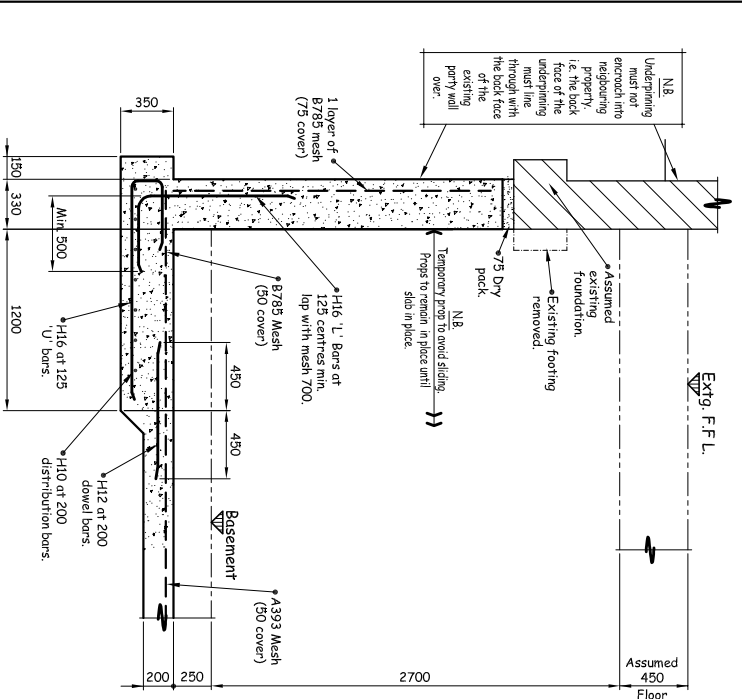
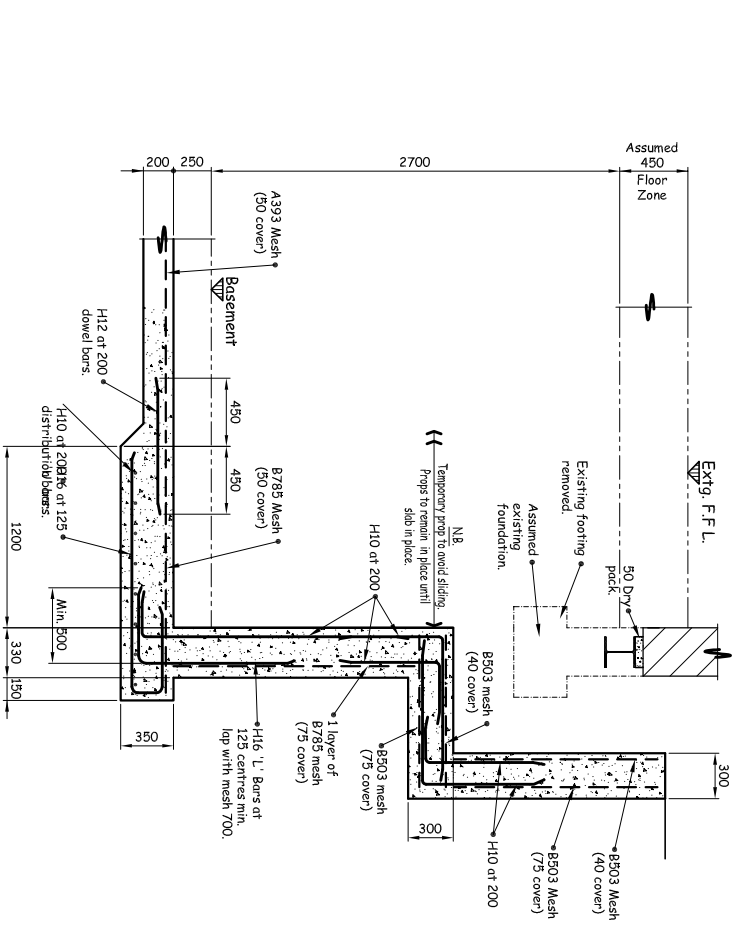


Basement Proposed Underpinning Plan.

Scale 1:50 of A1



Section 1 - 1
Scale 1:25 of A1

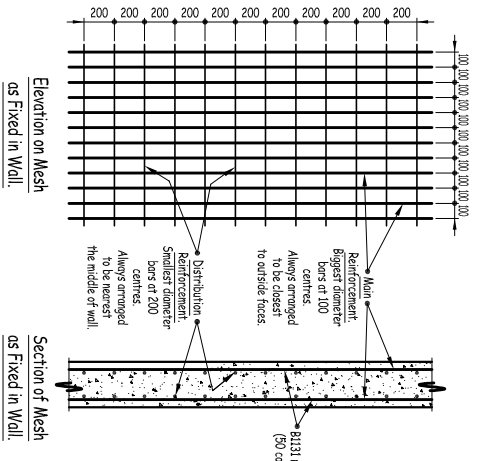


Section 2 - 2
Scale 1:25 of A1

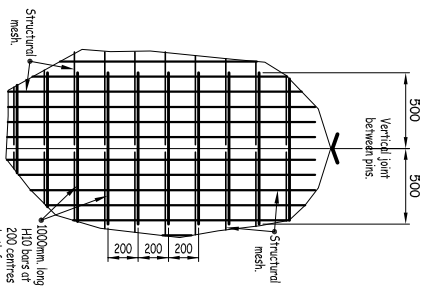
Underpinning Notes

- U1. The underpin numbering for identification purposes only.
- U2. The sequence of underpinning is to be agreed on site, with the District Surveyor and should follow the traditional 1, 4, 2, 5, 3 pattern.
- U3. But at all times the minimum requirements for the laps between the construction of adjacent piles must be adhered to.
- U4. Underpinning to be a maximum length of 1200mm.
- U5. Provide corner bars in underpinning stems, to ensure mesh reinforcement is held in place during concreting.
- U6. All reinforced concrete cast on the ground shall be placed at 50mm of concrete binding in a nominal 1:8 mix unless otherwise noted.
- U7. Foundations have been designed to resist a net bearing pressure of 100kN/m² on London Clay and 150kN/m² on Sand and gravel at depths shown. The bearing strain shall be governed by the Local Authority's Building Inspector, before laying binding 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.
- U8. Concrete mix for foundations shall be 6/33/40 mix with a minimum Ordinary Portland Cement of 320kg/m³ and a maximum water/cement ratio of 0.50. Concrete shall be left for at least 48 hours before dry packing.
- U9. Concrete cover to the reinforcement shall be as detailed on the drawings but never less than 35mm.
- U10. The minimum depth of the underpinning, measured from the underside of the existing footing, shall be 300mm on sand and gravel, 350mm on sand and gravel and 500mm on sand and gravel.
- U11. The underside of the existing wall or foundation shall be trimmed and damped if it is to be underpinned before dry packing. When dry packing, 75mm thick dry packing shall be left 24 hours before works are conducted on adjacent underpins.
- U12. The central area of excavation shall not be carried out until the perimeter underpinning has been completed.
- U13. If necessary backfilling behind retaining walls shall be 1:20 mix, using Ordinary Portland Cement.

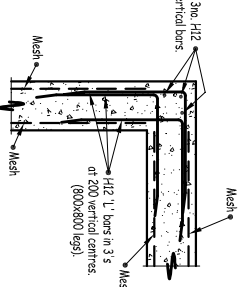
Reinforcement Note
Wall and Foundation reinforcement shall be continuous.
If loose bars are used to provide continuity the area of loose bars shall not be less than the area of reinforcement specified.
Laps shall be not less than 45 times the lesser bar diameter.



Important Note with Reference to the Fixing of Structural Mesh in Walls.
i.e. Mesh Prefixed with the letter 'B' e.g. B1131 or B785 etc.



Showing Typical Reinforcement Between Pins.



Plan Section on Typical Corner Showing Typical Reinforcement.

Tension Lap Lengths for Reinforcement
10mm Ø = 450mm,
12mm Ø = 540mm,
16mm Ø = 720mm,
20mm Ø = 950mm.

Notes

1. This drawing remains the copyright of Vincent and Rymill 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 on the site, as well as the adjoining sites. The Contractor must take all necessary precautions to safeguard this.
6. Adequate shoring shall be installed during the works, to ensure the stability of the structure. Such shoring is to be adequately founded.
7. Any deviation from the details shown, must be notified to the Engineer, by the Contractor, in writing, before being carried out.
8. All new steelwork to be grade 275. To be cleaned at works to Sd 2.5 and primed with High Build zinc phosphate primer to 75 microns minimum dft. Primer to be touched up on site where damaged by transit or erection.
9. All concrete padstones to be in 10mm, maximum aggregate size 1:3 mix (cement/aggregate/fines).
10. All structural timber to be grade C16 or C24 as noted. All timber to be treated.
11. For fire protection to steelwork see Architects details.

Rev	Details	Date
B	Revised to latest Architects drawings	13.05.15
A	Revised to latest Architects drawings	31.12.12

V & R VINCENT & RYMILL
 Consulting Civil & Structural Engineers
 Lakeside Country Club,
 Whatat Road, Finley Green,
 Camberley, Surrey, GU16 6PT
 Telephone: 01252 834 242
 Fax: 01252 833 889
 Email: info@vincentrymill.co.uk

**21 Kidderpore Gardens
London NW3**
Structural Elements

Scale of A1	Date	Job No	Draw No	Rev
1:50 1:25	Feb 2012	12A11	01	B