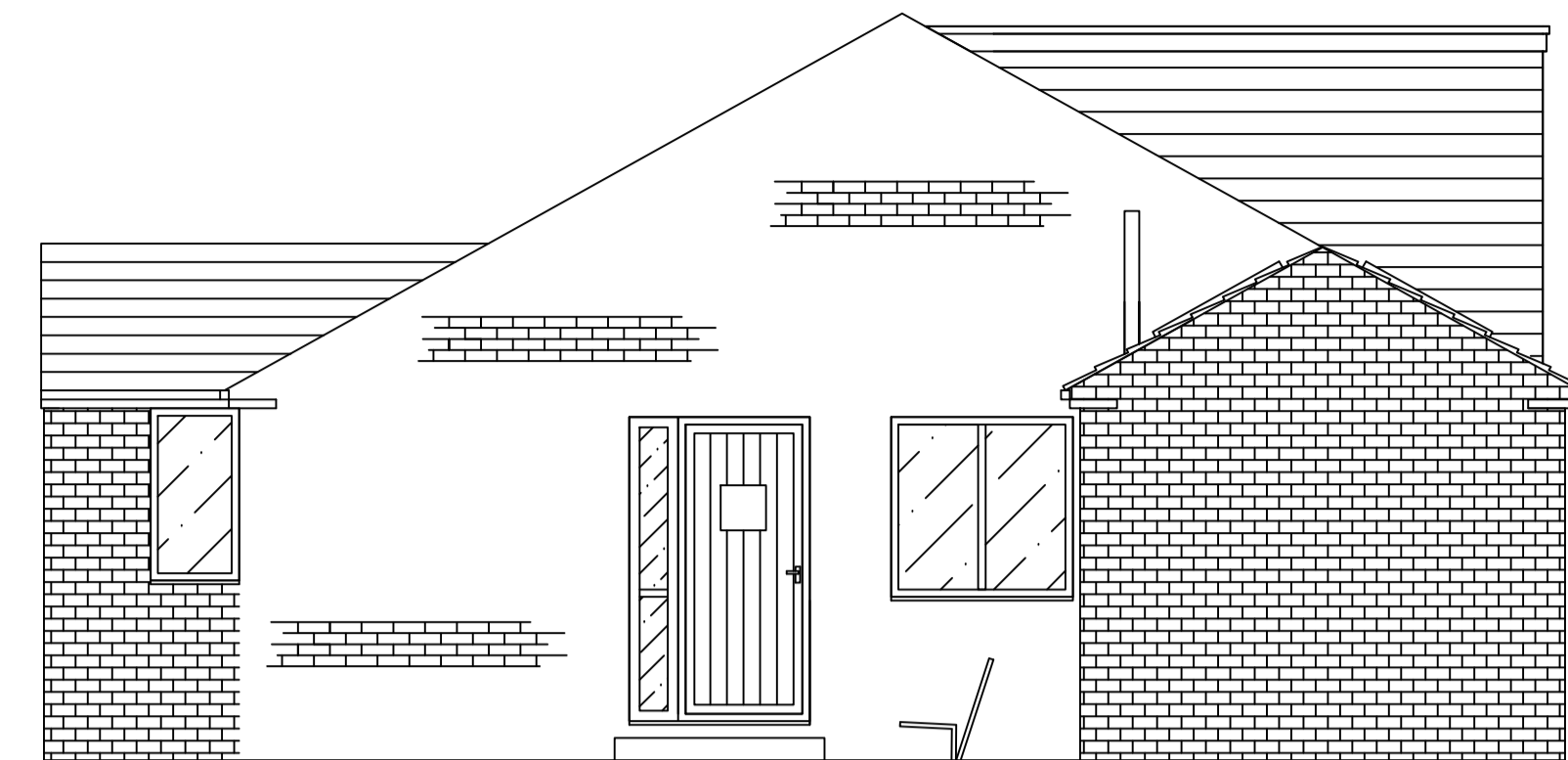


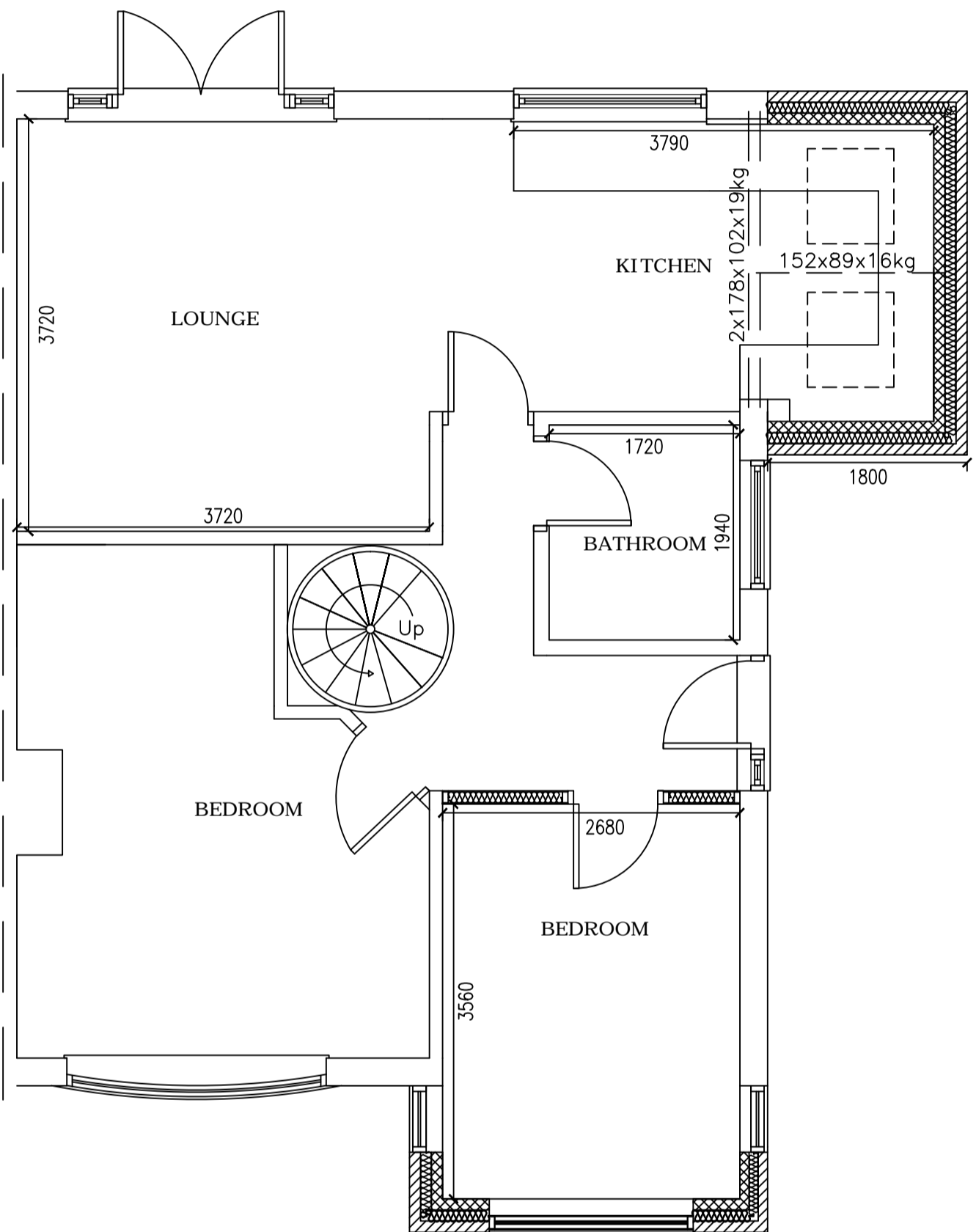
PROPOSED FRONT ELEVATION 1800



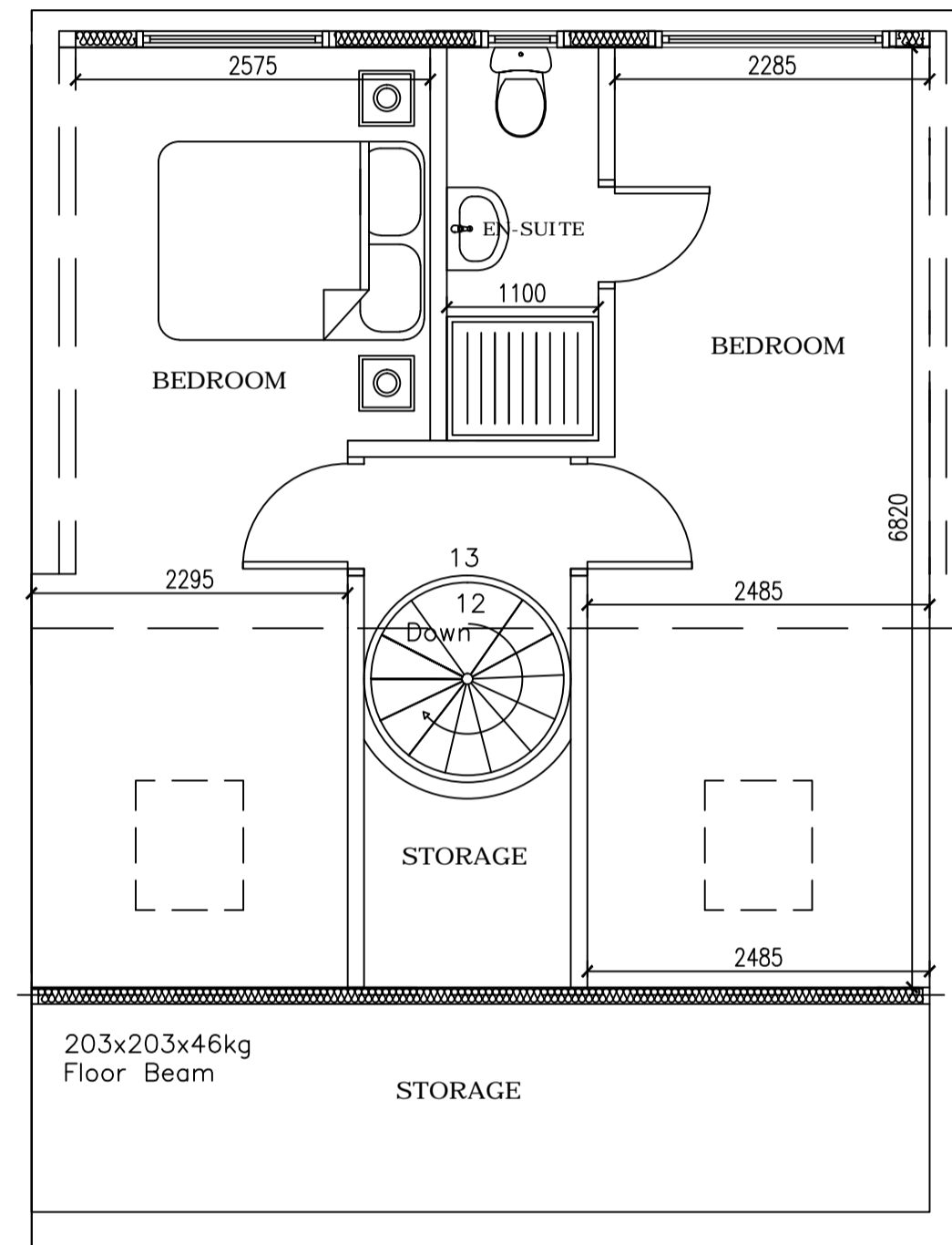
PROPOSED REAR ELEVATION



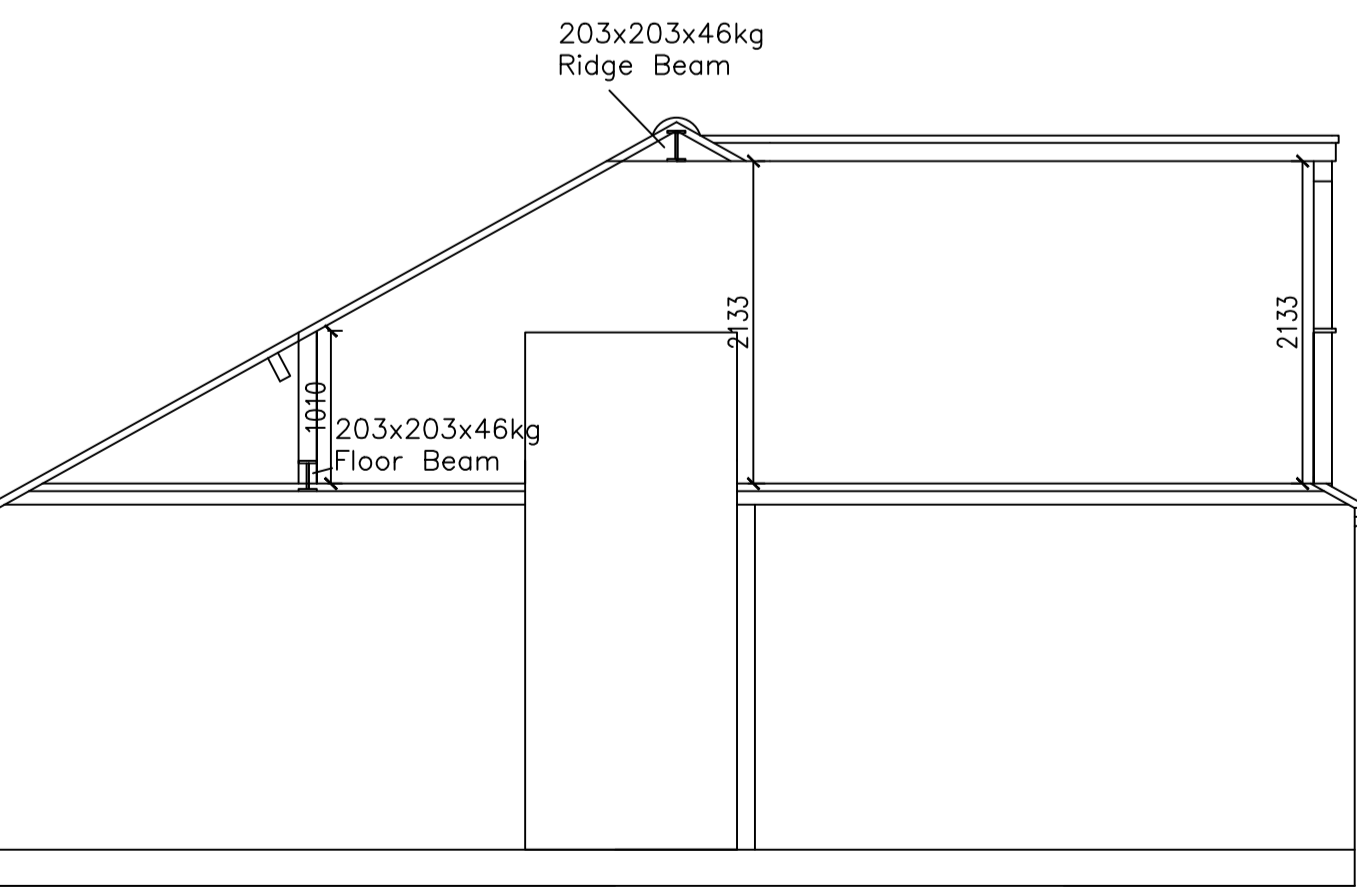
PROPOSED SIDE ELEVATION



PROPOSED GROUND FLOOR PLAN



PROPOSED FIRST FLOOR PLAN



PROPOSED SECTION

FOUNDATIONS

NOTE. It is recommended that a trial hole be dug on the site to determine the existing footing type and ground conditions. Where an existing single storey structure is to be built on top of the existing structure, the base of the footing to determine its suitability to carry additional loading so that any design work can proceed if required during the early stages of the application process. Building control records may also assist with local area knowledge e.g. shallow mining etc. Builder should initially allow for a strip footing of 900mm minimum dig. Client should note that anything over this as required by the inspector will incur extra design and building costs.

All Foundations to be excavated to a depth to satisfy building control inspector. any excavations within 1m of new or existing drains to be taken below invert level, any new or existing drains passing through substructure to be protected by bridging lintels. Footings to be traditional concrete strip type minimum dimension 600mm x 600mm thick and are not to be eccentrically loaded without further design work. Builder must check that footing type has been approved and no additional design work is required before pouring concrete. New walls to be built to ensure minimum 150mm toe to concrete footing each side.

STRUCTURE

Walls to be cavity construction throughout. Outer leaf to be of facing brickwork to match existing style with 100mm fully insulated cavity with Dritherm 32 or 34. All cavity work to be tied with ties at rate of 5 per m2 and at every course at openings. Inner leaf to be medium density blocks with plasterboard and skim finish achieving 0.28 W/m2k value. External return corners always to be a minimum of 665mm. Cavity only to be closed at openings with insulated closer. Ensure all new work is tied to existing using proprietary galvanised jointing system or by bonding into existing and ensure saw cut with dpc between where new cavity meets existing structure. Cavity below ground level to be filled with weak mix concrete to within 150mm of ground level and dpc to be provided to both leaves at min 150 mm above ground level linked to dpm/radon barrier with appropriate cavity tray and weep holes. If a timber floor is used then a cavity tray should be used over the airbrick liners. Ensure blocks used below ground level are trench blocks. Build up corners on existing kitchen bay with cavity work and replace with smaller windows.

STRUCTURAL CHANGES

Any structural work is to be to structural engineer's details for foundations, retaining walls, roof timbers, beams, padstones and support nibs to ensure overall stability and work should not commence until these have been specifically approved by the Building Inspector Neil Marsden 07712 324945 and builder should check with agent. Therefore kitchen designs should not proceed until nib sizes have been determined. All steelwork is to receive 1/2 hour fire protection and any beams above 3m span should be bolted together at either end and mid-span. Provide all necessary temporary supports when demolishing walls and check for any services which should be made safe. Steels should be placed as high as possible subject to direction of first floor joists and always be a minimum of 2000mm finished headroom. Calculations will be submitted a minimum of 14 days prior to installation of steels and builder should contact agent in time to allow this.

ROOF

Form new roof using 150mm x 50mm rafters at 450mm centres which should be doubled up to sides of velux window. Fix noggins between rafters at gable end to hold straps to retain brickwork verge. Straps to be fixed to noggins and turned down cavity two per end elevation. Use a 100mm x 75mm wall plate to the new inner leaf blockwork fixed down with straps at 1m long positioned at 1.8m centres and plugged and screwed to the blockwork. Ensure a good birds mouth cut to the rafters over the lower wall plate and use mechanical fixings. Use 100mm insulation between the rafters and 52.5mm insulated plasterboard across the rafters. Cover roof with Tyvek or similar breathable felt draped between rafters with 38mm x 25mm tanalised battens and tiles/slate to match existing fitted to manufacturer's instructions for pitch (30 degrees approximately) and exposure conditions. Use same roof structure over existing kitchen bay.

WINDOWS, DOORS AND VENTILATION

All windows and doors are to be of UPVC material. Areas of windows shown are to meet customer's specifications the total area of glass should not exceed 25% of the extended floor area plus any existing external openings enclosed. Windows to meet current regulations for safety and thermal insulation i.e. max U value 1.6W/m2K (1.8 W/M2K for doors). Therefore to be double glazed units (4mm) minimum 16mm air gap (argon filled) with low 'E' coating (e.g. Pilkington's K glass), ensure safety glass e.g. toughened is used to areas below 800mm and in all doors and glass panels adjacent doors and clearly marked to BS 6206. Ensure trickle ventilation of 8000mm2 is achieved and 1/20th floor area openings to habitable rooms and 4000mm2 to non-habitable rooms. First floor habitable rooms should provide means of escape with a minimum opening area of 0.33m2 with a minimum width of 450mm and a maximum cill height from finished floor level of 1100mm.

FLOOR

The whole of the ground floor extension footprint is to receive a 2000 gauge membrane as a radon barrier taken across the cavity below ground level laid on sand blinding on well compacted hardcore. The floor is to be a well compacted hardcore, sand blinding dpm/radon linked to dpc, 120mm insulation board with off-cuts to the perimeter and a concrete floor slab finish with A142 mesh to enable final floor finish to be level with existing. Alternatively (subject to builder preference and inspectors approval depending on ground levels and ability to achieve ventilated sub-floor) use a timber suspended floor using 150mm x 50mm joists at 400mm centres with mid-span strutting and sleeper walls (with dpc) positioned to ensure maximum joist span is 3m (2.5m if 125mm x 50mm joists used) and 120mm suspended insulation with 225mm x 150mm air grates at 1.8m centres.

SUNDRY

Finish all new walls and ceilings with 12.5mm plasterboard and skim finish and all necessary joinery items. Provide thermostatic valves to any new radiators (system should be surveyed by qualified engineer to ascertain suitability for additional output). Provide at least 25% of all new light fittings as energy efficient light fittings capable of only receiving low energy bulbs.

The client should be consulted reference socket outlets, lighting requirements and radiator positions in order to support new room layout and usage and also any exterior lighting as required. Allow for outside tap and also security PIR lighting and decorative lighting to rear as required. Where applicable separate wc's to have 6 litre extract fan operated with light switch and with 15 minute over-run. Bathrooms, en-suites and utility rooms to have 15 litre extract fans and kitchen areas to have 60 litre extract fan or 30 litres if over a cooker.

STOOTHING WALLS

Ensure joists are doubled up under positions of any stothing walls where running parallel and in all trimming situations i.e. stairs and around any chimneys (allow 50mm clearance). Walls to be 75mm x 50mm timber framing with min 25mm sound deadening insulation and double 12.5mm plasterboard and skim both sides.

Any boiler work is to be carried out by a GAS SAFE registered person to comply with Part J for all installation and flue outlet positions.

FIRE PROTECTION

Provide mains wired inter-linked smoke alarm with battery back-up in landing positions shown marked (SA).

DRAINAGE

Existing system appears to be combined, upon further inspection if separate system is found then this should be maintained records may show water authority adopted drains due to age of property building control will advise and any water authority conditions should be complied with. At an early stage builder should discuss with inspector feasibility of taking all additional surface water to a soakaway of 1m3 at a point 5m from the building. Suggested connections are shown, system to be investigated on site and all runs and final connections to be agreed with building inspector. Use 100mm upvc gutters and 75mm fall pipe. Any new underground drainage is to be 100mm upvc gutters to drain to 75mm fallpipes all securely fixed draining to existing mains system. All new underground drainage runs should use 100mm underground plastic drainage laid on pea gravel to a 1:40 fall, all new rain water gullies entering combined system should do so via traps

LOFT CONVERSION

ROOF STRUCTURE

All structural changes are to be to structural engineer's details including rafters, steel beams, floor joists and trimmers as required.

Fit all new steel work in positions i.e. steel ridge beam and steel floor beam below the front facing dormer according to structural engineer's sheets. New steel floor beam to SE details to carry floor and structural framing supporting rafters and dormer as appropriate. New floor joists to be 175mm x 50mm at 400mm centres spanning between new steel floor beams and load bearing wall. Check any existing lintels which may be required to carry additional loads e.g. over first floor doorways for suitability. Dormer roofs to be 150mm x 75mm timbers with 120mm kingspan insulation between maintaining an airgap over the insulation with through ventilation from back to front. Cover with 75mm to 0mm firing pieces and 20mm exterior grade ply with/breglass finish and upvc gutters and fall pipes.

Construct dormers with 100mm x 50mm timbers doubled up on corners and built off doubled up rafters. Cover dormers with plywood externally to provide diaphragm stability with 90mm insulation and foil backed plasterboard with building paper, tanalised battens and tile hanging finish to match existing roof covering. Upgrade (or replace) each remaining rafter with 150mm x 50mm timbers at same centres due to removal of purlins. Insulate roof slope with 100mm of Kingspan TP10 insulation boarding between rafters and a further 52.5mm of K18 boards across the rafters or 90mm between rafters and Tri-iso super 10 fitted across rafters (or thinsulate) strictly in accordance with manufacturers recommendations and subject to LA approval of the product. Followed by 12.5mm plasterboard and skim finish all to achieve 0.18 W/m2k. Timber framing forming dwarf walls and dormer to be insulated with 70mm of Kingspan TW55 between the studs and a further 20mm over the framing with taped joints and plasterboard finish. Party wall and end gable walls should also be insulated with 90mm TP10 in timber framework all walls to be finished with 12.5mm plasterboard and skim. Condensation control measures/roof ventilation to the residual roof voids should be provided via a soffit vent to the dormer. A ridge vent and tile vents to the front if the roof is not to be recovered and a breathable felt used.

WINDOWS

All windows to dormer to be 6mm toughened double glazed units with low E coating and argon filled all to achieve 1.6 w/m2k and to provide 5000mm2 trickle ventilation and 1/20th floor area opening ventilation. Velux windows should also provide 5000mm2 trickle ventilation.

FLOOR

The main floor area is to consist of new 175mm x 50mm SC3 joists at 400mm centres with mid span strutting, spanning between new steel floor beams and centre load bearing walls. Doubled up joists should be used to trim stairwell and also below positions of any stothing walls running parallel. Floor to be sound proofed with 100mm mineral wool and under drawn for fire protection with 12.5mm plasterboard and skim finish. Finish floor with 19mm moisture resistant flooring grade chipboard. The residual roof voids front and rear should receive 270mm of mineral wool laid in 2 layers.

STAIRCASE

Stairs should be measured on site by manufacturer to determine correct rise and going to suit storey height change. They should comply fully with Part K and have a rise of no more than 205mm and a going of not less than 220mm (minimum 50mm on winders) with an overall pitch of 42 degrees. A hand rail should be provided at a point 900mm above string line and banister rail protection at the top 1m high with maximum 100mm spacing between vertical rails. The new staircase should achieve 2m headroom on rise and a full landing should be provided at the head of the stair flight with 2m headroom.

FIRE PROTECTION

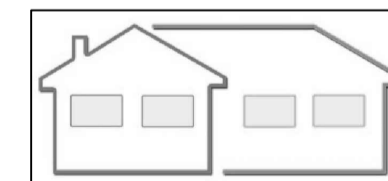
Provide mains operated inter-linked smoke detection (SA) with battery back up in landing positions shown.

STOOTHING WALLS

Ensure joists are doubled up under positions of any stothing walls where running parallel and in all trimming situations i.e. stairs and around any chimneys (allow 50mm clearance). Walls to be 75mm x 50mm timber framing with min 25mm sound deadening insulation and double 12.5mm plasterboard and skim both sides. Access should be formed for storage to the eaves area with insulation and boarding.

SUNDRY

Fit 25% energy efficient light fittings capable of only receiving energy efficient bulbs and ensure all new radiators have thermostatic valves; builder should check with customer and agree extent and position of radiators, lighting points and sockets for pricing and fitting purposes. En-suite to have 15 litre extract fan with 38mm waste pipes and deep seal traps taken to boss on existing soil pipe and connected to existing soil stack externally which should be taken 900mm above any opening windows within 3m.



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PROPOSED LOFT CONVERSION WITH FRONT AND REAR DORMERS AND SIDE EXTENSION FOR

Ms JULIE DAWSON PRETT
102 EASTFIELD CRESCENT
BARNSELY S75 6DN

DRAWING 2 OF 2
PROPOSED ELEVATIONS AND FLOOR PLANS
SCALE 1:50 AT A1 DATE JUNE 2015