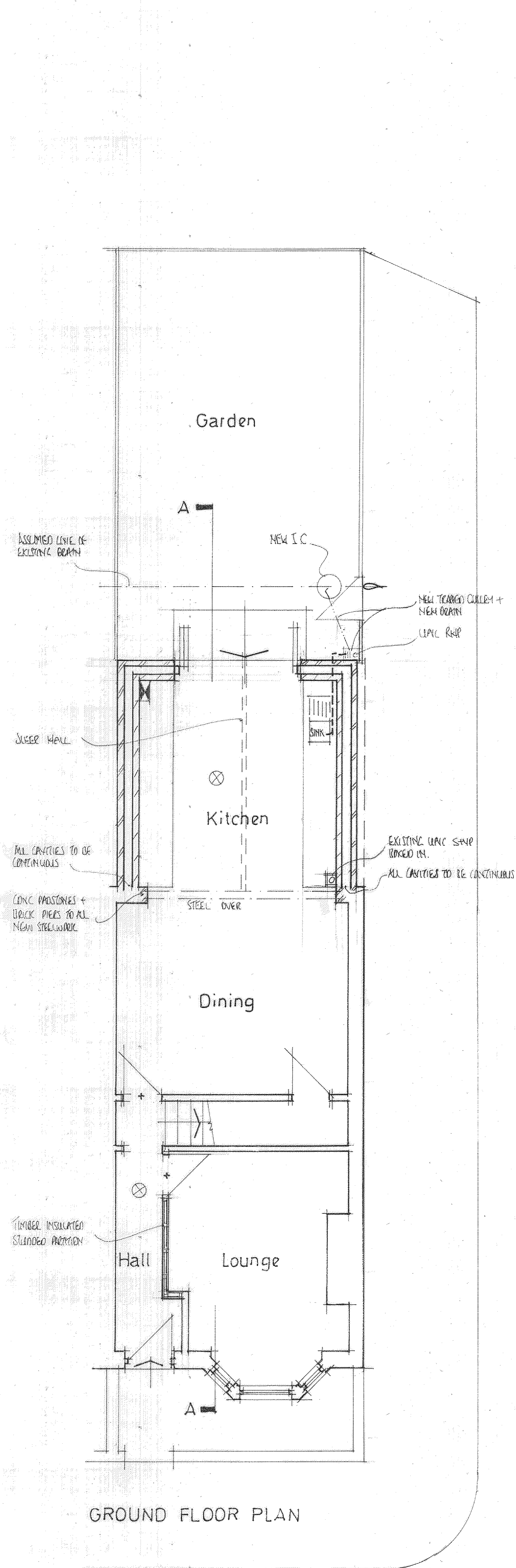
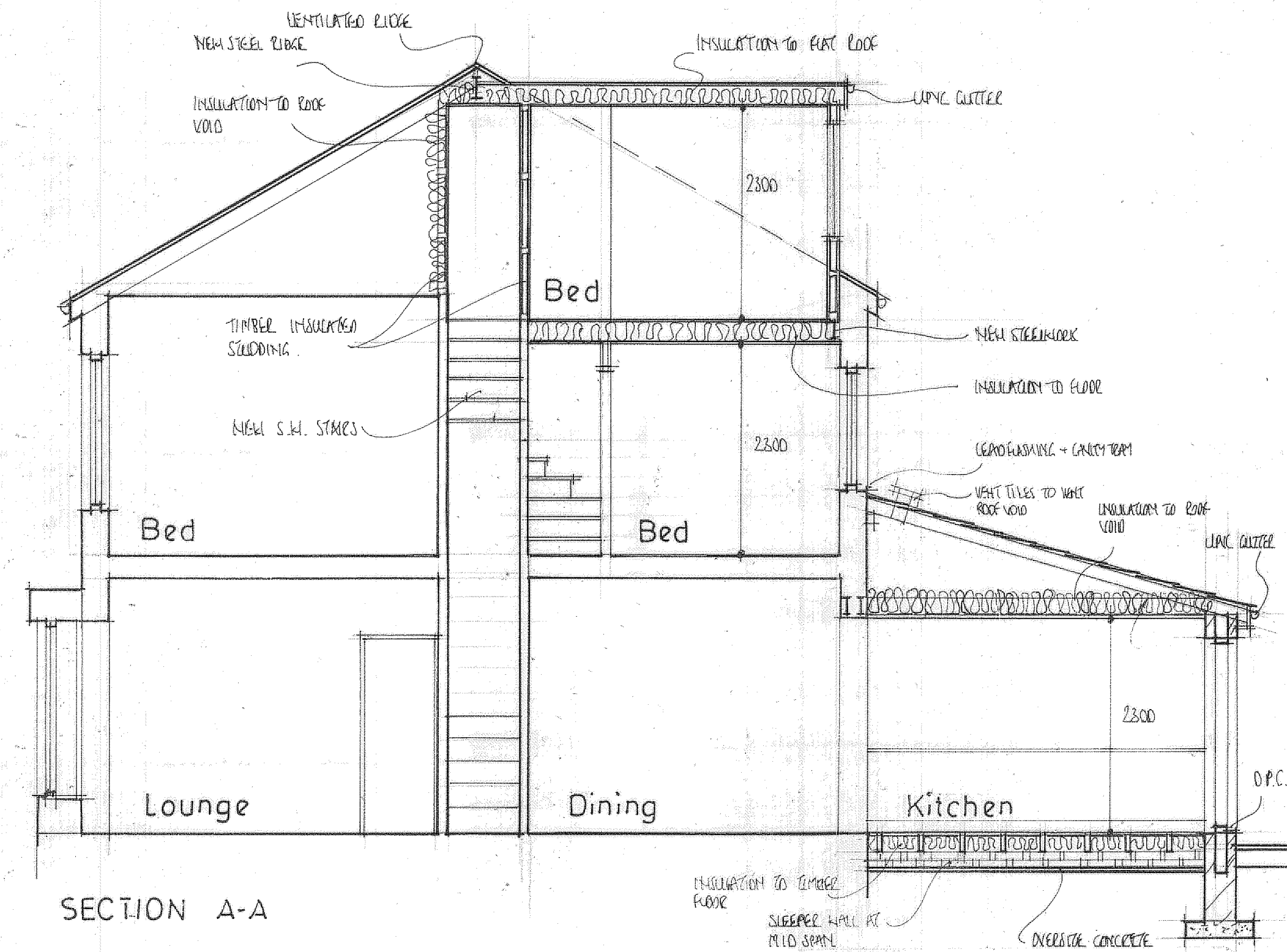


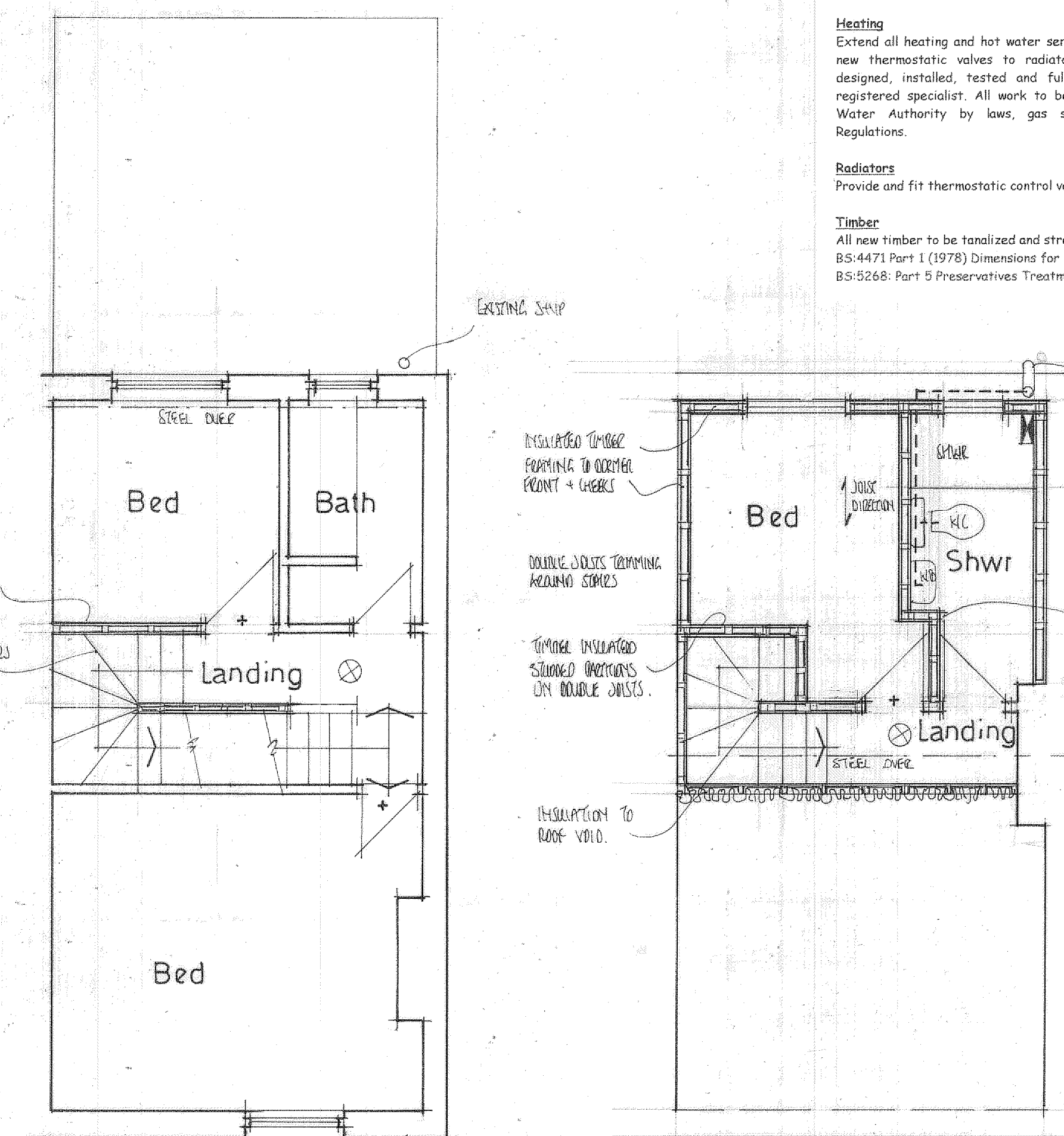


- Key:
- + 1/2" H.F. DOOR
 - ⊗ SMOKE HEAT DETECTOR
 - MECHANICAL EXTRACT FAN DUCT TO OUTSIDE AIR

FIRST FLOOR PLAN



- Heating
- To be supplied by balanced flue gas boiler condensing type, radiators and cylinder min Sedbuick efficiency rating of 88%
- Heating
- Extend all heating and hot water services from existing and provide new thermostatic valves to radiators. Heating system is to be designed, installed, tested and fully certified by a GAS SAFE registered specialist. All work to be in accordance with the Local Water Authority by laws, gas safety requirements and IEE Regulations.
- Radiators
- Provide and fit thermostatic control valves to radiators.
- Timber
- All new timber to be tanalized and stress graded 4 BS:4471 Part 1 (1978) Dimensions for softwood BS:5268: Part 5 Preservatives Treatment for Structural Timber



- Skirting
- 120 x20 mm half round skirting primed and painted three coats (1 gloss) to new extension and dormer
- Encase drains
- All drains passing under new extension to be encased in 150 mm thick concrete. Where drains pass under extension walls to be bridged over with 150 x 100 mm reinforced concrete lintels
- Existing manhole
- Connect new drainage system into existing manhole. Bench up in concrete to form channel
- Obsolete drainage
- Take up obsolete drains from kitchen seal off all junctions and corresponding connections

REVISIONS:

A.	AMENDMENTS FOR BUILDING REGULATIONS	DEC 23
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Demolish

Carefully take down existing single storey kitchen extension and ceiling to first floor and prepare site for new building works.

Foundations

Foundations to cavity walls to be constructed of concrete common brickwork up to 150 mm below ground level with Class B engineering brickwork from GL to DPC level externally and concrete block work internally. Walls built off 750 x 200 (C20 mix-20N/mm2) concrete strip foundations, at min depth of 1000mm, to suit local ground conditions. If the ground is found to clay the footings are to be in accordance with NHBC guide Building Near Trees and to be in accordance with BS 8004, BS 5837 and to satisfaction of the Local Building Authority Inspector. Precast concrete lintels to be laid over all openings for drainage and service runs with minimum 150 mm end bearing onto adjacent brickwork. Concrete mixes to be in accordance with BS 8000 - 2.1 All existing foundations and structure that is to take new structural loading to be exposed for Building Control to determine its suitability. Strengthen and underpin existing as necessary to carry new loads. Where new foundations arise in vicinity of old foundations, existing should be fully grubbed up and new foundations laid at least the same depth. Foundations to be taken down to the invert level of any drain passing within 1 metre. RC lintels to be provided over drains passing through walls. Walls below ground level to be filled with concrete cavity filling to 225mm below lowest dpc level. There should not be: a. non-engineered fill (as described in BRE Digest 427) or wide variation in ground conditions within the loaded area, nor b. weaker or more compressible ground of such a depth below the foundation as could impair the stability of the structure

Steelwork

Steelwork as noted on plan to comply with BS4449, BS5950. Steel beams to bear onto concrete pad stones min 300mm x 250mm x 150 mm deep. Where only 100mm seating is possible (i.e. no pier provided) steel to sit at minimum 450mm long x 100mm wide x 150mm deep concrete spreader padstones. Piers and walls under steel to be made good and rebuilt if formation of openings has weakened structure or structural engineer has specified a rebuild. Steel beams e.g. r.s.j's, u.b's etc to be coated in zinc primer prior to building in and to be spaced and bolted together via M12 bolts and spacers of 1000mm c/s (unless specified by structural engineer). Fully encased in 2 layers of 12.5mm plasterboard and skim support on 50x50mm cradles to give half hour fire resistance (web flanges packed with mineral wool reduce cold bridging). Lintels over openings to be proprietary insulated. Steel lintels e.g. Gatic or I.G. etc - lintel type to be suitable for loading configuration and spans. Install d.p.c. cavity tray over with stop ends and weep holes at 900mm c/s - min 2 per cavity tray. Where 150mm cavity is specified ensure correct lintel is used to deal with wider cavity. All lintels to be encased in plasterboard to give half hour fire resistance. Internal door openings (max 1200mm opening size) to have 150mm x 100mm reinforced concrete lintels over or proprietary steel lintels of approval manufacture - min 150mm end bearing. New concrete lintels over new opening to BS5977 Part 2 1986 (150mm x 225mm) deep where shown. Cavities to heads of wall to be closed with mineral wool quilt and dressed over wall plate to prevent cold bridging. Check with the manufacturer regarding the chosen insulation's suitability for building. D.p.c.'s to outer leaf to be min 150mm above ground level and at slab/floor level to inner leaf. Chases: Vertical chases should not be deeper than 1/3 of the wall thickness or, cavity walls, 1/3 of the thickness of the leaf. Horizontal chases should not be deeper than 1/6 of the thickness of the leaf of the wall

Cavity closer

Insert Isoform XCC insulated cavity closer to all new openings all as document I 2013. Width and fixing to suit opening

Cavity tray

Provide cavity trays of Yeovil limited 'e' straight cavity tray with no. 4 lead apron. Flashing over roof, min up-stand 75 mm dressed down 200 mm over roof tiles. Flashing to be taken min 35 mm under cavity trays lead wedged and pointed up. Provide weep holes

Damp Proofing

Horizontal d.p.c. to be provided to wall min 150mm above finished ground level (stepped where necessary). A minimum of 4 courses of engineering brick is to be provided below dpc level to prevent spalling damage. D.P.M.'s to lap both new and existing d.p.c's. Where a former external wall becomes internal as a result of the extension - check condition of existing H.D.P.C's and clean out existing cavities. Where defective - insert injection dpc. Limelite cement based water proof rendering to be used to finish off walls (not gypsum based plaster). Insulated half hour fire rated dpc's to be provided to all cavity closer around all opening to prevent cold bridging. Any air bricks covered by proposal to be duct-ed via 100mm dia ducts to new external walls and insert telescopic air bricks sleeved with cavity trays over to connect to outside air. Provide cavity trays in brickwork over solid brickwork, junction of cavity and solid brickwork and over solid piers to avoid cavity bridging. Where cavity wall adjoins cavity brickwork, provide extra vertical wall ties 225mm vertical centres and insulated vertical dpc to cavity bridging. Min 150mm Code 5 up stand flashing to be provided where roofs abut walls (dressed min 225mm over tiles). Proprietary cavity trays, stop ends and weep holes to be installed above roof flashing's, where lower roofs abut walls. To sloping abutments provide Code 4 soakers and stepped flashing's. ALL LEAD WORK TO COMPLY WITH THE GUIDANCE SET OUT BY THE LEAD DEVELOPMENT ASSOCIATION

New opening

Break open existing walls at ground floor level from floor to ceiling to form new opening as shown and provide and insert R.S.J.'s as indicated on plan, over supported both ends concrete padstones. Make good brickwork, plaster, floor and ceiling. Include for all necessary temporary support during execution of the works. See structural engineer's details and calculations. Upon exposing brickwork if any unsuitable seating felt on 150 x 50 treated s.w. Rafters at max. 450 mm centres supported on 100 x 75 treated s.w. Wallplate at eaves level and on 150 x 63 treated s.w. Poleplate at top of roof, rafterbolted to existing rear external wall. Clip all perimeter tie i.e.: eaves, verges and top course and every tile in every 4th course using proprietary aluminium clips. Provide continuous ridge vents. Provide 3 number tile vents located below ridge line of mono pitched roof to give through ventilation

Steel Beams and Brick Piers

The design has required the use of a number of steel beams and brick piers as designed by a Structural Engineer. The method of carrying out the safe and secure temporary support, needling and propping of the existing building structure whilst this building work is being undertaken is the sole responsibility of the builder who is to ensure that NO settlement or disturbance/cracking of the fabric of the building takes place during the construction process.

Roof Access Hatches

To be insulated and draught sealed to some standard as roof. Water pipes and tanks in roofs to be fully insulated to prevent freezing. Where roof structures abut external walls - ensure all residual gaps/edges are insulated

Ceiling to truss roof

To be under drawn with 12.7 mm foil-backed plasterboard and skim finish.

Brickwork good building practice

All new brickwork to be bonded to existing and cavities to be maintained - alternatively use proprietary bolted starter anchor system together with inserted insulation V.d.p.c. (installed in accordance with manufacturers recommendations) All return corners to be min 665mm unless otherwise indicated. Proprietary stainless steel double triangle wall/vertical twist ties to be provided to cavity walls at maximum 450mm vertical centres and 750mm horizontal centres - staggered across wall elevation. 225mm max vertical centres at reveals. Ties to be long enough to have 50mm minimum embedment into wall. Proprietary insulation clips to be provided to suit cavity insulation system. Wall ties to comply with BS:1234:1978 All lintels to have 150mm end bearing and all timbers to have 100mm min end bearing.

Cavity Walls Brick/Block full fill 150mm cavity (U value 0.18W/m2K)

Cavity walls to be 350 mm overall construction to comprise of 102 mm outer skin of facing brickwork with inner skin of 100 mm Thermolite Shield blockwork. Both skins laid on 1:6 mortar mix with plasticizer and bonded together with Ancon Staifix RT2 cavity wall ties, suitable for cavities up to 150 mm wide, staggered in alternate rows and spaced 750 mm horizontally and 450 mm vertically. All cavities closed at eaves, door and windows openings with Thermabate or similar insulated cavity closers. 150 mm cavity. 150mm full fill cavity with 150mm Drithern 32 Ultimate, installed in strict accordance with the manufacturers instructions. Blockwork lined internally with 12.5 mm plasterboard on dabs to provide a maximum 'U' value of 0.22W/m2K. Plasterboard returned into all window and door openings and with continuous band of adhesive around all openings at base and heads of wall and at external corners, in accordance with Accredited Construction Details with details checked on site to maintain quality assurance. All new internal solid walls to comprise of 100 mm skins of dense concrete blockwork (7KN) with 12.5 mm Gyproc Wallboard on dabs with skim finish. Check with the manufacturer regarding the chosen insulation's suitability for building. All masonry work to comply with BS 5268: P3. Clay bricks to BS 3921. Engineering bricks to BS 3921. Concrete bricks to BS 6073. Manufactured stone complying with BS 6457. Mortar: Selection of mortar used below dpc to be in accordance with BS 5268: Part 3 All new brickwork to be bonded to existing unless foundations design differs and cavities to be maintained - alternatively used proprietary bolted starter anchor system together with inserted insulation V.d.p.c. (installed in strict accordance with manufacturers recommendations) All return corners to be min 665mm unless otherwise indicated. Where a former external wall becomes internal as a result of the extension - check condition of exg H.D.P.C's and clean out existing cavities. Where defective - insert injection dpc. Limelite cement based water proof rendering to be used to finish off walls (not gypsum based plaster). New Internal Blockwork Walls (if applicable) to provide leaf of external wall and to be taken down to a suitable bearing structure on concrete foundation to be agreed with Building Control. Contractor to check indicated walls are non load-bearing prior to removal. If found to be load-bearing seek structural engineer's advice as to additional support required.

Existing Structure

The existing structure including foundations, beams, walls and lintels carrying new and altered loads are to be exposed and checked for adequacy to support new imposed 'dead' and 'live' loading conditions prior to commencement of work and as required by the Local Authority Building Control Officer.

Cavities

To be continuous with existing closed at eaves with Superlux

Cavity fill

Weak concrete mix. Fill in cavity to be 225 mm below DPC level

Floors to ground and first floor

All structural timber to be stress grade C16 and double vacuum preservative treated - unless otherwise indicated on construction notes

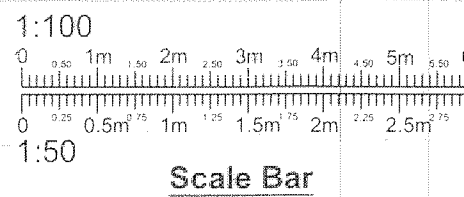
Moisture resistant floor (20mm chipboard/marine ply) or preservative treated min 20mm timber boarding to be provided to kitchens and bathrooms. Joists 175x50@400 centres and spans are indicated on floor plans - Contractor to check indicated load-bearing walls are suitable to carry floor load. If found to be non load-bearing seek structural engineer's advice as to additional support necessary to be provided. Provide 100mm thick Kingspan Koaltherm T770 floorboard laid between all 100mm thick Kingspan Koaltherm T770 floorboards and skim finish to underside. Notches - no deeper than 0.125 times depth of joist and not cut closer than 0.07 of the span, nor further over than 0.25 times the span. Holes - should be no greater diameter than 0.25 times the depth of joist; should be drilled of the neutral axis; and should not be less than 3 diameters (centre to centre) apart; and be located between 0.25 and 0.4 times span from the support. No notches or holes to be cut in roof rafters, other than supports where the rafter may be birds mouthed to a depth not exceeding 0.33 the rafter depth. (NO NOTCHING OF ROOF TIMBERS AND FLOOR TRIMMER BEAMS IS PERMITTED) Double floor joists bolted together to be provided under stud walls and both ribs - timbers bolted together using 51mm diameter double sided round toothed plate connectors and M12 grade 4.6 bolts at 600mm centres. Stud walls to be min 75mm x 50mm s.w studs at 400mm c/s - infilled 10kg/m3 quilt with 12.55. Ten (10kg/m3) plasterboard and skim finish. Where floor span more than 2.5m - provided strutting as follows: Spans > 4.5 - strutting at third spans / Span < 4.5 - strutting at mid span. Solid strutting - min 38mm thick timber extending to at least three quarters the joist depth. Harringbone strutting if not using the proprietary galvanized steel system, timber to be min 38x38mm (max joist spacing three times the joist depth e.g. 150 x 50 joist, herringbone strutting can only be used up to a 450mm centres

New roof construction

Marley 'modern' type smooth Grey interlocking roof tiles at max 320 mm gauge (min 100 mm headlap) on 38 x 25 tanalized s.w. Battens on 150 x 50 treated s.w. Rafters at max. 450 mm centres supported on 100 x 75 treated s.w. Wallplate at eaves level and on 150 x 63 treated s.w. Poleplate at top of roof, rafterbolted to existing rear external wall. Clip all perimeter tie i.e.: eaves, verges and top course and every tile in every 4th course using proprietary aluminium clips. Provide continuous ridge vents. Provide 3 number tile vents located below ridge line of mono pitched roof to give through ventilation

Roof void Insulation (U value 0.15W/m2K)

To be 2 layers, 150mm thick Rockwool laid between joists and cross-laid with 150mm Rockwool to give total thickness of 300 mm and a U value of 0.15W/m2K



Truss roof

Conditional approval to be obtained prior to commencement of work. Truss calls to be submitted to L.A. On initial visit to site. Trusses to be wind braced in accordance with BS 5268 part 3 1985. Roof tiles on 19 x 38 mm sw battens on untearable roofing felt on new trusses at 600 centres Wind loading shall comply with BS:CP3, Ch V Part 2 (1972), provide continuous ridge vents.

Eaves

Provide cross flow via eaves ventilators fixed between the trusses to vent roof space to BS 5250. Continuous 25 mm gap.

Verges

To be formed with interlocking dry verge system fixed in accordance with manufacturer's instructions. Dry verge to overhang 19 mm cellular extrusion bargeboards.

Fixings

Strap down new roof and ceiling with 1000 x 5 x 38 mm mild steel straps at 2 centres fixed across two rafters/joists with 3.35x50 wire nails at rafter and ceiling tie level

Flat roof Vented

To be 3 layers of felt top layer 350 ft finish, 10 mm limestone chippings bottom based on 15 mm exterior grade marine plywood decking with sw fixings to give fall of 1:60. Provide 175 x 50 mm sw flat roof joists at max 400 mm centres, trim out with double joists around any roof openings.

Stairs

New Oak internal staircase in configuration shown to comprise of 250 mm treads (minimum 220 mm) and 209 mm risers (maximum 220 mm) to provide maximum pitch of staircase 39.9 degrees with minimum 2 metres head room throughout, hand rail at 900 mm height above pitch line/landing, complete with vertical balustrades at maximum 100 mm centres, all in accordance with Approved Document K of Building Regulations.

Soil and vent pipe

100 mm diameter upvc with airtight rodding access above floor level and sealed into Hepworth 'Hepseal' drain connector at floor level. Stack taken up and terminated 450 mm above springing level with pvc bird cage (900 mm above any opening lights)

Kitchen sink

To have 75 mm deep seal trap into 42 mm diameter upvc waste into back inlet gully

Lead collar

Min up-stand 150 mm to new s & vp

New En-Suite

Provide mechanical extract ventilation to give min extract rate of not less than 15 litres per second which can be run intermittently but has a 15 minute over-run. Extract fan to be ducted to external air via 100mm dia flexible duct to terminate on outside wall at fitted grille. Extract fans to be positioned less than 400mm below ceiling. Ducts to be connected appropriate extract and discharge grilles (min 85% of the duct free area) with back draught device fitted to prevent draughts

New 50mm shower and bath, 40mm sink and 100mm wc waste to be provided to new en-suite and bathroom and connected to new soil and vent pipe. Anti-vac deep seal traps to be fitted to internal pipes. No opposed waste connections to be made within 200mm of W.C. connection with SVP. Boarding used as a flooring, to be moisture resistant. Chipboard of the grades with improved moisture resistance specified in BS 7331:199091 or BS EN 312 Part 5:1997992. It should be laid, fixed and jointed in the manner recommended by the manufacturer. To demonstrate compliance the identification marks should be facing upwards. Any softwood boarding should be at least 22mm thick and from a durable species 93 or treated with a suitable preserver

Non-loadbearing Walls

All non-loading partitions to comprise of 75x50 mm softwood studs@ 450 mm centres, and 75 mm offwood noggin 8900 mm centres, with continuous header and sole plates, and with 15 mm Gyproc Wallboard (minimum mass per unit area 10Kg/m2) and 15 mm Gyproc moisture resistant board to bathroom, en-suite and WC, joints sealed complete with skim finish to both sides. All stud partitions to have 60 mm thick Rockwool Flexi insulation quilt between studs (minimum density 10kg/m3).

Double Floor Joists

Bolted together to be provided under stud walls and bath tubs. Timbers bolted together using 51mm diameter double sided round toothed plate connectors and M12 grade 4.6 bolts at 600mm centres

First Floor Partition walls to roof void (room in roof).

Provide 10mm thick Kingspan Koaltherm K12 insulation board within framing (U Value of 0.15 W/m2K), 25 mm over frame. Finish internally with 12.5mm foil backed plasterboard and skim.

Sanitary fittings to new bathroom

W.C. To have dual flushing action to N/A/W/A regulations and to have 25 mm overflow direct to external air. Connect with 'p' trap to 100 mm diameter upvc soil branch pipe connected to new 100 mm diameter upvc s & v. Lavatory basin to have 75 mm deep seal trap and 38 mm diameter upvc waste connected to 50 mm diameter combined upvc waste connected to new 100 mm diameter upvc s & v. Shower to have 75 mm deep seal anti vac trap and 50 mm diameter upvc waste connected to 50 mm diameter combined upvc waste as lavatory basin. Bath to have 75 mm deep seal anti vac trap and 42 mm diameter upvc waste connected to new 100 mm diameter upvc s & v. Connect all fittings to new hot and cold system. All sanitary pipe work to be carried out in accordance with BS 5572:1978. Provide temperature mixing valve to bath or shower to prevent the temperature of water delivered not to exceed 48degreesC. All as per (Part 6), Hygiene.

Gutters and fascia

100 mm upvc gutter connected to existing falls to outlet. Fixed to 19 mm exterior grade plywood fascia boards. Provide 12 mm exterior grade plywood soffits fixed directly to underside rafters with continuous upvc soffit ventilators to vent roof space to BS 5250.

PROJECT

PROPOSED ENLARGEMENT OF EXISTING KITCHEN AND NEW REAR DORMER. DRAWING TITLE PROPOSED LAYOUT AND SECTION.

CLIENT MISS K. BRODERICK. ADDRESS 20, WOODHOUSE STREET, GORTON, MANCHESTER.

SCALE 1:50@A1 DATE SEPT 2023. DRAWING No FO 09225792/11. A