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BASEMENT CONSTRUCTION METHOD STATEMENT

PROJECT REF: 17200
ADDRESS: The Studio House, 1 Hampstead Hill Gardens,
London,
NW3 2PH.
CLIENT: Carmi Korine
DATE: 29/09/2017

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This document has been prepared and checked by;

Francesco Gelosi MEng
(BCS Project Engineer)

Eur Ing Barry. C. Smith BSc (Eng) CEng MICE FFPWS .....
(BCS Company Director)

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I. PRELIMINARIES

SITE: The Studio House, 1 Hampstead Hill Gardens, London, NW3 2PH.

CLIENT: Carmi Korine.

ARCHITECT: Nick Leith-Smith Architecture + Design.

DISCLAIMER:

The primary details contained within this document are generated from drawings produced by Nick Leith-Smith Architecture + Design.

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II. SUMMARY OF PROPOSED WORKS

EXISTING STRUCTURE:

The building is a late 19th or early 20th century London terraced property of traditional construction; the external envelope is constructed from solid masonry, likely supported on brickwork footings.

PROPOSED WORKS:

1. Formation of a single storey basement & rear lightwell under the ground floor and rear garden at the above address.
2. Support of superstructure over to allow RC basement wall construction and ground floor slab installation.

III. ASSUMPTIONS MADE AT TIME OF WRITING

- External walls are solid masonry, supported on corbelled footings
- Internal walls at ground floor level are solid masonry or masonry infill.
- Ground & upper floors are of suspended timber construction.
- Property currently remains mainly unchanged structurally from its original form with any changes/repairs being in line with a property of its age.

IV. FUNDAMENTAL CONSTRUCTION AREAS

- RC BASEMENT WALLS TO BE FORMED PARTIALLY IN UNDERPINNING SEQUENCE AND PARTIALLY IN ONE PHASE, ENABLING THE FULL REQUIRED BASEMENT DEPTH TO BE

ACHIEVED.

- TWO ROWS OF HORIZONTAL PROPS WILL BE REQUIRED TO ALL FULL HEIGHT UNDERPINS SPANNING ACROSS THE WHOLE SITE. PROPS SHOULD REMAIN IN PLACE UNTIL THE BASEMENT AND ANY GROUND FLOOR SLABS HAVE BEEN FULLY CONSTRUCTED AND HAVE SUFFICIENTLY CURED PROVIDING PERMANENT LATERAL RESTRAINT TO THE NEW RC RETAINING WALLS.
- ALL UNDERPINS AND RETAINED EARTH REQUIRES TEMPORARY WORKS AND SHUTTERING DURING EXCAVATION AND CASTING UNTIL SLABS ARE CAST.

V. SITE LOCATION

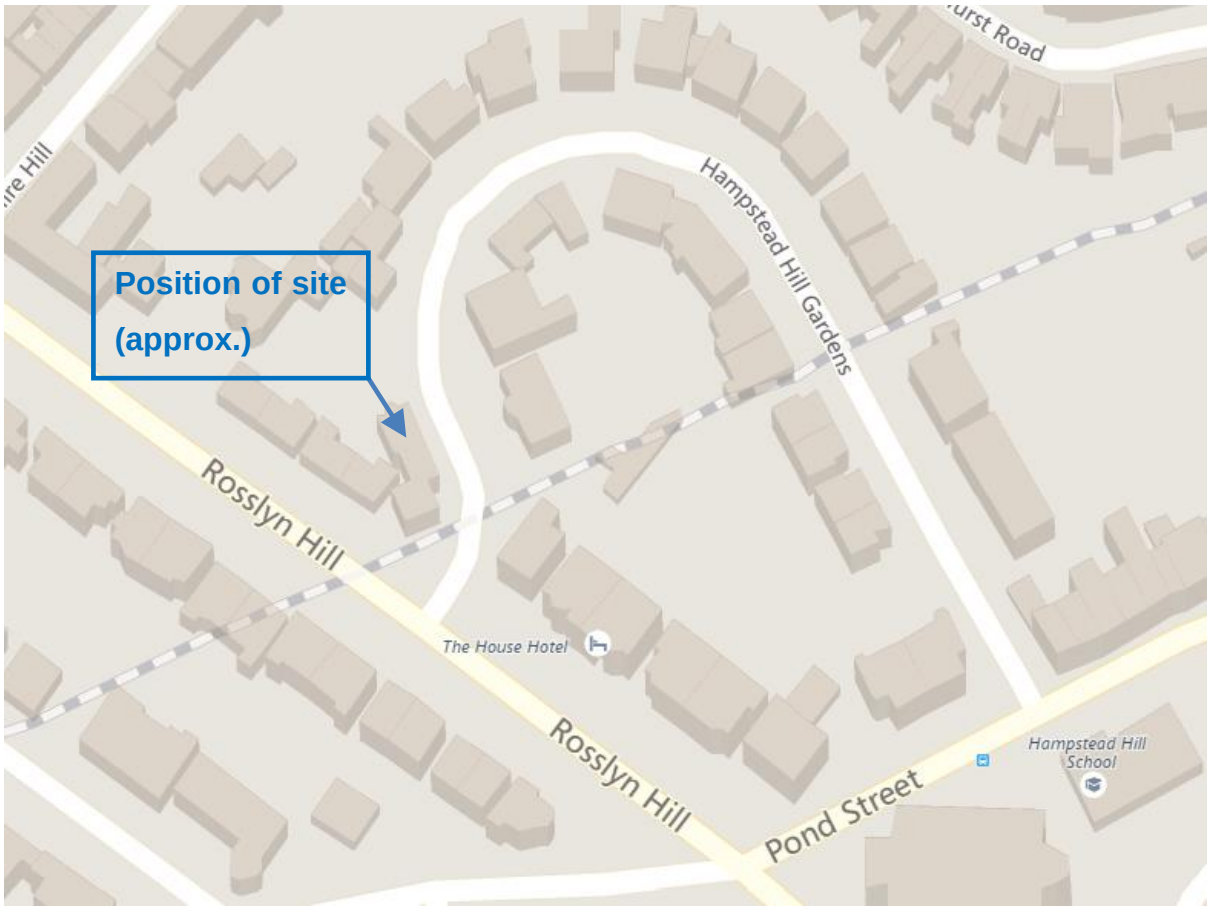


Fig.1 - Site map (Image from Microsoft Bing Maps, Copyright 2017).

VI. SCOPE OF DOCUMENT

The content of this document should be read in conjunction with temporary works drawing set TW1-TW4 and the permanent works structural engineer's package along with any other relevant drawings/ details.

The purpose of this package is to provide a method statement and suggested construction sequence to enable the required elements of temporary works to be installed thus allowing the construction of the permanent works to be carried out.

It should be noted that all temporary works drawings are indicative only and are not intended as detailed construction drawings therefore all specific construction details should be provided by the structural engineer or other relevant parties. Construction sequences are illustrative and should not be relied on to provide specific construction arrangements or any dimensions; these should be specified by others and confirmed on site.

VII. GENERAL COMMENTS

- Buildings of the age of the property in question have often reached equilibrium with their surroundings. The superstructure slowly deforms with time during its life to accommodate any minor settlements and therefore some work is likely to have been carried out in the past and additional repairs may be necessary as a result of the proposed works.
- Any modifications to the existing property should be investigated with local opening up works to assess their potential impact on the proposed scheme.
- The contractor is responsible for the design and correct installation of all temporary works required to safely install the proposed basement and any other affiliated works. The contractor is to ensure that all excavations, any new structure and any neighbouring structures are adequately supported for the full duration of the works.

VIII. BASEMENT CONSTRUCTION

Basement walls

Basement walls are to be formed in reinforced concrete following the underpinning sequence shown (see fig 2). In the permanent case the RC walls will support any load applied from the structure over as well as resisting the retaining soil, surcharging & any water present behind them (see fig 1).

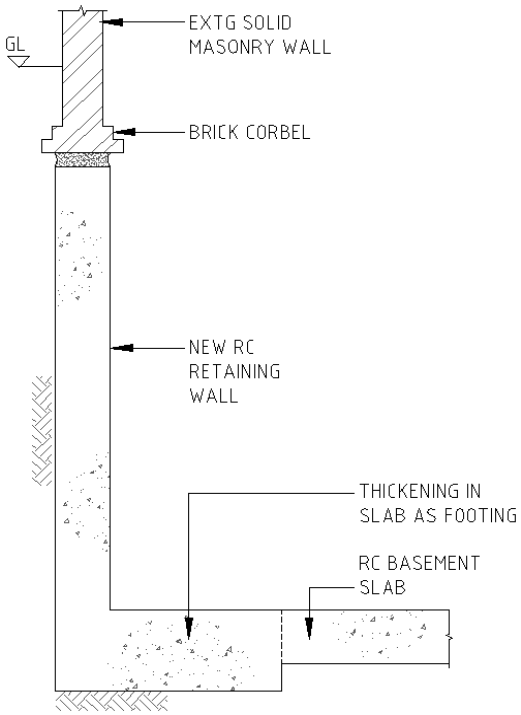


Fig .1 - Typical RC wall section.

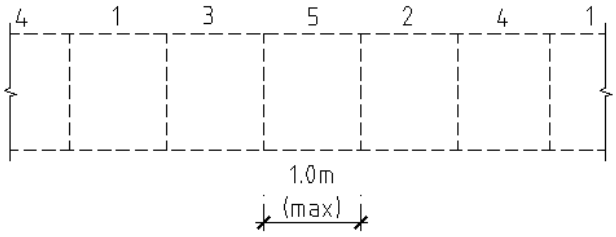


Fig .2 - Typical underpinning sequence.

Heave protection

The removal of excavated soil to form the basement will significantly reduce the loading on the deep clay layer likely present below the property creating the possibility of heave occurring. Therefore heave protection to the slab is recommended to avoid cracking within the basement slab (see fig 3.)

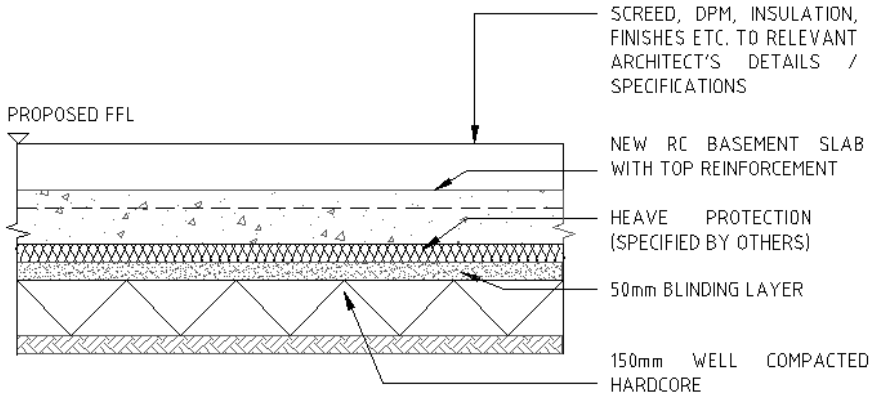


Fig .3 – Typical suggested slab make up with heave protection.

IX. MATERIALS

(Details below to be confirmed by structural engineer)

Concrete used in underpinning/slabs

Mix designation: RC 40 Aggregate size: 20mm Cube strength: 40N/mm^2

Notes:

1. Unless otherwise instructed a 50mm thick blinding layer should be provided beneath all reinforced concrete to provide a clean level surface and avoid pouring directly on to ground/hard core.
2. High Alumina Cement (HAC) should not be used under any circumstances.

Concrete cover

All cover should adhere to minimum values specified by the Eurocodes (BS EN 1992-1-1:2004).

It is recommended that:

Concrete internal cover	= 35mm
Concrete external cover	= 50mm
Direct contact with ground	= 75mm

X. GROUND BEARING PRESSURE

Allowable GBP @ ground level = 100kN/m^2 (Clay soil type TBC)

Allowable GBP @ formation level:

Allow for enhancement of 25% to account for excavated soil mass;

∴ Enhanced GBP @ formation level = (say) 125kN/m^2 (TBC following SI results)

XI. PARTY WALLS

The proposed works are subject to the Party Wall etc. Act 1996 and it is therefore advised that the client starts the process/instructs a surveyor as early as possible to ensure that the necessary party wall awards are in place before work commences.

(For further advice on the party wall process please contact the BCS Consulting party wall department.)

XII. EXISTING INFRASTRUCTURE

Where nearby tunnels have been identified (Network Rail within BIA) the relevant body should be contacted at design stage to assess the level of information they will require to confirm they will accept the proposed scheme.

XIII. SUGGESTED METHOD STATEMENT

1 BASEMENT UNDERPINNING

1.1 Remove existing timber floor.

1.2 Hand excavate pins in sections not exceeding 1.0m following numbered sequence provided in temporary works drawing package. (Typical number sequence shall be 1, 3, 5, 2, 4) under no circumstances are adjacent pins to be opened during construction.

1.3 During excavations ensure vertical faces are shored at all times using 18mm ply, timber wailing pieces and horizontal strutting. The exposed face of the excavation should be lined with 'Hardie Backer 500' cement board trench sheeting or similar permanent sacrificial shuttering with de-bonding membrane installed to the inside face of trench sheets prior to concreting.

1.4 Reinforcement should be placed in position in preparation for casting the underpinning base, starter bars should be provided to enable a connection between the base and the vertical stem to be formed.

1.5 Local authority building control officer or appointed inspector to inspect and pass reinforcement prior to concreting base section.

1.6 Pour concrete base and kicker sections to structural engineer's details. Use vibrating pokers to ensure full compaction of concrete and removal of trapped air pockets within forms.

1.7 Once base has sufficiently cured (min 24 hours) place reinforcement to vertical stem including horizontal dowel link bars to neighbouring pins (horizontal dowels to structural engineers specification).

1.8 Formwork to be secured with heavy timbers and "Leada Acrow" or similar trench props supported off of the central earth mass to retain the concrete during pouring. Leave 75mm clearance between top of concrete pour and underside of existing foundation.

1.9 Pour concrete stem section to structural engineer's details, use vibrating pokers to ensure full compaction of concrete within forms.

1.10 Allow 48 hours curing time between concrete pour and installation of dry pack. Clean underside of existing foundation using wire brush or similar in preparation for installation of dry pack.

1.11 Use 1:3 dry pack well rammed into position between head of pin and underside of existing foundation (Dry pack is to be installed after each individual pin has been cured see point 2.1 regarding corbel removal.)

1.12 Strike formwork following lapsing of sufficient curing period (normally approximately 7 days)

1.13 Underpinning is to continue according to sequence specified in temporary works drawing package following previously described method.

1.14 Central earth mass is to be retained to enable local shoring of pins and trenches as underpinning progresses.

1.15 Following completion of all underpinning the central soil mass can be excavated in stages to allow installation of high level lateral “Mabey Mass 50” or similar engineer approved props in accordance with propping plan (Drwg TW1).

1.16 The remaining central soil mass can now be removed and a second row of lateral props can be installed to restrain the lower 3rd of the pins.

1.17 Excavate for reinforced concrete basement slab ensuring lateral propping remains in place at all times.

1.18 Compact base of slab excavation and place reinforcing bars to structural engineer’s specification.

1.19 Cast basement slab to structural engineer’s details using vibrating pokers to ensure full coverage of concrete and removal of trapped air pockets.

1.20 Once basement slab has sufficiently cured (min 14 days) the remaining propping can be removed.

2 REMOVAL OF BRICK CORBELS

Upon completion of underpinning and sufficient curing of dry packing has been allowed, the existing brick corbel foundation projection can be removed using hand tools to leave the wall over flush with the face of the RC underpinning. Care should be taken when removing the corbel to avoid causing undue damage. Where brickwork is in poor condition it should be carefully made good in small increments.

3 INSTALLATION OF STEEL BEAMS/ FRAMES

The method described below is a typical generic steel beam/frame installation; full requirements for shoring of superstructure should be assessed on site at the start of the project through opening up and inspection of existing structure

Prior to any underpinning or steel work installation the contractor may also carry out the following suggested works:

- Carry out a verticality survey to check plumb of walls.
- Provide bracing to openings including doors and windows with timber constructed frames.

Where frames are to be installed and supported at basement level, pin sections supporting columns/beams should be excavated and cast first prior to any steel installation being carried out.

All connection details, splices and base plates should be installed in accordance with structural engineer's specification.

Installation Method

3.1 First install securely diagonally braced "Leada Acrow" propping placed either side of the wall requiring support, props should be sited on paving slabs bearing on well consolidated ground throughout.

3.2 Install 152x152x30UC needle beams at high level spanning between the Acrow dead shoring to provide support to the brickwork over and enable removal of masonry panel below.

3.3 Once needling and propping is positioned and tightened the brickwork below can be carefully removed by hand.

3.4.1 Where permanent steel framework is specified members needed to transfer loads in to RC pins should be installed in accordance with structural engineer's details to provide a bearing for the high level beam.

3.4.2 Where bearings are specified cut slots into walls to accept padstone or bearing plates as specified by structural engineer (allowing 48 hours to cure where padstone are cast).

3.5 Insert permanent steel beam either fixed to columns or seated 100mm into walls at each end on bearings.

3.6 Dry packing should be placed between the top flange and the underside of the wall over allowing 48 hours to cure. (Where beam is seated on bearings dry pack should also be placed 75mm above and below the beam well rammed into position and any defective brickwork around beam ends should be removed and made good using class B engineering bricks and 1:3 mortar once dry pack has cured.)

3.7 Following the provision of full support to the wall above, (and bracing has been securely fitted if frame installation is being carried out) any temporary works in relation to its support can be removed.

3.8 Any voids in the brickwork where needles had been positioned should now be repaired by bricking up.

3.9 Once adequate support has been provided by the permanent works structure underpinning can proceed following the sequence specified in point 2.1.

4 DE-WATERING DURING CONSTRUCTION

4.1 If during any excavation work significant ground water ingress is found, a local $1m^3$ sump should be provided formed at a level below the base of the excavation being worked on.

4.2 The vertical faces of the sump chamber should be supported with a pre-made shutter positioned in the area excavated for the sump. The sump shutter should be constructed from 18mm thick plywood sheets with drilled vertical faces to provide a porous surface allowing ground water to flow through.

4.3 Ground water will now flow into the excavated sump to be extracted using a suitable Semi Trash dewatering pump and appropriate diameter discharge hose.

4.4 Discharge from the sump should be directed to the nearest manhole and a drain filter should be fitted to avoid any large debris being deposited into the sewer.

4.5 After completion of the excavation and preparation for the concrete pour has been carried out ensure the sump area is fully dewatered before removing pump and pouring concrete.

4.6 The process above should then be repeated for each excavation where ground water is found.

XIV. REFERENCES

1) Codes / Regulations

I) Eurocode : Basis of structural design (BS EN 1990:2002)

II) UK National Annex for Eurocode : Basis of structural design (NS BS EN 1990:2002)

III) Eurocode 1 : Actions on structures (BS EN 1991:2005)

IV) UK National Annex for Eurocode 1 : Actions on structures (NA BS EN 1991:2005)

V) Eurocode 2 : Design of concrete structures (BS EN 1992-1-1:2004)

VI) UK National Annex for Eurocode 2 : Design of concrete structures (NA BS EN 1991-1-1:2004)

VII) Eurocode 3 : Design of steel structures (BS EN 1993-1-1:2005)

VIII) UK National Annex for Eurocode 3 : Design of steel structures (NA BS EN 1993-1-1:2005)

IX) The Building Regulations 2000 : part A - Structure

2) Books / Manuals

I) Concrete Basements: Guidance on the design and construction of in-situ concrete basement structures – R. S. Narayanan & C. H. Goodchild.

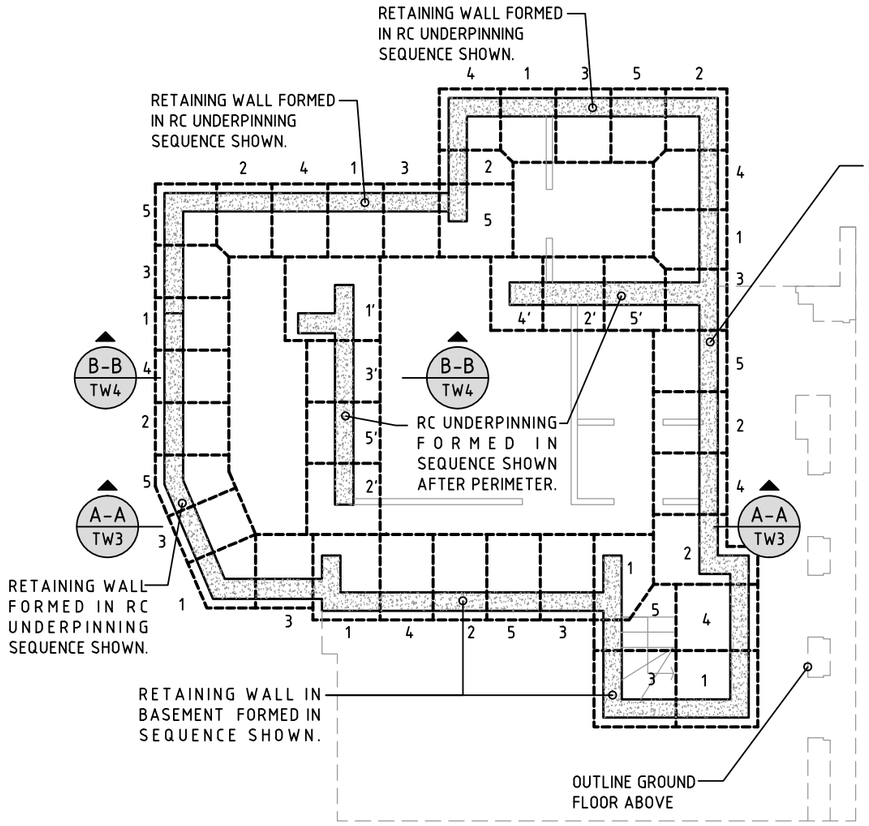
II) How to Design Concrete Structures using Eurocode 2 – A. J. Bond et al.

III) Manual for the design of steelwork building structures to Eurocode 3 (October 2010) – IStructE.

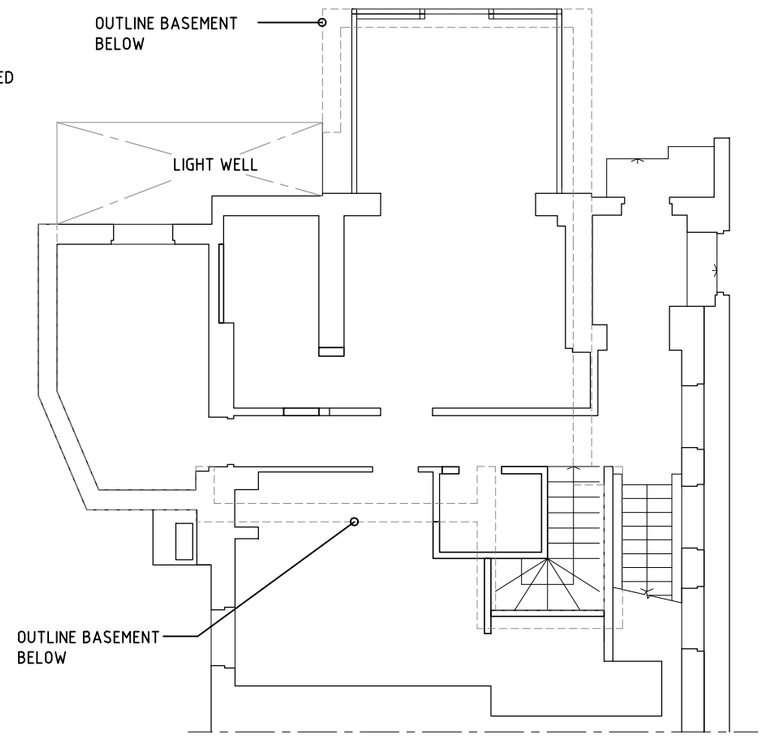
IV) Reynolds's reinforced concrete designer's handbook 11th Edition - C. E. Reynolds et al.

V) Standard Method of Detailing Structural Concrete 3rd Edition (June 2006) – IStructE.

XV. APPENDICES



PROPOSED BASEMENT PLAN



PROPOSED GROUND FLOOR PLAN

DRAWING NOTES

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT THIRD PARTY ARCHITECTS & OTHER SPECIALISTS' DRAWINGS AND SPECIFICATIONS.
2. THIS DRAWING SHOULD NOT BE SCALED IN EITHER PAPER OR DIGITAL FORMAT.
3. ALL DIMENSIONS AND LEVELS TO BE CONFIRMED BY THE ARCHITECT.
4. ANY DISCREPANCIES IN DRAWINGS OR DETAILS TO BE IMMEDIATELY REPORTED TO BCS CONSULTING.
5. THIS DRAWING REMAINS THE PROPERTY OF BCS CONSULTING AND MUST NOT BE REPRODUCED WITH OUT PRIOR WRITTEN CONSENT.
6. ALL DETAILS ARE SUBJECT TO BUILDING REGULATIONS APPROVAL.
7. TO ENSURE THIS DRAWING HAS BEEN PRINTED CORRECTLY THE BAR BELOW SHOULD MEASURE 50mm:

0mm 25mm 50mm

8. ALL WORK CARRIED OUT SHOULD ADHERE TO SPECIFIC DRAWING NOTES & GUIDANCE AND COMPLY WITH CURRENT RELEVANT HSE & CDM REGULATIONS TO ENSURE SAFE SITE PRACTICE IS MAINTAINED IN ACCORDANCE WITH DETAILS PRODUCED BY OTHERS.
9. FOR GENERAL NOTES SEE DRAWING: 17200/GN01.
10. ALL DIMENSIONS SHOWN ARE IN mm U.N.O.

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SYMBOL KEY
- LATEST REVISION MARKER

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PROJECT
Hampstead Hill Gardens
Studio House
NW3

DRAWING TITLE
CONSTRUCTION METHOD STATEMENT.
PROPOSED BASEMENT & GROUND FLOOR PLANS

SCALE	DRAWN
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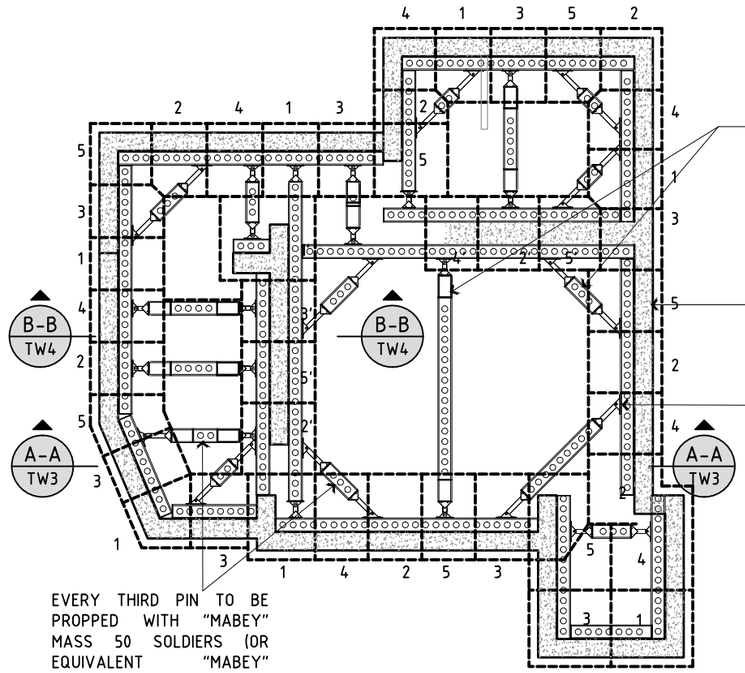
	ENGINEER --
DATE: SEP 2017	CHECKED --
DRAWING No.: 17200 / TW1	REVISION: -

PROPOSED BASEMENT PLAN SKETCH



EVERY THIRD PIN TO BE PROPPED WITH "MABEY" MASS 50 SOLDIERS (OR EQUIVALENT "MABEY" TUBULAR) HORIZONTAL PROPS AS INDICATED ON PLAN INSTALLED TO MANUFACTURER'S SPECIFICATIONS .

NEW BASEMENT RETAINING WALL FORMED IN RC UNDERPINNING SEQUENCE SHOWN.

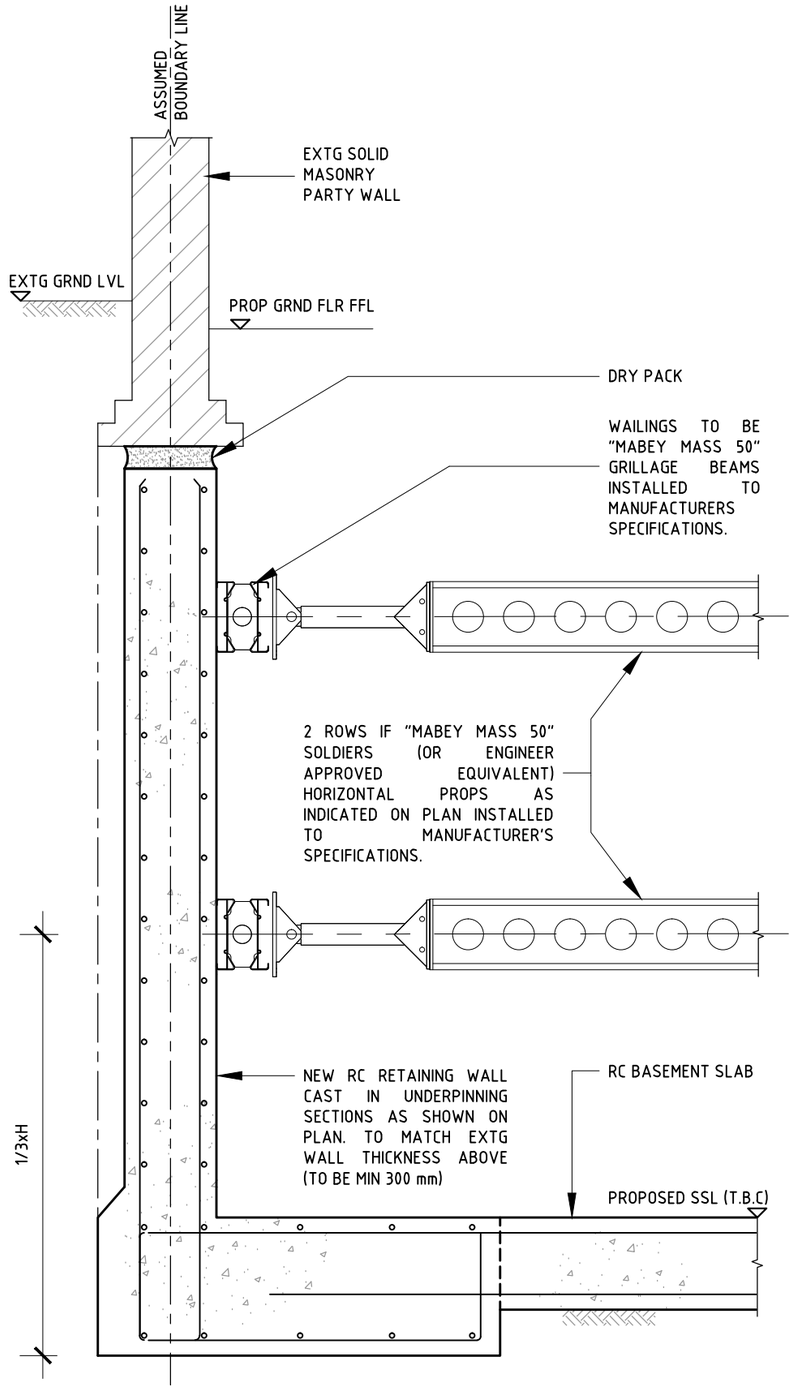
WAILINGS TO BE "MABEY MASS 50" GRILLAGE BEAMS INSTALLED TO MANUFACTURERS SPECIFICATIONS.

EVERY THIRD PIN TO BE PROPPED WITH "MABEY" MASS 50 SOLDIERS (OR EQUIVALENT "MABEY" TUBULAR) HORIZONTAL PROPS AS INDICATED ON PLAN INSTALLED TO MANUFACTURER'S SPECIFICATIONS .

UNDERPINNING GENERAL NOTES

1. THIS DRAWING SHOULD NOT BE SCALED
2. ALL DIMENSIONS AND LEVELS TO BE CONFIRMED BY THE ARCHITECT
3. A SOIL INVESTIGATION IS TO BE CARIED OUT INCLUDING TRIAL PITS AND BOREHOLES PRIOR TO CONFIRMATION OF ENGINEER'S DETAILS
4. NO CONCRETE IS TO BE POURED UNTIL EXCAVATION BOTTOMS HAVE BEEN CHECKED AND APPROVED BY THE LOCAL AUTHORITY
5. THE UNDERSIDE OF EXISTING FOUNDATIONS ARE TO BE THOROUGHLY CLEANED AND ALL LOOSE PARTICLES REMOVED TO RECEIVE DRY PACK.
6. CONCRETE PINS TO BE CONSTRUCTED IN THE ORDER AS SHOWN ON THE DRAWING.
7. ONLY 20% OF WALL IS TO BE OPENED UP AT ANY ONE TIME.
8. DRY PACK MIX (1:3) SULPHATE RESISTING CEMENT: SHARP SAND TO DAMP EARTH CONSISTENCY TO BE THOROUGHLY RAMMED INTO POSITION.
9. ALLOW 48 HOURS FOR DRY PACK TO MATURE BEFORE EXCAVATING ADJOINING AREAS.
10. ALL SOFT MATERIAL IS TO BE REMOVED TO ENSURE A FIRM SOUND FOUNDING MATERIAL TO BE AGREED ON SITE.
11. UNDERPINNING WORKS TO BE IN ACCORDANCE WITH EUROCODE 7, PART 1, BS EN 1997-1
12. THE CONTRACTOR IS RESPONSIBLE FOR THE STABILITY OF ALL EXCAVATION AND THE BUILDING DURING THE COURSE OF THE WORKS AND THEREFORE SHALL HAVE PLANKING AND STRUTTING ON SITE AT ALL TIMES TO COMPLY WITH CURRENT HEALTH AND SAFETY REGULATIONS.
13. DRAINS ENCOUNTERED IN EXCAVATIONS AND ACCESS HOLES ARE TO BE WRAPPED IN MINIMUM 50mm THICKNESS POLYSTYRENE PRIOR TO PLACING CONCRETE IN PIN AND BACK FILLING ACCESS HOLES WITH LEAN MIX CONCRETE WHERE THIS IS REQUIRED
14. FOR GENERAL NOTES SEE DRAWING 17200/GN01 EXCAVATED VERTICAL FACES TO BE SUPPORTED USING NON-DEGRADEABLE SACRIFICIAL TRENCH SHEETING SECURELY PROPPED OFF OPPOSITE FACE.
15. ALL PINS TO BE SUPPORTED AT 3RD HEIGHT FROM BASE OF PIN (FULL HEIGHT TAKEN BETWEEN BTM OF EXCAVATION UP TO GROUND LEVEL). A SECOND ROW OF PROPPING MUST ALSO BE PROVIDED AT THE HEAD OF EACH PIN. ALL PROPS TO EXTEND BACK HORIZONTALLY TO THE CENTRAL EARTH MASS (OR OFF FACE OF OPPOSING PIN/WALL). ALL PROPPING TO BE IN ACCORDANCE WITH CONTRACTORS TEMPORARY WORKS DESIGN & METHOD STATEMENT. (CORNERS TO BE PROPPED AS ABOVE WITH DIAGONALS ACROSS ADJACENT PINS)
16. CONTRACTOR IS ENSURE THAT ADEQUATE PROPPING AND SACRIFICIAL SHEETING ARE KEPT ON SITE IN CASE LOOSE SOIL IS ENCOUNTERED
17. ALL UNDERPINNING TO BE FORMED WITH GRADE RC35 CONCRETE, WITH SULPHATE RESISTING CEMENT (SRC) TO BS EN 197-1

NOTES:
1. THIS DRAWING IS INTENDED AS AN INDICATIVE SUGGESTED T.W. SPECIFICATION ONLY AND SHOULD BE READ IN CONJUNCTION WITH THE WRITTEN METHOD STATEMENT.
2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE A FULL T.W. PACKAGE INCLUDING PROPPING PLAN & T.W. DESIGN CALCULATIONS. THIS DRAWING AND ANY SUPPORTING SKETCH CALCULATIONS SHOULD NOT BE RELIED ON FOR THE REQUIRED T.W. PROVISIONS.
3. ALL CONSTRUCTION DETAILS SHOULD ADHERE TO STRUCTURAL ENGINEER'S AND ARCHITECT'S DETAILS.
4. SEE DRAWING TW02 FOR SUGGESTED METHOD OF PROPPING.
5. UNDER NO CIRCUMSTANCES SHOULD DIGGERS BE USED FOR ANY EXCAVATIONS ALL WORKS TO BE HAND DUG.



TYP. PROPPING SECTION

SCALE 1:20

DRAWING NOTES

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PROJECT

Hampstead Hill Gardens
Studio House
NW3

DRAWING TITLE

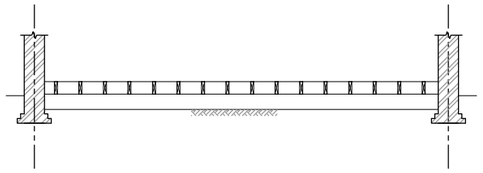
TYPICAL CMS PLAN/SECTION LAYOUT

SCALE 1:100 @ A3	DRAWN AR
	ENGINEER --
DATE SEP 2017	CHECKED --
DRAWING No. 17200 / TW2	REVISION -

A-A
TW1

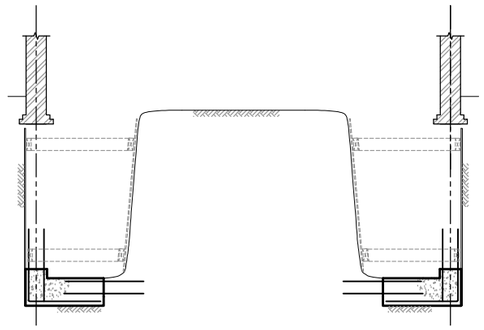
BASEMENT CONSTRUCTION SEQUENCE

SCALE 1:100

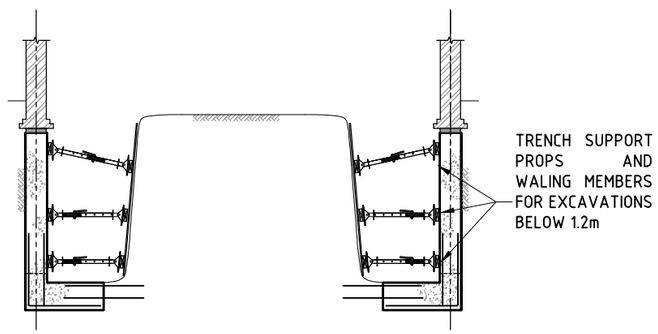


1. EXTG SITE CONDITION.

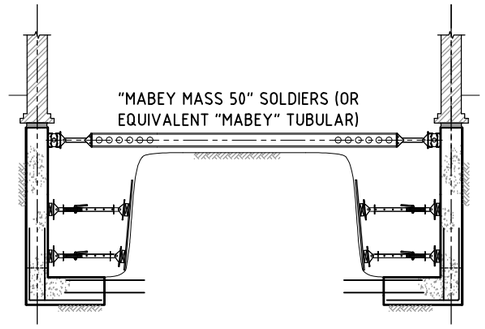
2. REMOVE EXTG FLOOR STRUCTURE & EXCAVATE TOPSOIL TO LVL OF EXTG FOOTINGS.



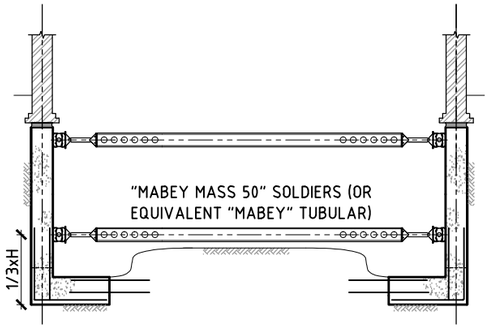
3. EXCAVATE TO FORMATION LEVEL PROVIDING RETENTION SHORING TO EXPOSED FACES OF ACCESS PIT. CAST RC BASE & KICKER IN ACCORDANCE WITH WRITTEN METHOD STATEMENT.



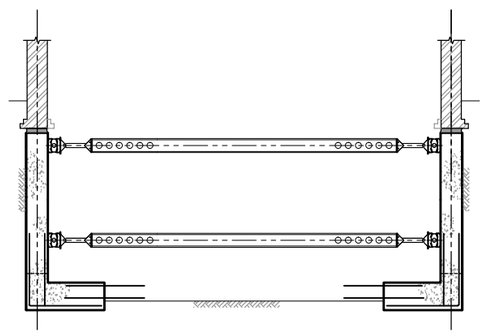
4. CAST WALL STEM AND DRY PACK BTWN EXTG IN ACCORDANCE WITH WRITTEN METHOD STATEMENT.



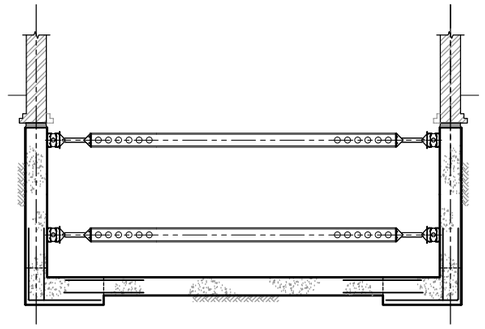
5. REDUCE LEVEL OF CENTRAL EARTH MASS TO ALLOW INSTALLATION OF HIGH LEVEL "MABEY MASS 50" PROPPING AND WAILINGS.



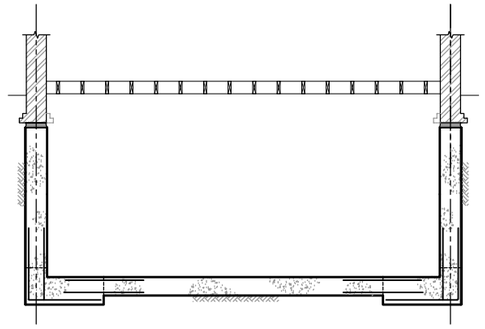
6. PROGRESS EXCAVATION TO 1/3 HEIGHT AND INSTALL 2nd ROW OF PROPPING ACROSS SITE. ALL PROPPING AND SHORING TO REMAIN IN PLACE UNTIL ALL REQUIRED UNDERPINNING IS COMPLETE AND BASE SLAB HAS BEEN CONSTRUCTED.



7. EXCAVATE TO BASE SLAB FORMATION LEVEL.



8. CAST RC BASE SLAB.



9. REMOVE TEMPORARY PROPS AND RE-INSTATE GROUND FLOOR STRUCTURE.

SYMBOL KEY	
1	- LATEST REVISION MARKER

DRAWING NOTES

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0mm 25mm 50mm

8. ALL WORK CARRIED OUT SHOULD ADHERE TO SPECIFIC DRAWING NOTES & GUIDANCE AND COMPLY WITH CURRENT RELEVANT HSE & CDM REGULATIONS TO ENSURE SAFE SITE PRACTICE IS MAINTAINED IN ACCORDANCE WITH DETAILS PRODUCED BY OTHERS.
9. FOR GENERAL NOTES SEE DRAWING: 17200/GN01.
10. ALL DIMENSIONS SHOWN ARE IN mm U.N.O.

PROP NOTE

- ALL WAILINGS TO BE "MABEY MASS 50" GRILLAGE BEAMS INSTALLED TO MANUFACTURERS SPECIFICATIONS.

NOTES:

1. THIS DRAWING IS INTENDED AS AN INDICATIVE SUGGESTED T.W. SPECIFICATION ONLY.
2. CONTRACTOR TO CARRY OUT UNDERPINNING ENSURING PIN SECTIONS WIDTHS DO NOT EXCEED 1.0m WITH A MAXIMUM OF 20% OF THE WALL BEING OPEN AT ANY TIME.
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5. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH WRITTEN METHOD STATEMENT.
6. UNDER NO CIRCUMSTANCES SHOULD DIGGERS BE USED FOR ANY EXCAVATIONS ALL WORKS TO BE HAND DUG.

DRAFT ISSUE

DATE	REV	DETAIL	DRAWN
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BCS CONSULTING

Hamdan House, 2nd Flr,
760 High Road, London, N12 9QH.

T: 020-8446 4650
E: office@bcsconsulting.co.uk
W: www.bcsconsulting.co.uk

PROJECT

Hampstead Hill Gardens
Studio House
NW3

DRAWING TITLE

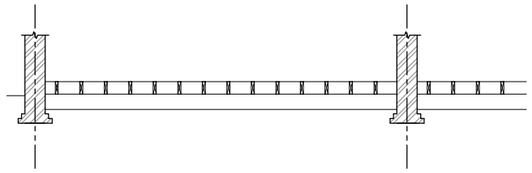
BASEMENT CONSTRUCTION SEQUENCE SECTION A-A

SCALE 1:100 @ A3	DRAWN AR
	ENGINEER --
DATE SEP 2017	CHECKED --
DRAWING No. 17200 / TW3	REVISION -

B-B
TW1

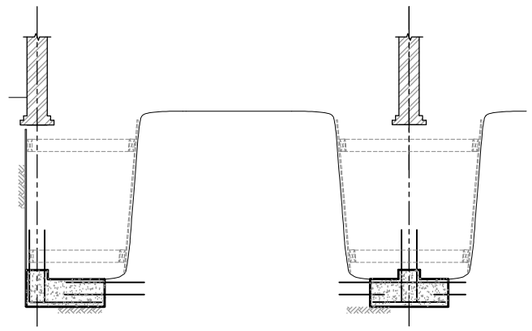
BASEMENT CONSTRUCTION SEQUENCE

SCALE 1:100

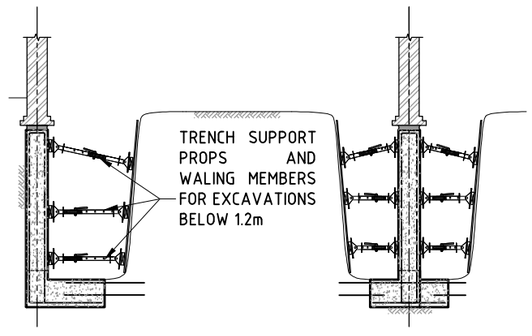


1. EXTG SITE CONDITION.

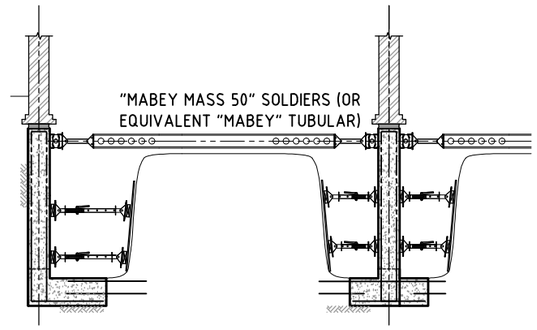
2. REMOVE EXTG FLOOR STRUCTURE & EXCAVATE TOPSOIL TO LVL OF EXTG FOOTINGS.



3. EXCAVATE TO FORMATION LEVEL PROVIDING RETENTION SHORING TO EXPOSED FACES OF ACCESS PIT. CAST RC BASE & KICKER IN ACCORDANCE WITH WRITTEN METHOD STATEMENT.



4. CAST WALL STEM AND DRY PACK BTWN EXTG IN ACCORDANCE WITH WRITTEN METHOD STATEMENT.



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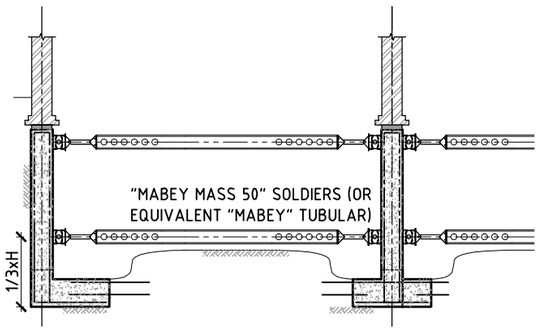

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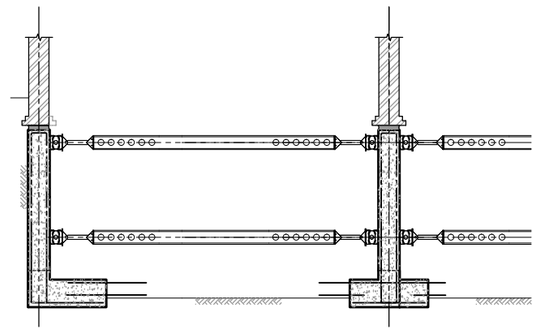

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PROP NOTE
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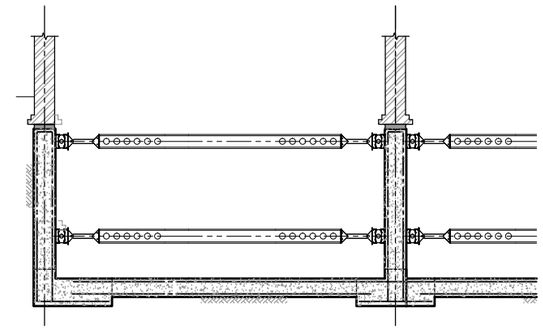

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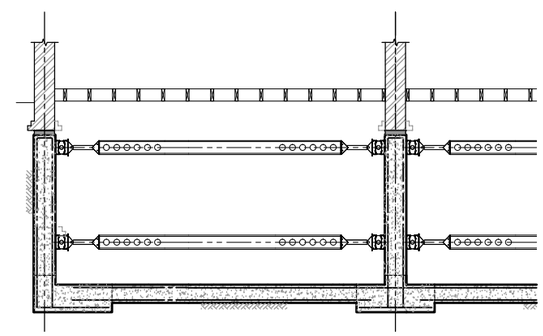

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DRAFT ISSUE

DATE	REV	DETAIL	DRAWN
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W: www.bcsconsulting.co.uk

PROJECT
Hampstead Hill Gardens
Studio House
NW3

DRAWING TITLE
BASEMENT CONSTRUCTION SEQUENCE WITH RC GROUND FLOOR, SECTION B-B

SCALE 1:100 @ A3	DRAWN AR
	ENGINEER --
DATE SEP 2017	CHECKED --
DRAWING No. 17200 / TW4	REVISION -