2DE

DRAWING TITLE
Lower Ground Floor Plan
As Existing with Demolitions

SCALE 1:50@A1 1:100@A3 DATE August 2015

JOB NO. 806 | DRWG NO. (PL)100 | REV -

esd Structural Engineers 2 River Court, Albert Drive, Woking Surrey GU21 5RP	PROJECT: 32 PERCY STREET LONDON W1.	PROJECT NO. 150805
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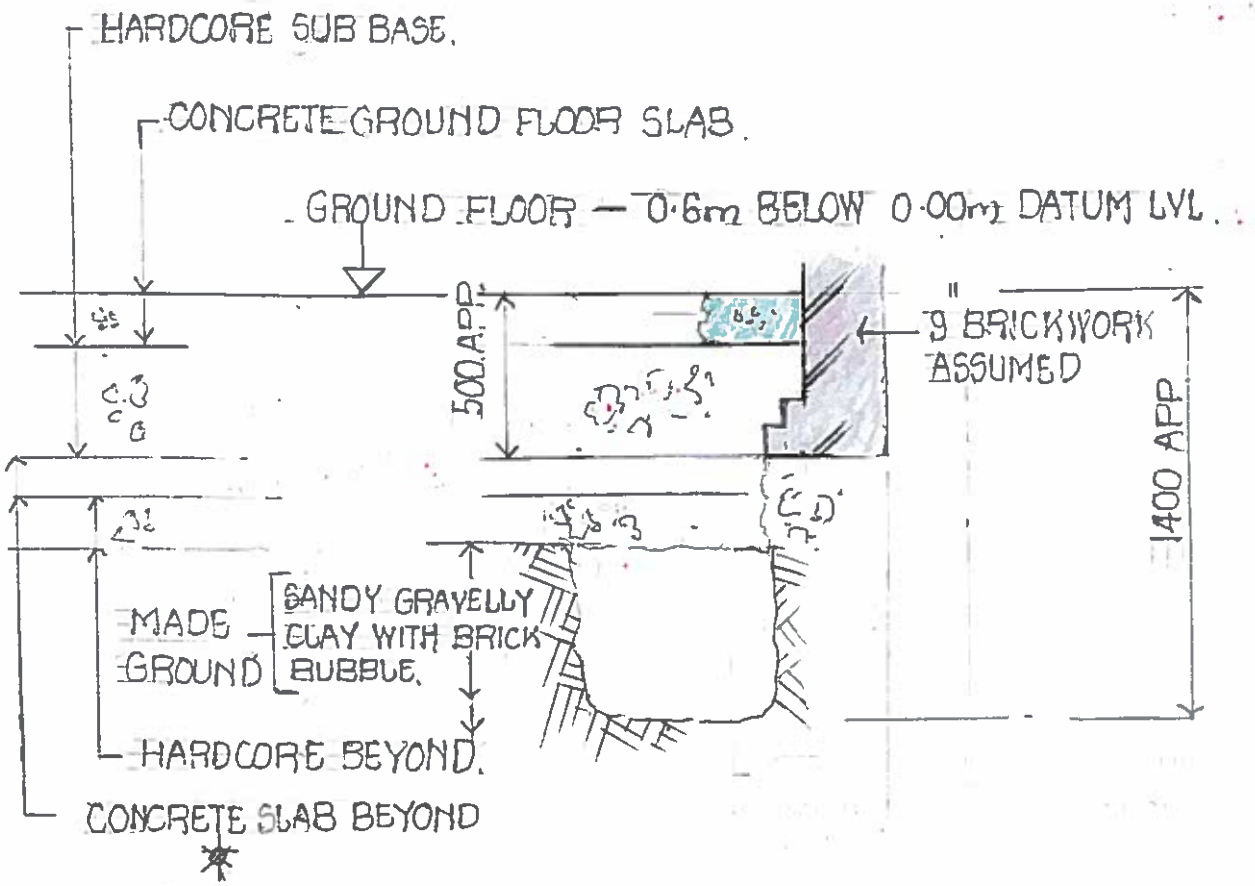
	PREPARED BY: AB. CHECKED BY: ✓	SHEET NO. 05



TRIAL PIT 1

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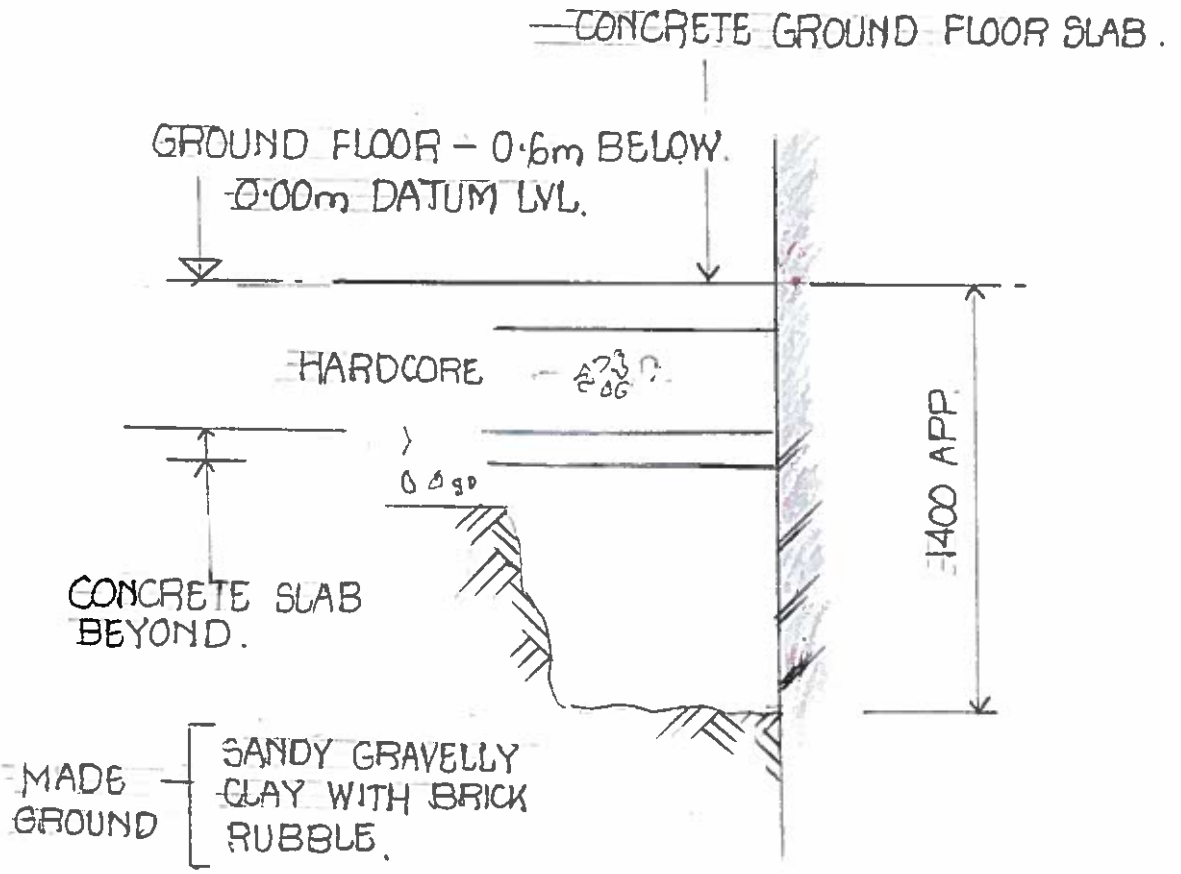
		REVISION: A.
	PREPARED BY: A.B. CHECKED BY: /	SHEET NO. 06.



TRIAL PIT N° 2.

esd Structural Engineers 2 River Court, Albert Drive, Woking Surrey GU21 5RP	PROJECT: 32 PERCY STREET LONDON W1.	PROJECT NO. 150805
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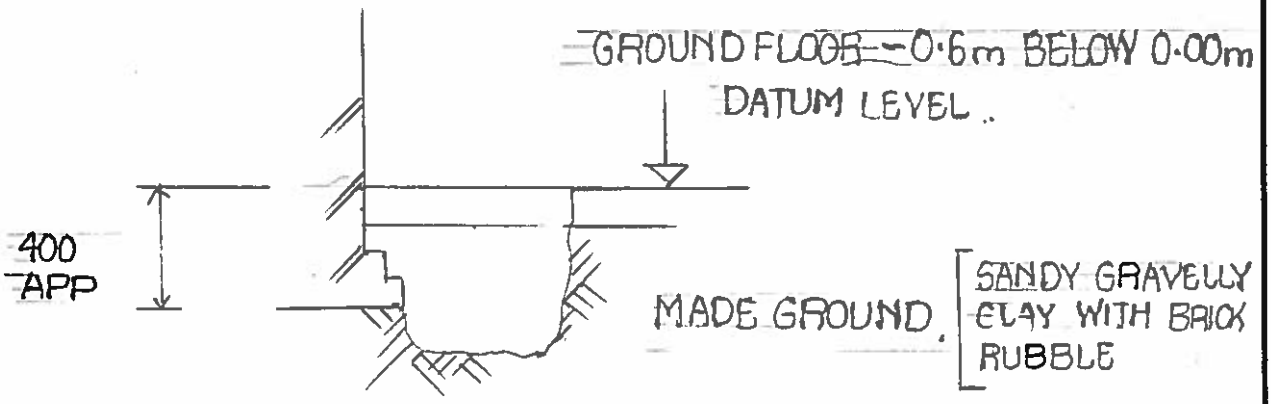
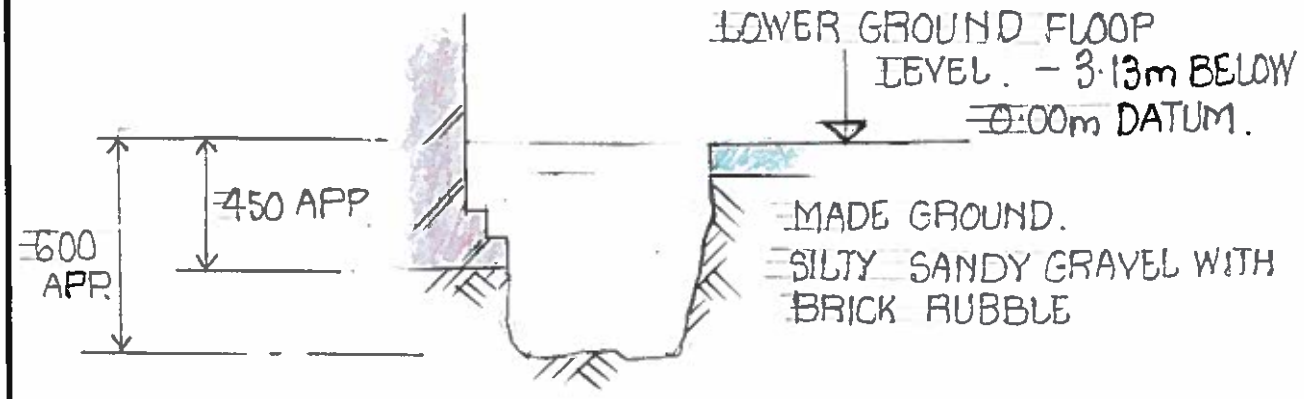
	PREPARED BY: AB. CHECKED BY:	SHEET NO. 07



TRIAL PIT Nº 3

esd
Structural Engineers
2 River Court, Albert Drive,
Woking Surrey GU21 5RP

PROJECT: 38 PERCY STREET LONDON W1.	PROJECT NO. 150805
DESCRIPTION: TRIAL PIT LOGS. SHEET 4..	DATE: AUG 2016
	REVISION: A
PREPARED BY: A.B. CHECKED BY:	SHEET NO. 08



TRIAL PIT N°4

TRIAL PITS N° 5 & 6
SIMILAR.

esd Structural Engineers 2 River Court, Albert Drive, Woking Surrey GU21 5RP	PROJECT: 32 PERCY STREET LONDON W1.	PROJECT NO. 150805
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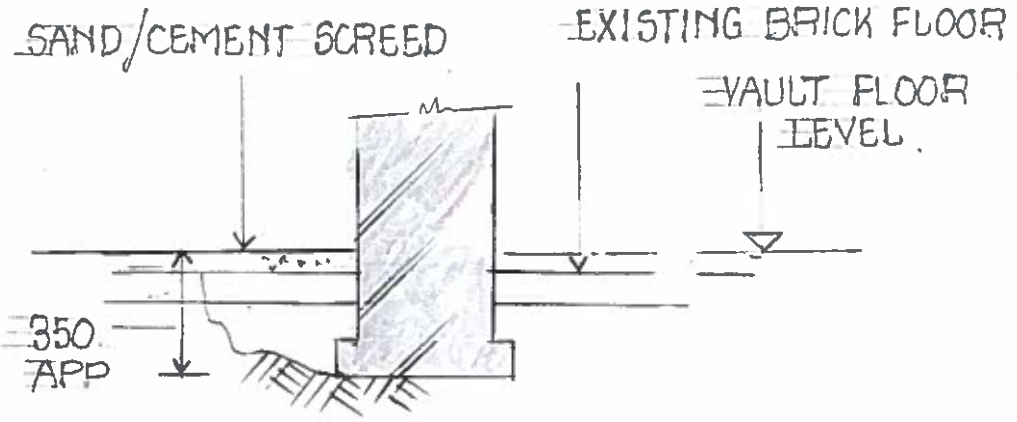
	PREPARED BY: A.B. CHECKED BY:	SHEET NO. 09.



TRIAL PIT N° 7

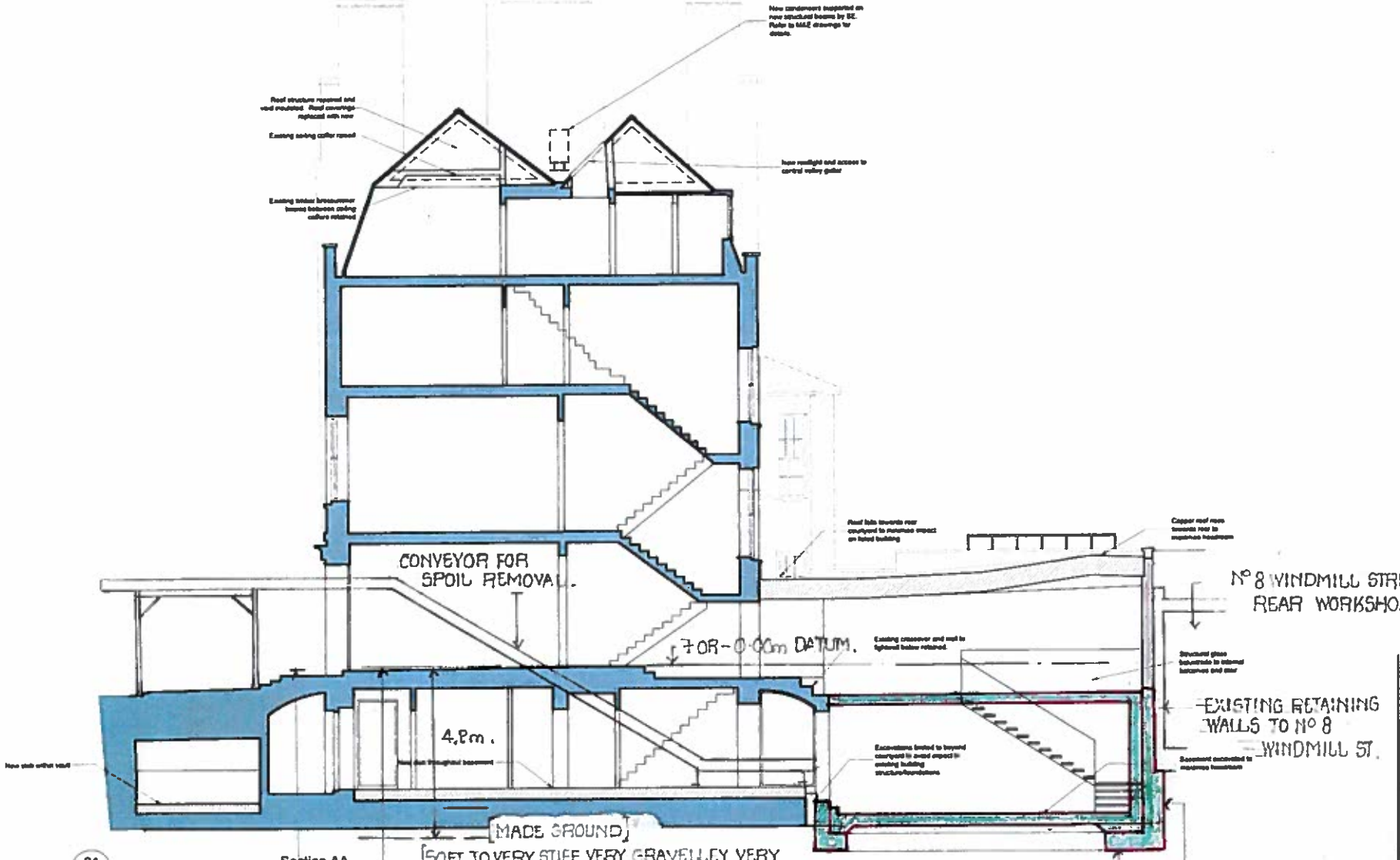
Appendix C

New Basement Schematic
Sheets 1 – 5 Inclusive

GENERAL NOTES:

1.1 Use written dimensions only

1.2 All dimensions are in mm unless specified



01 Section AA As Proposed

LONGITUDINAL SECTION THROUGH PROPOSED NEW BASEMENT.

esd

ESD Structural Engineers
2 RIVER COURT ALBERT DRIVE
WOKING SURREY GU21 5RP
T +44 (0) 1483 73 71 17
F +44 (0) 1483 73 91 17
e-mail engineering@esdltd.com

Client: RIVENDALE PROPERTIES LIMITED.

Project Title: Nº 38 PERCY STREET LONDON W1.

Drawing Title: NEW BASEMENT SCHEMATIC – SHEET 1.

Drawn | Date | Checked

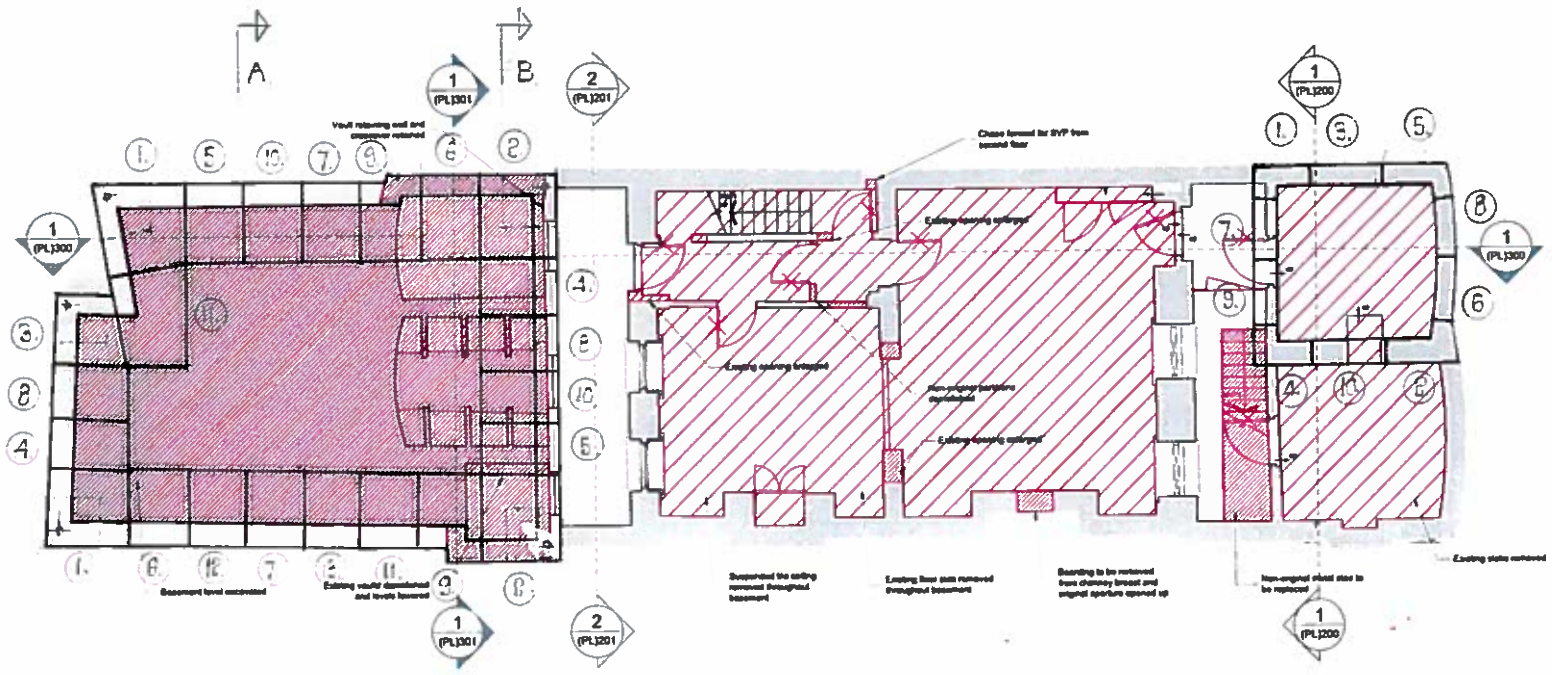
Drawing No. J50805/01 | Rev. A.

Size A1 (594mm x 841mm)

GENERAL NOTES:

1.1 Use written dimensions only

1.2 All dimensions are in mm unless specified



BASEMENT PLAN SHOWING PROPOSED NEW UNDERPINNING SEQUENCE.

01 Lower Ground Floor Plan
As Existing with Demolitions

0 1 2 3 4 5 10
METERS

esd

BIVENDALE PROPERTIES LIMITED

No 38 PERCY STREET LONDON W1.

NEW BASEMENT SCHEMATIC - SHEET 2

350805/08 A

Size A1 (594mm x 841mm)

esd Structural Engineers 2 River Court, Albert Drive, Woking Surrey GU21 5RP	PROJECT: Nº 32 PERCY STREET LONDON W1	PROJECT NO. 150805
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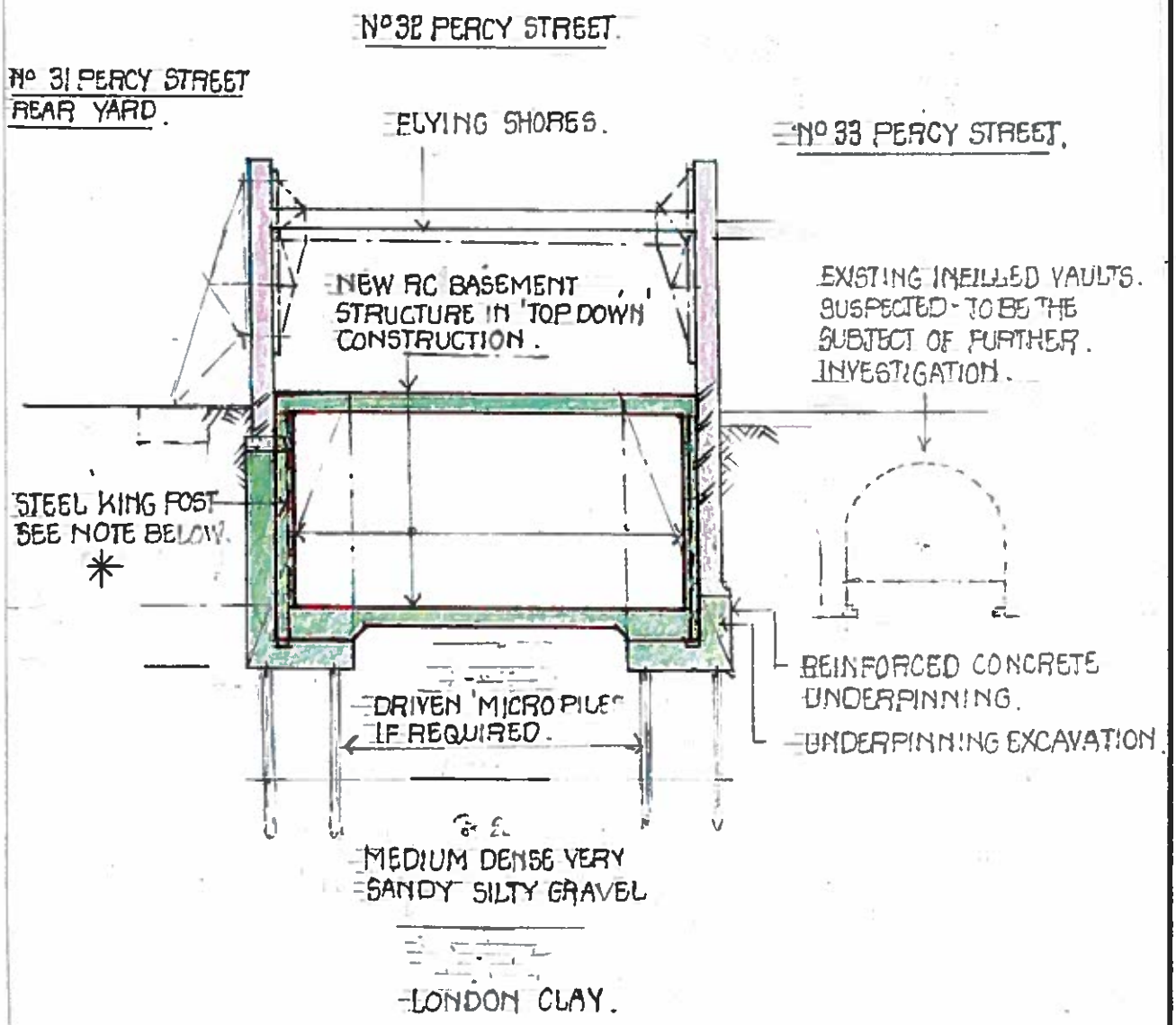
		REVISION: A
	PREPARED BY: AB. CHECKED BY:	SHEET NO. 03



SECTION A-A

* Nº STEEL KING POST TO BE INSTALLED AGAINST THE FACE OF EACH UNDERPIN AS PART OF THE TOP DOWN CONSTRUCTION METHODOLOGY. — POSTS TO PROVIDE VERTICAL SUPPORT FOR THE TOP SLAB AND LATERAL SUPPORT FOR THE UNDERPINNING IN THE TEMPORARY CONDITION PRIOR TO THE CONSTRUCTION OF THE PERMANENT LINING WALLS INTO WHICH THESE POSTS ARE TO BE INCORPORATED.

esd Structural Engineers 2 River Court, Albert Drive, Woking Surrey GU21 5RP	PROJECT: 32 PERCY STREET LONDON W1.	PROJECT NO. 150805
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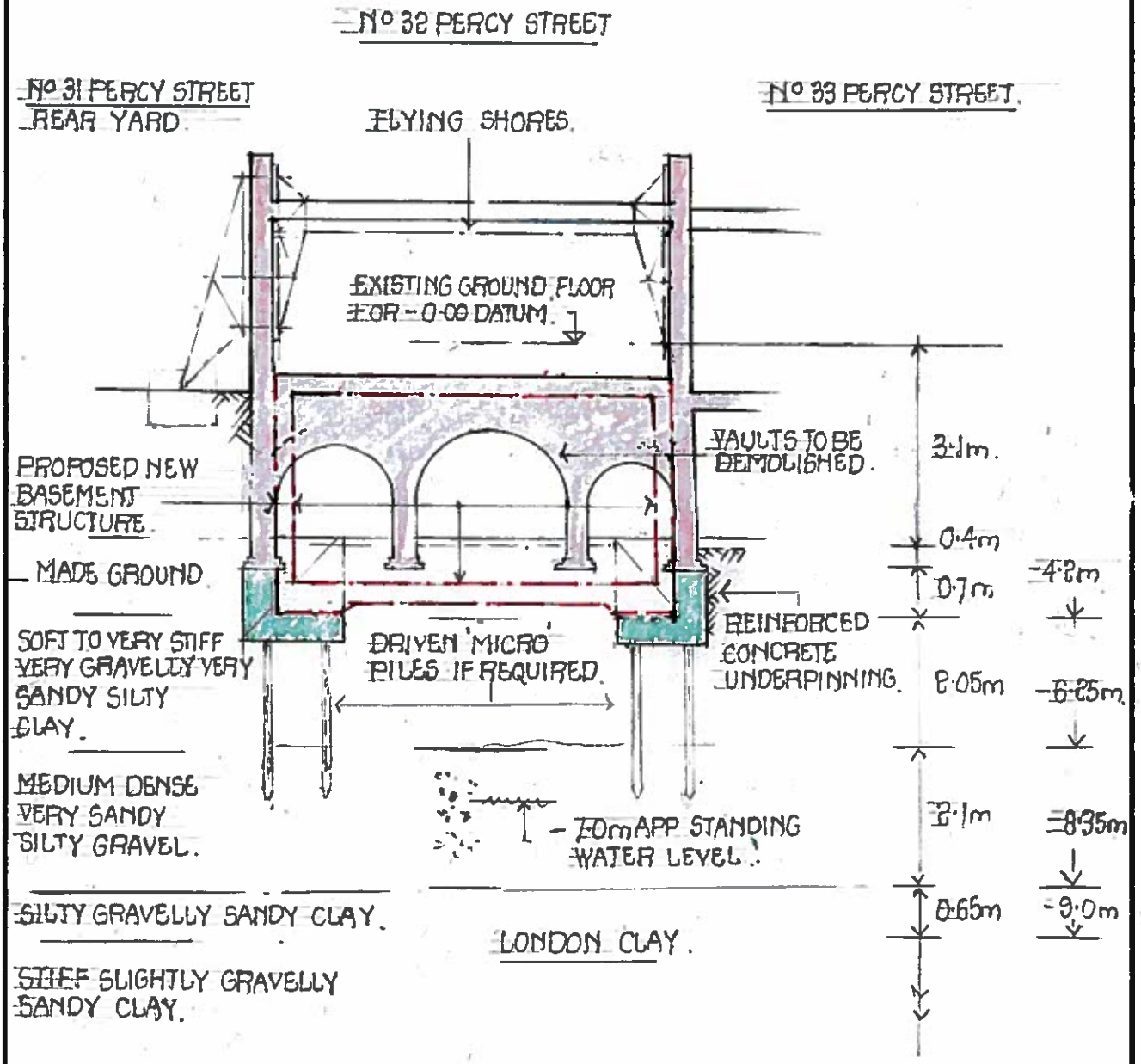
	PREPARED BY: A.B. CHECKED BY:	SHEET NO. 04.



SECTION B-B.

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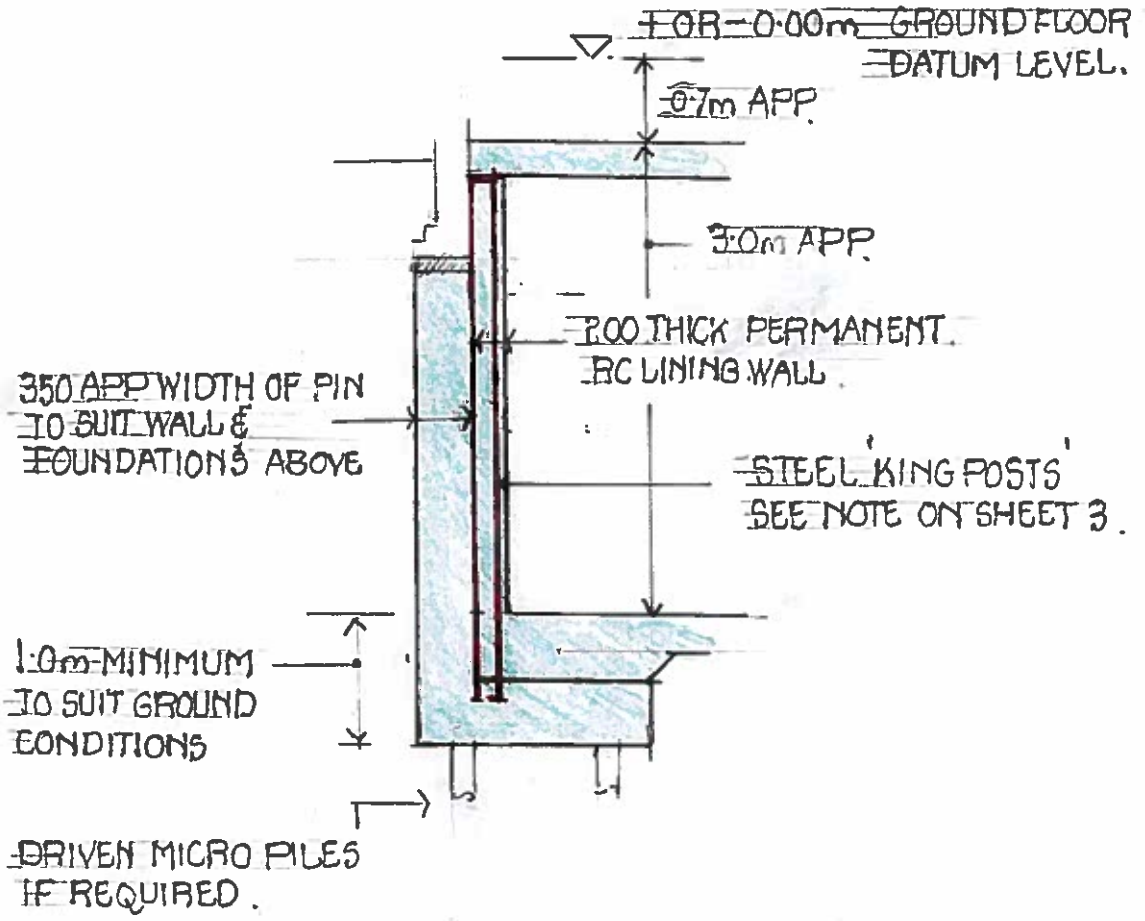

ENLARGED SECTION THROUGH NEW BASEMENT WALL.