

[P1] & [F2] 220 x 50mm C.16 floor joists @ 400mm c/c.

- [B7] 178 x 102 x UB19 with min. 150mm bearing on to eng. brick padstones and positioned above existing lintel and supporting [P1].
- [B8] 152 x 152 x UC23 connected to [B9] & [B14] with 2No M12 bolts and supporting [P2].
- [B9] 152 x 152 x UC23 bearing on 300 x 100 x 20mm thick m.s. plate and connected to [B11] with 2No M16 bolts through 12mm thick angle cleats welded to beams. Provide timber bearer bolted into web of beam with M12 bolts @ 750mm c/c. supporting floor joists with galv. jiffy joist hangers.
- [B10] Min. 2No 150 x 50mm C.16 timbers spiked together supporting floor joists with galv. jiffy joist hangers.
- [B11] 203 x 133 x UB30 with min. 225mm bearing on to eng. brick pad stone AND connected to [P9] with 4No M16 bolts AND connected to [B16] with 4No M16 bolts through 12mm thick m.s. end plates welded to beam with connection max. 150mm from bearing.
- [B12] 203 x 102 x xUB23 bearing on 225 x 100 x 12mm thick m.s. plate AND 400 x 100 x 25mm thick m.s plate AND connected to [B18] with 4No M16 bolts through 12mm thick m.s. end plates welded to beam with connection max. 150mm from bearing.
- [B14] 203 x 102 x xUB23 bearing on 225 x 100 x 12mm thick m.s. plate AND connected to [B16] with 4No M16 bolts AND connected to [B15] with 4No M16 bolts through 12mm thick m.s. end plates welded to beam with connection max. 150mm from bearing. Provide timber bearer bolted into web of beam with M12 bolts @ 750mm c/c. supporting floor joists with galv. jiffy joist hangers.
- [B15] 203 x 102 x UB23 bearing on 225 x 100 x 12mm thick m.s. plate connected to [B17] with 4No M16 bolts through 12mm thick m.s. end plates welded to beam with connection max. 150mm from bearing AND connected to [B16] with 4No M16 bolts.
- [B16] 152 x 152 x UC23 with min. 100mm bearing on to 220 x 100 x 150mm deep concrete padstone and connected to [P9] with 4No M16 bolts through 12mm thick m.s. end plate welded to post AND supporting [B14] & [B15] as above.
- [B17] 203 x 102 x UB23 connected to [B15] as above AND [B19] as below.
- [B18] 203 x 133 x UB25 bearing on 400 x 100 x 25mm thick m.s. plate AND connected to [B12] as above AND connected to [B21] with 4No M16 bolts through 12mm thick m.s. end plates welded to beam with connection max. 150mm from bearing.
- [B19] 203 x 102 x UB23 bearing on 225 x 100 x 12mm thick m.s. plates AND connected to [B17] with 4No M16 bolts through 12mm thick m.s. end plates welded to beam with connection max. 150mm from bearing.
- [B20] 178 x 102 x UB19 bearing on 225 x 100 x 12mm thick m.s. plates. Provide timber bearer bolted into web of beam with M12 bolts @ 750mm c/c. supporting floor joists with galv. jiffy joist hangers.

- [B21] 203 x 102 x UB23 bearing on 400 x 100 x 25mm thick m.s. plate and connected to [B18] as above AND connected to [B21] with 4No M16 bolts through 12mm thick m.s. end plates welded to beam with connection max. 150mm from bearing.
- [B22] 203 x 102 x UB23 bearing on 400 x 100 x 25mm thick m.s. plate and connected to [B21] as above AND connected to [B24] with 4No M16 bolts through 12mm thick angle cleats welded to beams.
- [B23] 203 x 102 x UB23 bearing on 225 x 100 x 12mm thick m.s. plate and connected to [B24] with 4No M16 bolts through 12mm thick angle cleats welded to beams.
- [B24] 152 x 152 x UC23 bearing on 300 x 100 x 20mm thick m.s. plates. Provide timber bearer bolted into web of beam with M12 bolts @ 750mm c/c. supporting floor joists with galv. jiffy joist hangers.
- [B25] 152 x 89 x UB16 bearing on 225 x 100 x 12mm thick m.s. plates. Provide timber bearer bolted into web of beam with M12 bolts @ 750mm c/c. supporting floor joists with galv. jiffy joist hangers.
- [B26] 152 x 89 x UB16 bearing on 225 x 100 x 12mm thick m.s. plates. Provide timber bearer bolted into web of beam with M12 bolts @ 750mm c/c. supporting floor joists with galv. jiffy joist hangers.
- [B27] 203 x 102 x UB23 bearing on 225 x 100 x 12mm thick m.s. plates AND connected to [B19] with 4No M16 bolts through 12mm thick m.s. end plates welded to beam with connection max. 150mm from bearing.
- [B28] 203 x 102 x UB23 bearing on 225 x 100 x 12mm thick m.s. plates.
- [B29] Expose existing beam to ensure min. 178 x 102 x UB19 with min. 225mm bearing on to 440 x 100 x 220mm deep concrete padstones. Replace as necessary.
- [B30] Expose existing beam to ensure min. 127 x 76 x UB13 bearing on eng. brick padstones. Replace as necessary.
- [W1] Expose existing wall to ensure min. 100 x 1000mm pier in 7.3MN/m2 blocks in 1:1:6 mortar and block bonded into existing wall.
- [W2] Expose existing wall to ensure min. 100 x 1200mm pier in 3.6MN/m2 blocks in 1:1:6 mortar and block bonded into existing wall.
- [W3] Expose existing wall to ensure min. 100 x 1200mm pier in 3.6MN/m2 blocks in 1:1:6 mortar and block bonded into existing wall.
- [W4] Expose existing wall to ensure min. 100 x 1200mm pier in 3.6MN/m2 blocks in 1:1:6 mortar and block bonded into existing wall.
- [W5] Expose existing wall to ensure min. 100 x 900mm pier in 3.6MN/m2 blocks in 1:1:6 mortar.

BEAMS TO BE INSTALLED AS PER SEPARATE STRUCTURAL CALCULATION SHEETS WITH ALL DETAILS AND BEAM SIZES DOUBLE CHECKED.

INSTALLATION OF BEAMS TO BE INSPECTED BY BUILDING CONTROL OFFICER.

BEAMS TO BE INSTALLED TO HEALTH AND SAFETY STANDARDS WITH ADEQUATE SUPPORT PROVIDED TO EXISTING STRUCTURE DURING INSTALLATION.

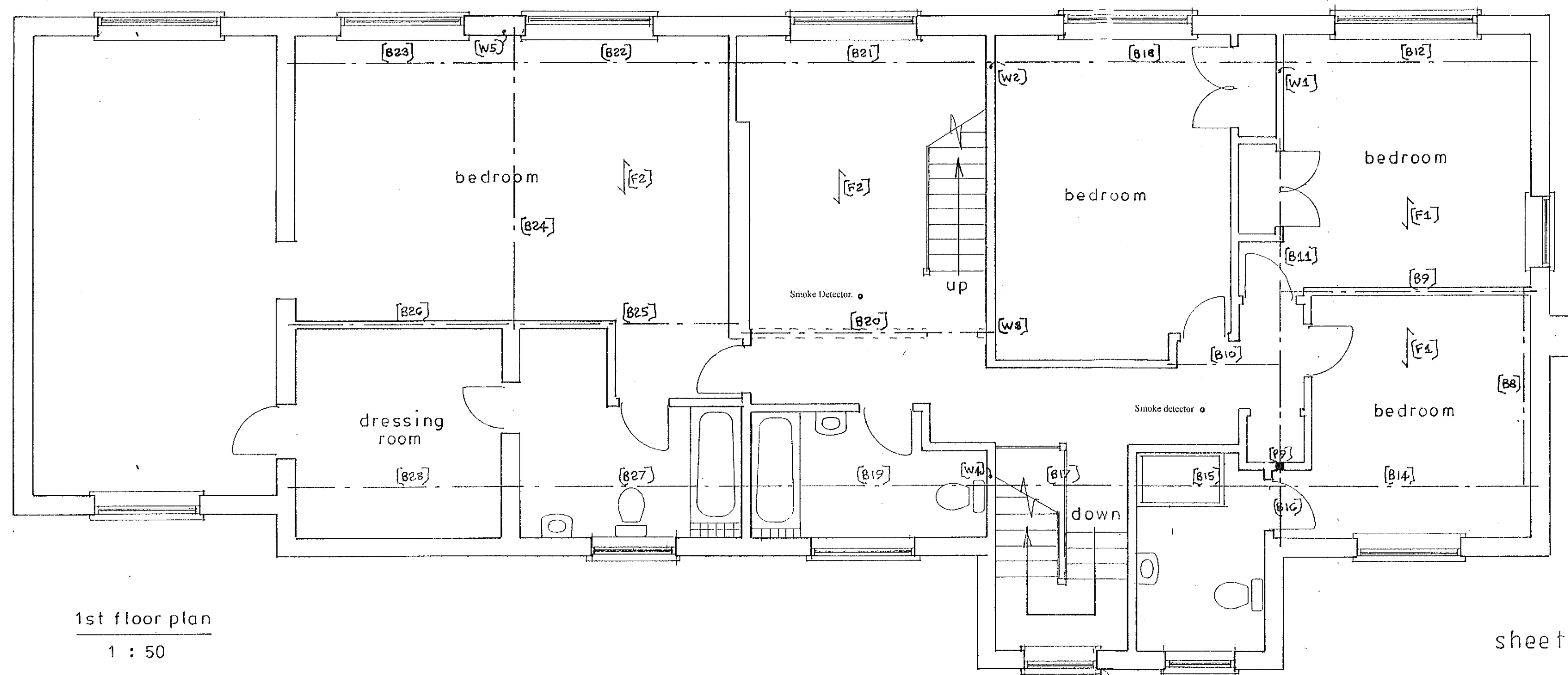
PHYSICAL ON SITE MEASUREMENTS TO BE TAKEN PRIOR TO ORDERING OR FABRICATION OF BEAMS.

INSTALLATION OF BEAMS PRIOR TO FULL LOCAL AUTHORITY APPROVAL [NOT CONDITIONAL] CARRIED OUT AT CLIENTS/BUILDERS RISK.

NO CHANGES TO STRUCTURAL DESIGN TO BE CARRIED OUT BY CLIENTS OR BUILDERS UNTIL STRUCTURAL ENGINEER HAS DESIGNED ALTERATIONS AS THESE WILL REQUIRE REVISED CALCULATIONS FOR SUBMISSION TO COUNCIL FOR APPROVAL, WILL CAUSE DELAYS TO BUILDING WORK AND WILL BE CHARGED APPROPRIATELY.

NO CALCULATIONS WILL BE FORTHCOMING TO BUILDER'S OR CLIENT'S ASSUMED OR 'GUESSED' INSTALLED CHANGES TO DESIGN.

Class A dense concrete blocks are NOT deemed to be concrete padstones.



sheet 2 of 6

Proposed

PROPOSED ROOF ALTERATIONS TO FORM NEW 2ND FLOOR AT 16 VICARAGE LANE,
FELPHAM FOR MR. & MRS. S. NEWMAN.

Bryan Butcher
Rainbow Cottage
Nyetimber Lane
Bognor Regis PO21 3JX
01243 266871
07973 233442
bryan.butcher@btinternet.com
www.bryanbutcher.com