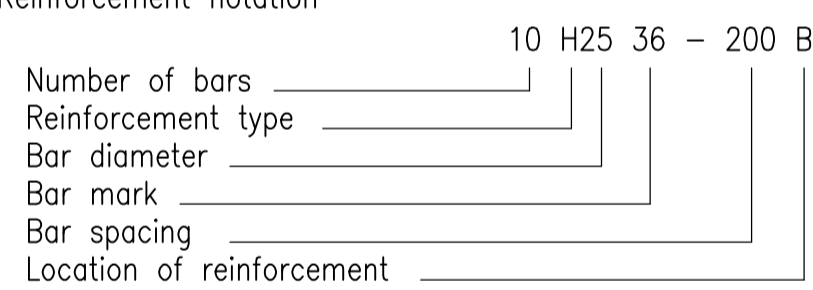


1.0 GENERAL NOTES

- This drawing is to be read in conjunction with all relevant Architects drawings, Engineers drawings and contract documentation.
- Dimensions are in millimetres. Levels are in meters.
- All setting out, levels and dimensions to be confirmed on site and against architects and specialist suppliers drawings prior to fabrication or construction.
- The contractor shall be responsible for the structure during the course of the works.
- Drawings are not to be scaled, if in doubt ask.
- All proprietary products to be installed in accordance with the Manufacturers Recommendations.
- Underside of foundations to obtain a minimum bearing pressure of 100kN/m² to the satisfaction of the Building Control/ Structural Engineer.
- Where temporary works are required the Contractor shall allow in his pricing for a competent temporary works Engineer to design all necessary supports for the structure during the course of the works.

2.0 CONCRETE NOTES

- All materials and workmanship to be in accordance with BS 8110 Parts 1 & 2 and B.S. 8500 Parts 1 & 2 – The structural use of concrete.
- Concrete quality to be 40N/mm² at 28 days unless noted otherwise, Max nominal aggregate to be 20mm. Minimum cement content 380kg/m³. Maximum free water cement ratio 0.55
- Reinforcement to be placed in accordance with BS 8110 Reinforcement type H to BS4449 : 2005 Mesh fabric reinforcement to BS4483
- Concrete cubes to be taken and crushed at 7 & 28 days to obtain required crushing strengths (one cube to be taken as a spare cube.)
- Concrete qualities for Mass Concrete foundations to low rise structures in non-aggressive soils to be C25 OR GEN3. Minimum cement content not less than 220kg/m³
- No reinforcement to be cut displaced or omitted without prior written agreement of the engineer.
- Cover to reinforcement to be 50mm minimum unless otherwise noted.
- The ground is to be blinded prior to reinforcement being placed in position, blinded concrete mix to be GEN1. Min 50mm thick to all reinforcement bases etc.
- Reinforcement notation



- Abbreviations
 T = top B = bottom STGD = staggered
 NF = near face FF = far face EF = each face
 ALT = alternate bars ABR = alternate bars reversed
- Lap lengths unless otherwise noted to be min:
 H10 – 490mm H20 – 980mm
 H12 – 590mm H25 – 1225mm
 H16 – 785mm H32 – 1570mm

3.0 TIMBER NOTES

- All timber materials and workmanship to be in accordance with BS 5268: Part 2 – Structural Use of Timber.
- All timbers to be a minimum strength class 'C16' (unless noted otherwise) and have max. moisture content of 18%.
- Multiple timbers to be bolted together at 600 centres with 12mm dia. bolts and 50x30x5 washer plates.
- No notches, holes or rebates etc. to be cut in any member without the written agreement of the Engineers.
- Site storage, handling and erection procedures of trusses is to be in accordance with BS 5268: Part 3.
- All structural timber to be adequately protected against adverse weather conditions during stocking and after erection.
- All structural timber is to be treated by vacuum pressure impregnation of organic or water borne preservative, to a dry salt retention in accordance with the manufacturers recommendations. Type of treatment may be:- 'Tanalith', 'Celcure', 'Protim', or other only with the prior approval of the Architect.
- Finger joints are not acceptable.
- All fixings in roof space (nails, screws, bolts, hangers etc.) are to be galvanised unless noted otherwise.

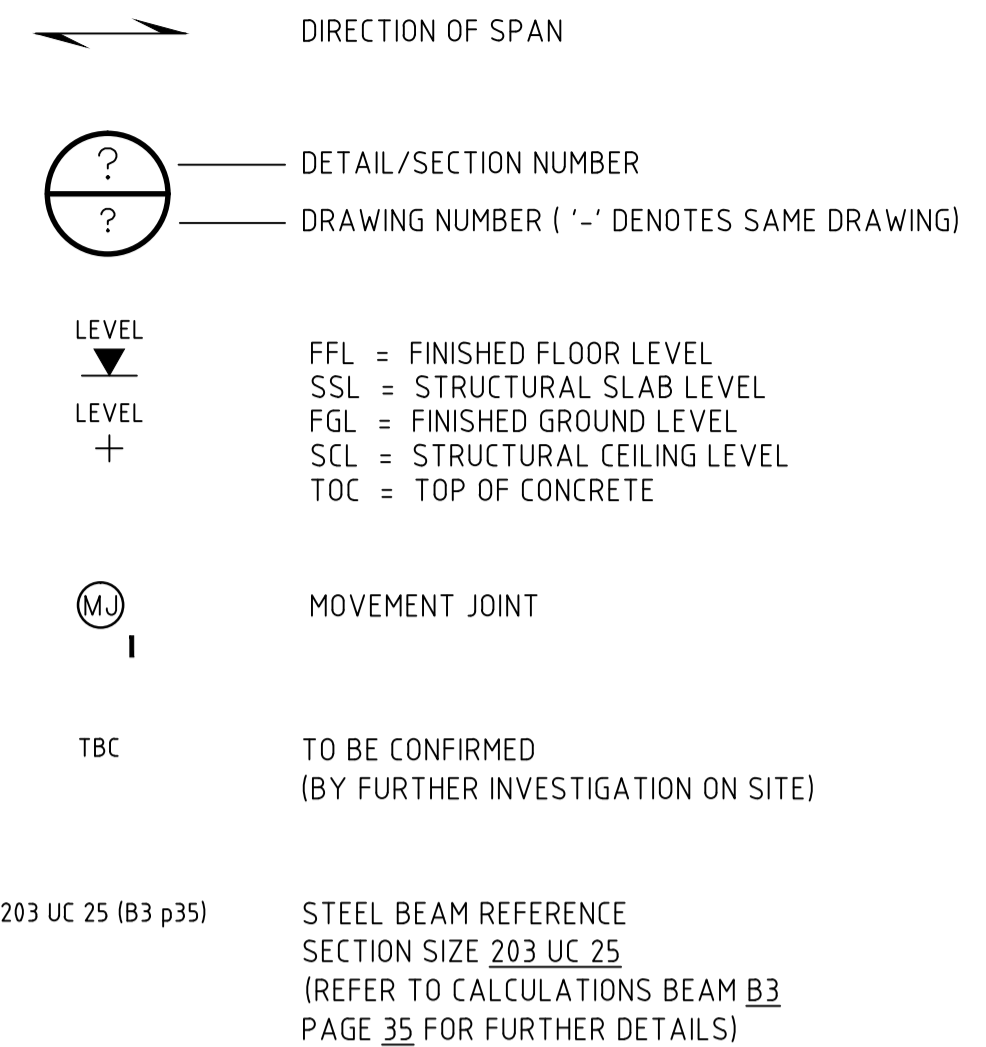
4.0 BRICKWORK AND BLOCKWORK NOTES

- All materials and workmanship to be in accordance with BS 5628 Code of Practise for the Structural Use of Brickwork.
- Bricks to have average crushing strength of 20.5 N/mm² (Class 3 min) unless noted otherwise.
- Block work above ground to be 7.0N/mm² minimum unless otherwise noted.
- Block work below ground to be 7.0N/mm² minimum unless otherwise noted.
- Mortar designation above ground to be 1:1:6 Cement/Lime/Sand Unless noted otherwise.
- Mortar designation below ground to be 1:3 Cement/Sand unless noted otherwise.
- 'Hyload' DPC or similar approved to all walls. All waterproofing in accordance with architects details.
- Wall ties to be stainless steel vertical twist type ties to comply with BS 1243. Max spacing to be 900mm horizontally, 450mm vertically and with a 50mm embedment in the mortar joint of each leaf, unless noted otherwise. Wall ties to be placed in walls where cavities exceed 90mm to be placed at 450cts vertically, 450cts horizontally. Additional ties are to be provided at the sides of all openings so that there is at least one tie at 300crs maximum.
- Brickwork restraints to be in accordance with BS 5628 Part 1 at 1200mm crs horizontally and 1200mm crs for vertical straps.
- Movement joints to be provided in masonry walls where indicated 'MJ' on the drawings. At 6.0m maximum internally, 12.0m for brickwork.
- At brick/block junctions, brickwork is to be block bonded into blockwork unless noted otherwise.
- Wall ties shall not slope inwards.
- All brickwork is to be laid with frogs, if any, uppermost.
- Where 215mm Blocks are laid flat no shell bedding shall be allowed
- Lintel Bearings to be in accordance with the Manufacturers recommendations or as noted on the drawings or directed otherwise by the engineer.
- All steel bearing onto walls to have a minimum 215x100x215mm deep engineering brick or concrete padstone centered on steel unless noted otherwise.

5.0 STRUCTURAL STEELWORK NOTES

- All materials and workmanship to be in accordance with BS5950. The structural use of steelwork in building.
- Structural steelwork sections to be Grade S275 mild steel in accordance with BS 4360.
- Bolts to be grade 8.8 unless noted otherwise.
- Welds to be 6mm continuous fillet, unless noted otherwise.
- Contractor must verify all dimensions on site before commencing any work or making any shop drawings. No dimensions to be scaled from drawings. Discrepancies must be reported to the engineer prior to proceeding. 7 working days are required by the Engineer to check and comment on any working drawings prior to fabrication.
- Steelwork which is not required to be encased in concrete blast cleaned to SA2½ free from mill scale, rust and other contamination and painted with two coats of zinc phosphate primer 85 microns thick as soon as practicable but not more than four hours after cleaning.
- Bolted connections to have a minimum connection of 4 N°. M20 bolts per member, unless noted otherwise.
- Minimum bearing of steels to be 100mm Unless noted otherwise
- Where indicated galvanised steel to be a minimum of 85 microns thickness unless noted otherwise in accordance with BS 728.
- Workmanship erection and tolerances to be in accordance with the National structural steelwork specification for building construction.
- HSFG Bolt connections are to be metal to metal and painted on site after the connection has been completed and load indicating washers in final position

LEGEND



ENGINEERS DRAWINGS

14.385.00	NOTES
01	BASEMENT DETAILS 1/2
02	BASEMENT DETAILS 2/2
03	GROUND FLOOR DETAILS

P1	Preliminary for checking	24/11/14
Rev.	Description	Date
AND DESIGNS LTD Consulting Engineers 90 Meadrow, Godalming, Surrey GU7 3HY Tel. 01483 418140 Fax. 01483 421304 E Mail info@anddesigns.co.uk		
Project PROPOSED ALTERATIONS 21 ABERDARE GARDENS		
Title NOTES		
Scale	AS SHOWN AT A1	Job No. 14.385
Date	NOV 2014	
Dwn. by MT	Chkd. by JW	Dwg. No. 00 P1
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