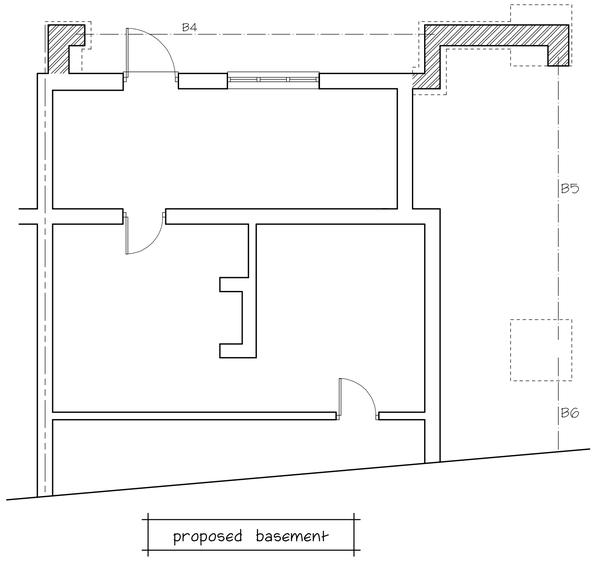
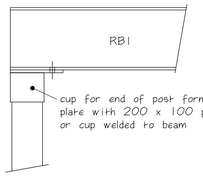


proposed basement

foundation widened to 1m cube pad at corner



end post

1m cube foundation built up to level of pad at front

TYPICAL MULTIPLE JOIST/FLITCHED BEAM TO FLITCHED BEAM FIXING DETAIL

tile vents to be provided to roof voids giving ventilation area as for flat roof

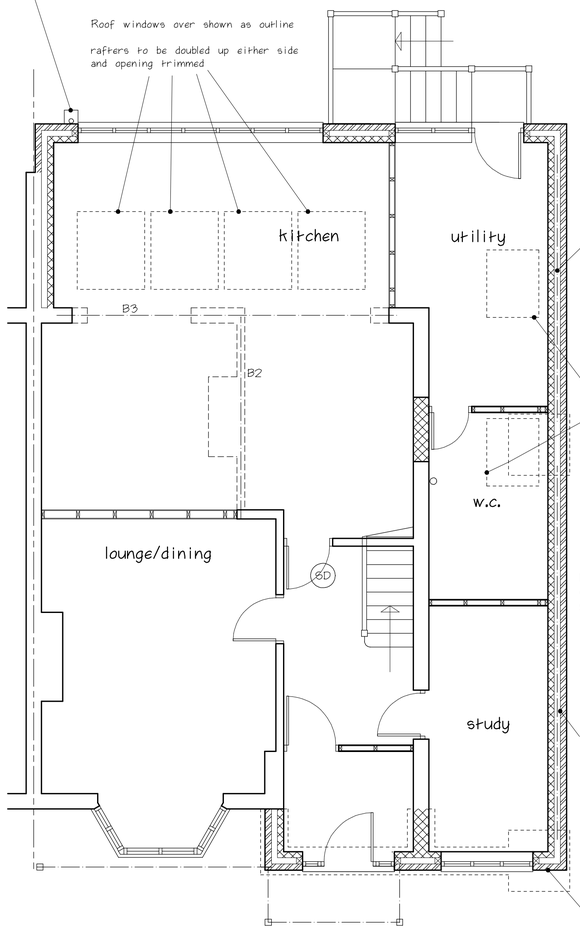
TYPICAL MULTIPLE JOIST/FLITCHED BEAM TO BEAM FIXING DETAIL

new roddable B.I.G. run to 1 cubic metre soakaway formed with "Aquacell" crates or similar at least 5m from any building

staircase to comply with notes as for loft staircase, but number of treads, rise and going to be adjusted to suit ground levels in accordance with Approved Document K - guarding to be 1100mm high

Roof windows over shown as outline

rafters to be doubled up either side and opening trimmed

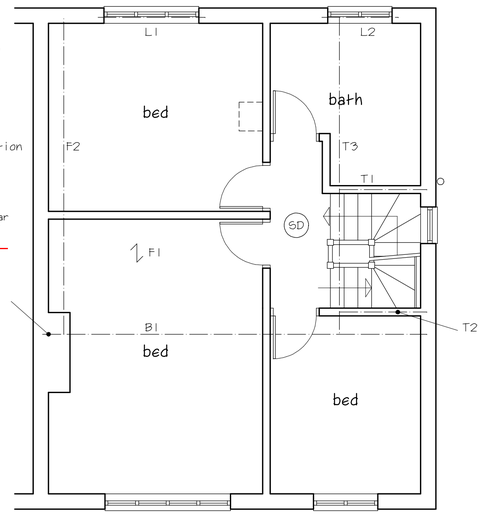


proposed ground floor

KEY TO BEAMS

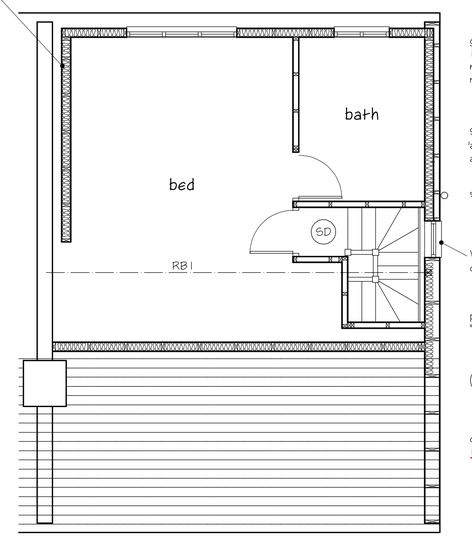
RB1 = 203 x 133 x 30 UB
Posts = 97 x 97 C16
F1 = 63 x 220 C24 at 400mm centres
F2 = 3No. 47 x 220 C24
T1 = 2No. 47 x 97 C16 min.
T2 = 2No. 47 x 97 C16 min.
T3 = 2No. 47 x 220 C24 with 10 x 200 flitch plate or 152 x 152 x 23 UC
B1 = 203 x 203 x 46 UC.
B2 = 178 x 102 x 19 UB. (may be omitted if not load-bearing)
B3 = 254 x 254 x 73 UC. or 203 x 203 x 86 UC
B4 = 203 x 203 x 52 UC encased in concrete with min. 50mm cover
B5 = 203 x 203 x 46 UC encased in concrete with min. 50mm cover
B6 = 203 x 203 x 60 UC encased in concrete with min. 50mm cover
L1 = 2No. 47 x 220 C16
L2 = 127 x 76 x 13 UB.

Flitch beams to be bolted at 550mm centres using M12 bolts along centre line of beam with min. edge distance of 50mm. 2No. bolts to be provided at bearings and point loads.



proposed first floor

dormer cheek to be faced with "Supalux" or similar under tile hanging



Dormer to be set in min. 200mm from eaves

SVP to be extended prior to work starting on dormer to no more than 1m above the existing ridge line

Dormer MUST be tile hung to match existing roof in order not to require Planning Permission

gable to be constructed as external stud wall in exterior grade plywood faced with breathable membrane and expanded metal lathing, then rendered to BS5262

Staircase to be 700mm wide and pached away from wall so that newel does not affect headroom below

stairwell enclosure to be faced both sides with 12.5mm plasterboard and set coat

Window to be obscure glazed and any opening casements to be at least 1.7m above floor level

party wall to be insulated with 72.5mm "Celotex PL4060"dot and dab fixed

SD denotes smoke detector

doubled joists to be provided under bathroom if a bath is to be installed

proposed second floor

Notes

FOUNDATIONS

Existing foundations to be exposed as required by B.C.O. prior to work starting. New foundations to comprise mass-fill concrete (1:2:4 mix) to a minimum depth of 1m and width of 450mm. Depth to be to invert level of sewer or to 600mm below tree roots if deeper. Face of foundation to be min. 800mm from any sewer. Depth and design to Local Authority satisfaction on site. No trees within 30m to affect foundations. Foundation to be 600mm wide at boundary side to allow for eccentric loading.

FLOORS

Ground floor to comprise flooring grade chipboard on joists at sizes and centres noted hung from new and existing walls using suitable galvanised joist hangers. 100mm "Celotex" TD4000 insulation to be provided between joists. Airbricks to be provided to give min. 3000 sq. mm ventilation area per metre run of wall or 1500 sq. mm if on opposing sides of the building.

Upper floors to comprise min 22mm tongued and grooved flooring grade chipboard (type II/III in bathroom/w.c.) on joists at sizes and centres noted. Floor spans over 2.5m to be provided with solid strutting to 3/4 the depth of the joists at the centre point. Floor spans over 4.5m to be strutted at 1/3 points. 100mm rockwool sound insulation to be provided between joists hung on galvanised chicken wire. Boarding to be continued to external walls.

WALLS

To comprise inner and outer skin of 112mm brickwork below DPC level and outer skin of brickwork and inner skin of thermal blockwork above with 100mm cavity. Cavity to be filled with lean mix concrete to ground level, then 100mm "Dritherm 32" cavity batts or similar from 225mm below DPC level upwards. DPC not to bridge cavity. Skins to be tied together using stainless steel double twist ties at max. spacings of 450mm vertically and 900 mm horizontally with alternate rows staggered and doubled at openings. "Thermabate" or similar insulated cavity closures to be provided at openings.

"Cannic" lintels to be provided over openings with min. bearing of 150mm. Voids in lintels to be insulated. New walls to be tied to existing using "Furfix" profiles or similar product. DPC to BS743 to be provided not less than 150mm above ground level and lapped with existing DPC and DPM. Walls to be plastered internally with 15mm lightweight plaster.

Stud walls to comprise 100 x 50 (125 x 50 for external walls) head and sole plates, studs and noggins. Studs to be at 400 centres with min. 2No. 100 x 50 above openings as lintel. Both sides to be faced with plasterboard and set coat. 100mm sound insulation quilt to be provided between studs in partition walls. External stud walls (including walls adjacent to roof voids and any doors into roof voids) to be insulated using min. 120mm "Celotex" and provided with 1000 gauge vapour barrier.

DORMERS

Dormer walls to be constructed as stud walls, faced externally with 19mm external grade plywood sheathing covered with roofing felt to BS 747 and hung with tiles to match the existing roof colour on suitably sized and spaced treated battens.

Sloping ceilings/walls to be insulated using 50mm "Celotex" between rafters, allowing 50mm air gap between insulation and felt, with 50mm Celotex" laid across face of rafters internally.

FLAT ROOF

To comprise 13mm mineral chippings on three layer felt to BS 747 on type II/III chipboard to BS5669 with 170mm "Celotex" between and 50mm air gap over. Firring pieces to be provided to give a min. fall of 1 in 60. All work to CP144. Lateral restraint and roof/wall tying by galvanised straps at 1.8m max. centres. All flashings etc. to be provided in Code 4 lead.

PITCHED ROOF

To be tiled to match the existing where possible on suitably sized and spaced treated battens of min. size 38mm x 25mm on breathable sarking felt on 6G rafters at sizes and centres noted securely fixed to wallplates tied to walls using galvanised straps at 1.8m centres. 270mm Fibreglass quilt laid in two layers at 90 degrees to be provided between/over ceiling joists or 100mm "Celotex" laid between rafters with 69.5mm "Celotex" backed plasterboard across face of rafters. "Tyvek" breathable membrane to be provided where it is not possible to achieve conventional ventilation because of insulation. All flashings, valleys etc. to be provided in Code 4 lead.

DRAINAGE

Existing SVP to be extended in 110mm PVCu, terminating 900mm above second floor window heads and fitted with vent cap. Waste pipes to be in 38mm PVC unless otherwise specified, with rodding access at changes of fall or direction. 76mm deep seal traps to be provided to all appliances.

Rainwater drainage by 100mm gutters and 75mm downpipes to existing sewer unless otherwise specified.

MISCELLANEOUS

Energy efficient light fittings to be provided at the rate of 3 to every 4 fittings provided.

Any new boiler to be of the condensing type, to have a min. SEDBUK rating of 90% (natural gas) and to be installed and tested by a GAS SAFE registered installer. A copy of the test certificate is to be submitted to Building Control.

Gable end to be strapped across at least 3No. rafters at 2m centres, with noggins between at straps.

Fire protection to steel beams to comprise 2No. layers 9.5mm plasterboard and set coat or 3No. coats "Nullifire" fire retardant paint.

All new windows to be double glazed with min. air gap of 20mm to sealed units, inner pane of low-E glass and argon fill to give a min. U-value of 1.6W/sqm/K. (WER band rating C). Windows to have a total area equal to 10% of the room floor area and a min. opening area equal to at least 5% of the room floor area. All glazing to doors and panels within 300mm of doors to consist of safety glass to 1500mm above floor level. All other glazing within 800mm of floor level to be safety glass to BS6206&1981.

Bathroom/w.c. to be mechanically ventilated by light switch activated fan rated at 15 l/sec min. and capable of giving 3 air changes per hour. Timer to be incorporated giving 15 minute over-run. 10mm gap to be left under door to allow input air.

Kitchen to be mechanically ventilated by fan rated at 60l/sec or 30l/sec if fitted to a cooker hood vented to the exterior.

5000 sq. mm ventilator to be provided to habitable rooms, 2500 sq. mm to others, measured as equivalent area.

Radiators to be fitted with thermostatic radiator valves.

Staircase to comprise 14No. risers of 199mm with goings of 225mm. NB. floor to floor level to be measured accurately prior to ordering staircase. If this does not tie up with the measurements given, contact ConstructAid for guidance. Minimum width of stairs to be 700mm and and width and going of landings to be the same. Min. headroom over stairs and landings be min. 2m above pitch of stairs unless otherwise specified. Handrail to be provided 900-1000mm above pitch line on stairs and 900mm at landings. Vertical balustradings to be provided at max 99mm spacings. All winders to have the same going with a minimum of 50mm. Handrail as above to be provided to outside of winders.

All timber to timber beam joints to be made using purpose made connectors from "BAT Industries".

All doors to staircase enclosure to be FD30 fire resistant and fitted with 25mm door stops. Loft room door to be fitted with self closing device. Any door glazing to be fire resistant. First floor landing to be overlaid with 6mm hardboard to give 30 minute fire resistance.

Smoke detectors to BS5839part 6 to be provided to hallway/landing at each floor level, linked to each other and to the lighting system, with battery backup.

GENERAL

The contractor is to work from the plans marked "APPROVED under the Building Regulations" by the Local Authority or satisfy himself that he is in possession of a plan showing all amendments.

Do not scale from plan. All sizes, dimensions, details etc. of new and existing structure to be verified by contractor prior to starting work and any discrepancies notified to ConstructAid for advice/amendments.

All structural details are provided on the understanding that they are to be checked and approved by Building Control prior to work starting.

All work to be carried out in accordance with the relevant British Standards and Codes of Practice and to comply with the requirements of the Building Regulations 2000 as amended.

Proprietary products, materials and applicances to be used or installed with the manufacturer's specification and instructions.

Gas, water and electrical installations to comply with the relevant statutory regulations.

ConstructAid can take no responsibility for estimating or construction errors due to misreading of plans. If in doubt, ASK!

The applicant is responsible for carrying out all requirements of the Party Wall etc. Act 1996, the Health and Safety Regulations relating to notification of construction works and notification of the Water Authority where necessary. If in any doubt, please contact ConstructAid for further information.

Project	: Single storey side/rear extension & loft conversion
Address	: 108 Lake Rise Gidea Park
Client	: Mr. & Mrs. Newton
Date	: June 2018
Drawing No.	: 1590/18/2B
Scale @ A1	: 1/50, 1/100

Revisions

A	Building Regulations amendments	16/11/2018
B	Amendments to layout, details added	07/04/2021

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