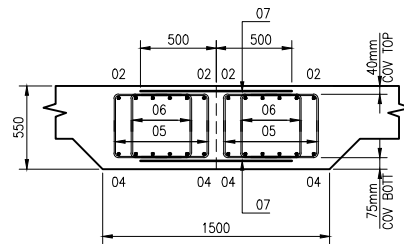


COMBINED BASE TYPE X
SCALE 1:25



TYPICAL SECTION THROUGH
COMBINED BASE TYPE X
SCALE 1:25

BAR BENDING SCHEDULE

Bar No.	Type and Size	No. of Members	No. of Bars in each	Total No. of Bars	Length of each Bar (mm)	Shape Code	A* (mm)	B* (mm)	C* (mm)	D* (mm)	E/R* (mm)
05	H10	1	36	36	2300	51	635	435			
06	H10	1	36	36	1830	51	400	435			

REINFORCEMENT NOTE

WALL AND FOUNDATION REINFORCEMENT SHALL BE CONTINUOUS. IF LOOSE BARS ARE USED TO PROVIDE CONTINUITY THE AREA OF THE LOOSE BARS SHALL NOT BE LESS THAN THE AREA OF THE BARS SPECIFIED.

LAPS SHALL NOT BE LESS THAN 45 TIMES THE LESSER BAR DIAMETER.

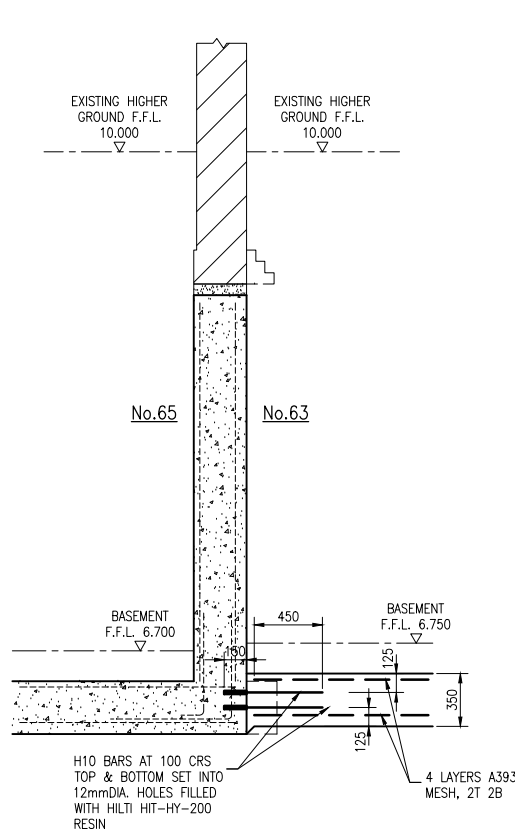
FOR FOUNDATION DETAIL TYPES
A-C REFER TO MMP DESIGN
DRAWING No. 4491/02.

FOR FOUNDATION LAYOUT
REFER TO MMP DESIGN
DRAWING No. 4491/02.

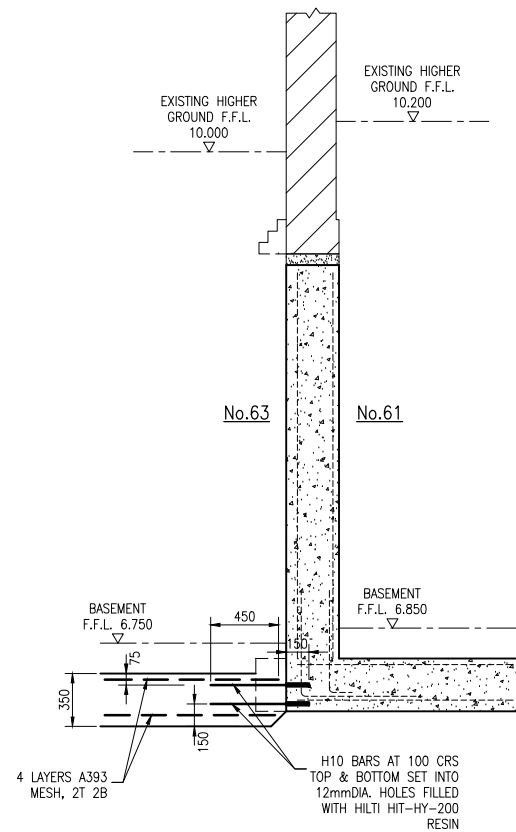
THE LEVELS INDICATED ON
THE SECTIONS ARE FOR
REFERENCE ONLY.
ALL DIMENSIONS SHOULD
BE CHECKED ON SITE
PRIOR TO CONSTRUCTION.

UNDERPINNING NOTES

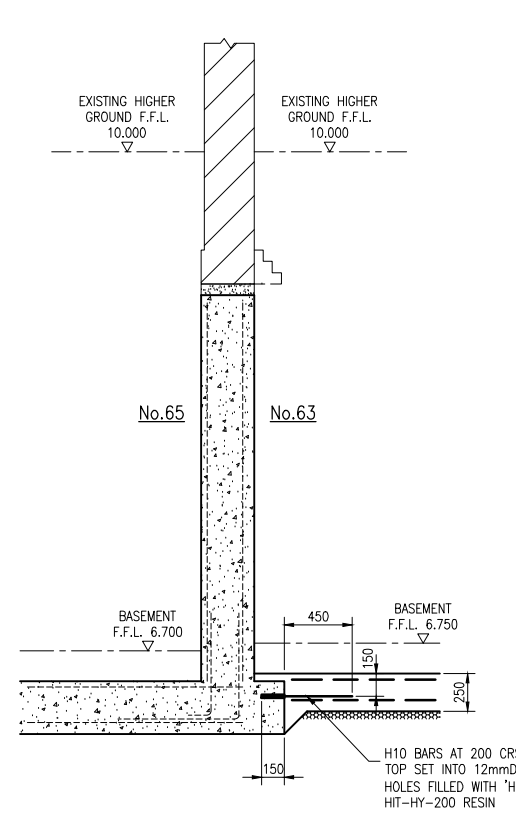
- U1. ALL REINFORCED CONCRETE CAST ON THE GROUND SHALL BE PLACED ON 50mm OF CONCRETE BLINDING IN A NOMINAL 1:8 MIX UNLESS OTHERWISE NOTED.
- U2. FOUNDATIONS HAVE BEEN DESIGNED TO IMPOSE A NET BEARING PRESSURE OF 100kN/m² ONTO A COHESIVE SOIL AT THE DEPTHS SHOWN. THE BEARING STRATA SHALL BE APPROVED BY THE LOCAL AUTHORITY'S BUILDING INSPECTOR BEFORE LAYING BLINDING OR CASTING FOUNDATIONS. ANY ADDITIONAL EXCAVATION SHALL BE REPLACED WITH A NOMINAL 1:8 MIX CONCRETE BUT IN THE EVENT OF EXTENSIVE ADDITIONAL EXCAVATION BEING REQUIRED, THE ENGINEER MUST BE INFORMED IMMEDIATELY AND FRESH INSTRUCTIONS OBTAINED.
- U3. CONCRETE MIX FOR FOUNDATIONS SHALL BE A 35N MIX WITH A MINIMUM 380kg OF SULPHATE RESISTING CEMENT PER CUBIC METRE AND A MAXIMUM WATER/CEMENT RATIO OF 0.45. CONCRETE SHALL BE LEFT FOR AT LEAST 48 HOURS BEFORE DRY PACKING.
- U4. CONCRETE COVER TO THE REINFORCEMENT SHALL BE AS DETAILED ON THE DRAWINGS BUT NEVER LESS THAN 35mm.
- U5. THE MINIMUM DEPTH OF THE UNDERPINNING (MEASURED FROM THE UNDERSIDE OF THE EXISTING FOOTING TO THE UNDERSIDE OF THE NEW) SHALL BE 500mm AND THE UNDERSIDE IS TO BE DUG TO A STRATA CAPABLE OF SUSTAINING A PERMISSIBLE NET GROUND PRESSURE OF 100kN/m².
- U6. THE UNDERSIDE OF THE EXISTING WALL OR FOUNDATION SHALL BE TRIMMED AND CLEANED OF ALL MUD AND DEBRIS BEFORE DRY PACKING. THE DRY PACK SHALL BE A 1:3 MIX AND WELL RAMMED IN HORIZONTAL LAYERS NOT EXCEEDING 75mm THICK. DRY PACKING SHALL BE LEFT AT LEAST 24 HOURS BEFORE WORKS ARE COMMENCED ON ADJACENT UNDERPINS.
- U7. THE CENTRAL AREA OF EXCAVATION SHALL NOT BE CARRIED OUT UNTIL THE PERIMETER UNDERPINNING HAS BEEN COMPLETED.
- U8. BACKFILLING BEHIND LIGHTWELL RETAINING WALLS IF REQUIRED SHALL BE A 1:20 MIX USING SULPHATE RESISTING CEMENT.



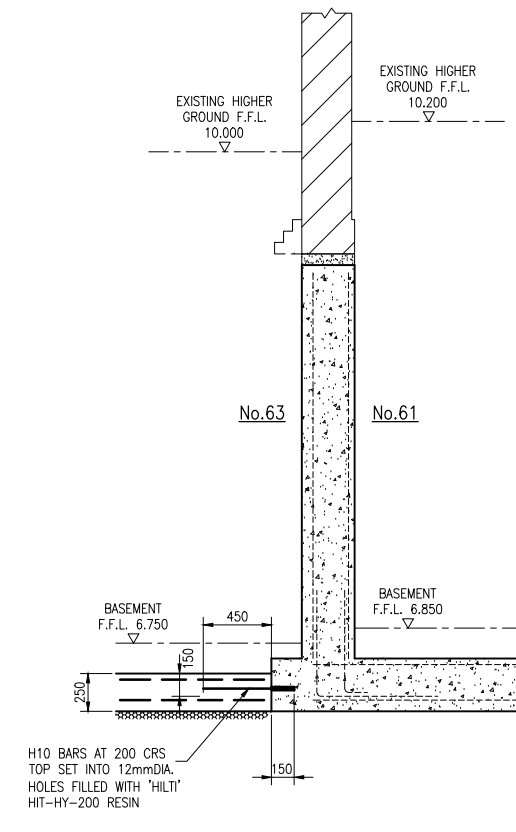
NEW FOUNDATION TO EXISTING 65/63
UNDERPINNING CONNECTION DETAIL
SCALE 1:25



NEW FOUNDATION TO EXISTING 61/63
UNDERPINNING CONNECTION DETAIL
SCALE 1:25



NEW FLOOR SLAB TO EXISTING 65/63
UNDERPINNING CONNECTION DETAIL
SCALE 1:25



NEW FLOOR SLAB TO EXISTING 61/63
UNDERPINNING CONNECTION DETAIL
SCALE 1:25

NOTES

1. THIS DRAWING REMAINS THE COPYRIGHT OF MMP DESIGN AND IS NOT TO BE COPIED, ALTERED OR CHANGED WITHOUT PERMISSION.
2. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED.
3. DO NOT SCALE OFF THIS DRAWING.
4. ALL TEMPORARY WORKS SHALL BE THE RESPONSIBILITY OF THE MAIN CONTRACTOR BUT SHOULD ADVICE BE GIVEN BY THE ENGINEER, NO RESPONSIBILITY WILL BE ACCEPTED UNLESS THE ADVICE IS CONFIRMED IN WRITING BY THE CONTRACTOR PRIOR TO THE WORKS BEING CARRIED OUT.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE STABILITY OF THE EXISTING STRUCTURE AND EARTHWORKS ON THE SITE AND ADJOINING SITES AND MUST TAKE ALL NECESSARY PRECAUTIONS TO SAFEGUARD THIS. ADEQUATE SHORING SHALL BE INSTALLED DURING THE WORKS TO ENSURE STABILITY OF THE STRUCTURE AND SUCH SHORING IS TO BE ADEQUATELY FOUNDED.
6. ANY DEVIATION FROM THE DETAILS SHOWN MUST BE NOTIFIED TO THE ENGINEER BY THE CONTRACTOR IN WRITING BEFORE BEING CARRIED OUT.
7. THE LOCAL AUTHORITY'S BUILDING INSPECTOR AND THE ENGINEER ARE TO BE INFORMED BY THE CONTRACTOR IN WRITING AT LEAST 48 HOURS PRIOR TO THE WORKS STARTING ON SITE AND THEIR AGREEMENT OBTAINED THAT WORK CAN COMMENCE.
8. FIRE PROTECTION TO ALL STRUCTURAL MEMBERS SHALL ACHIEVE NOT LESS THAN A 1 HOUR STANDARD.
9. ALL NEW STRUCTURAL TIMBER SHALL BE GRADE SC4 (OR C24) TO BS. 4978 UNLESS OTHERWISE NOTED AND SHALL BE TREATED WITH AN APPROVED TIMBER PRESERVATIVE, INCLUDING CUT ENDS AND NOTCHES.
10. THE CONCRETE MIX FOR PADSTONES SHALL BE A 1:4 MIX.
11. BRICKWORK SHALL BE CONSTRUCTED USING BRICKS WITH A MINIMUM CRUSHING STRENGTH OF 27.5N/mm² AND BLOCKWORK SHALL BE CONSTRUCTED USING BLOCKS WITH A MINIMUM CRUSHING STRENGTH OF 4.0N/mm² UNLESS OTHERWISE NOTED. ALL MASONRY SHALL BE LAID IN CLASS (iii) MORTAR.

Rev. Revision Date



Client
DIG FOR VICTORY

Project
**63 GOLDHURST TERRACE
LONDON
NW6 3HB**

Title
**PROPOSED BASEMENT EXTENSION
AND ALTERATIONS
STRUCTURAL DETAILS - SHEET 3**

Drawing Status:
BUILDING REGULATIONS

Date: SEPT/2015 Drawn by: AFB
Scales: AS NOTED AT A1 Checked:

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The Institution of Structural Engineers

Job No. **4491** Drg. No. **03** Rev.