

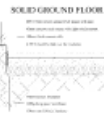
FOR PLANNING ONLY

TRENCH FOUNDATION
Provide 750mm x 600mm trench fill foundations, concrete mix to conform to BS EN 206-1 and BS 8002-2. All foundations to be a minimum of 1000mm below ground level, exact depth to be agreed on site with Building Control Officer to suit site conditions. All constructed in accordance with 2004 Building Regulations A1/2 and BS 8004:1986 Code of Practice for Foundations. Ensure foundations are constructed below invert level of any adjacent drains. Base of foundations supporting internal walls to be min 600mm below ground level. Substrate resistant cement to be used if required. Please note that should any adverse soil conditions or difference in soil type be found on any major tree roots excavating, the Building Control Officer is to be contacted and the advice of a structural engineer should be sought.

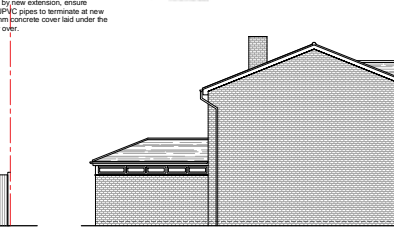
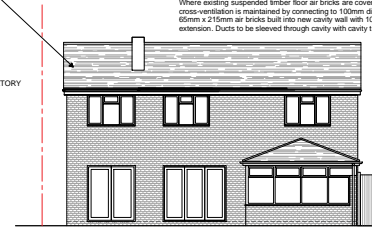
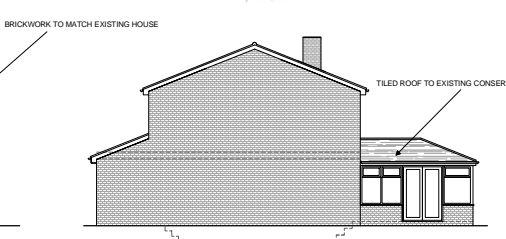


WALLS BELOW GROUND
All new walls to have Class A blockwork below ground level or alternatively semi engineering blockwork in 1:4 masonry cement or equal equivalent specification. Cavities below ground level to be filled with lean mix concrete min 225mm below damp proof course. Or provide lean mix beddill at base of cavity wall 150mm below damp course level to fall to weepholes.

SOLID FLOOR INSULATION UNDER SLAB
To meet min U value required of 0.22 W/m²K
Solid ground floor to consist of 150mm compressed self-warmed hardcore. Blinded with 50mm sand bedding. Provide a 1200 gauge polythene DPM, DPM to be lapped in min DPC in walls.
Floor to be insulated over DPM with 75mm Kingspan Nocturnal K1.
25mm insulation to continue around floor perimeters to avoid thermal bridging. A VCL should be laid over the insulation boards and turned up 100mm at room perimeters behind the sitting all joints to be lapped 150mm and sealed. Provide 100mm ST2 or Geri ground bearing slab concrete mix to conform to BS 8502-2 over VCL. Finish with 65mm sand/cement bedding finished with light mesh reinforcement.
Where drain runs pass under new floor, provide A12 mesh. 1.0m wide within bottom of slab min 50mm concrete cover over length of drain.
Where existing suspended timber floor air bricks are covered by new extension, ensure cross-ventilation is maintained by connecting to 100mm dia. DPC pipes to terminate at new 60mm x 215mm air bricks built into new cavity wall with 100mm concrete cover laid under the extension. Ducts to be sleeved through cavity with cavity tray over.



FULL FILL CAVITY WALL
To achieve minimum U Value of 0.28 W/m²K
New cavity wall to comprise of 100mm facing brick to match existing. Fill the cavity with 85mm Dinterm² cavity insulation on manufacturer's details. Inner leaf to be 100mm lightweight block. K-value 0.16. (Aercrete, Calcium silicate). Top/bottom courses standard. Internal finish to be 1.25mm plasterboard on dabs. Walls to be built with 1:1 cement mortar.
WALL TIES
All walls constructed using stainless steel vertical twist type retaining wall ties built in at 750mm ctrs horizontally, 450mm vertically and 225mm ctrs at reveals and corners in staggered runs. Wall ties to be suitable for cavity width and in accordance with BS 5262-6.1. 1996 and BS EN 845-1: 2003



AS PROPOSED FRONT ELEVATION - 1:100

AS PROPOSED SIDE ELEVATION - 1:100

AS PROPOSED REAR ELEVATION - 1:100

AS PROPOSED END ELEVATION - 1:100

THIS BAR SHOULD SCALE 5M @ 1:100

CAVITIES
Provide cavity trays over openings. All cavities to be closed at eaves and around openings using Thermabatts or similar non combustible insulated cavity closers. Provide vertical DPCs around openings and abutments. All cavity trays must have 150mm upstands and suitable cavity sweep holes (min 2) at max 900mm centres.

INTELS
For uniformly distributed loads and standard 2 storey domestic loadings only
Lintels will be to be equal to wall thickness. All lintels over 700mm and internal door openings to be 65mm deep pre-stressed concrete plank lintels. 150mm deep lintels are to be used for 800mm sized internal door openings. Lintels to have a minimum bearing of 150mm on each end. Any existing lintels carrying additional loads are to be exposed for inspection at commencement of work on site. All pre-stressed concrete lintels to be designed and manufactured in accordance with BS 8110, with a concrete strength of 50 or 40 N/mm² and incorporating steel strands to BS 5896 to support loadings assessed to BS 5971 Part 1.
For other structural openings provide proprietary insulated steel lintels suitable for spans and loadings as specified in Approved Document A and steel manufacturer's standard tables. Stop ends, DPC trays and sweep holes to be provided above all externally located lintels.



INTERNAL STUD PARTITIONS
100mm x 50mm softwood treated timbers studs at 400mm ctrs with 50 x 100mm head and sole plates and solid intermediate horizontal nogging at 1/3 height or 400mm. Provide min 100mm² density acoustic soundproof quilt tightly packed (eg. 100mm Rockwool or Rockwool mineral fibre sound insulation) in all voids the full depth of the stud. Partitions built off doubled up joists where partitions run parallel or provide nogging where at right angles, or built off DPC on thickened concrete slab if solid ground floor. Walls faced through with 12.5mm plaster board with sarn plaster finish. Taped and jointed complete with beads and stops.

SAFETY GLAZING
All glazing in critical locations to be toughened or laminated safety glass to BS 6206, BS EN 14179 or BS EN ISO 12543-1:2011 and Part K (Part N in Wales) of the current Building Regulations.

ESCAPE WINDOWS
Provide emergency egress windows to any newly created first floor habitable rooms and ground floor inner rooms. Windows to have an unobstructed openable area of 450mm high x 450mm wide, minimum 0.3m² in total. The bottom of the openable area should be not more than 1100mm above the floor. The window should enable the person to reach a place free from danger from fire.



INTERMEDIATE FLOORS
Intermediate floor to be 20mm R4g flooring grade chipboard or floorboards laid on C24 joists at 400mm ctrs (see engineer's calculation for sizes and details). Lay 100mm Rockwool mineral fibre quilt insulation min 100mm² or equivalent between floor joists. Ceiling to be 12.5 Fine-Line plasterboard with sarn plaster seal and finish. Joints spans over 2.5m to be situated at mid span using 38 x 38mm herringbone strutting or 38mm solid strutting (at least 2.0 of joist depth). In areas such as kitchens, utility rooms and bathrooms, flooring to be moisture resistant grade in accordance with BS EN 312:2010. Identification markings must be laid upper most to allow easy identification. Provide lateral restraint where joists run parallel to walls. Floors are to be strapped to walls with 100mm x 30mm x 6mm galvanneal mild steel straps or other approved in compliance with BS EN 845-1 at max 2.0m centres, straps to be taken across minimum 3 no. joists. Straps to be built into walls. Provide 30mm wide x 1/2 depth solid nogging between joists at strap positions.

NEW AND REPLACEMENT WINDOWS
New and replacement windows to be double glazed with 16mm argon gap and soft coat low-E glass. Window Energy Rating to be Band C or better and to achieve U-value of 1.6 W/m²K. The door and window openings should be limited to 25% of the extension floor area plus the area of any existing openings covered by the extension.

NEW AND REPLACEMENT DOORS
New and replacement doors to achieve a U-Value of 1.80 W/m²K. Glazed areas to be double glazed with 16mm argon gap and soft coat low-E glass. Glass to be toughened or laminated safety glass to BS 6206, BS EN 14179 or BS EN ISO 12543-1:2011 and Part K (Part N in Wales) of the current Building Regulations.



EXTRACT TO BATHROOM
Bathroom to have mechanical vent ducted to external air to provide min 15 litres / sec extraction. Vent to be connected to light switch and to have 15 minutes over run if no wind in room. Internal doors should be provided with a 15mm gap below the door to aid air circulation. Extraction provided in accordance with the Domestic Ventilation Compliance Guide. Interim extract fans to BS EN 13141-4. All fixed mechanical ventilation systems, where they can be inspected and adjusted, shall be commissioned and a commissioning notice given to the Building Control Body.

ELECTRICAL
All electrical work required to meet the requirements of Part P (Electrical safety) must be designed, inspected and tested by a competent person registered under a competent person self certification scheme such as NICEIC certification Ltd. IBEI, NICEIC Certification Services or Zurich Ltd. An appropriate BS7171 Electrical Installation Certificate to be issued for the work by a person competent to do so. A copy of a certificate will be given to Building Control on completion.

INTERNAL LIGHTING
Install low energy light fittings that only take lamps having a luminous efficacy greater than 45 lumens per circuit watt and a total output greater than 400 lamp lumens. Not less than three energy efficient light fittings per four of all the light fittings in the main dwelling spaces to comply with Part L of the current Building Regulations and the Domestic Building Services Compliance Guide.



ABOVE GROUND DRAINAGE
All new above ground drainage and plumbing to comply with BS EN 12056-2:2000 for sanitary sewerwork. All drainage to be in accordance with Part H of the Building Regulations. Wastes to have 75mm deep anti vac bottle traps and rodley eyes to be provided at changes of direction.

WATER PIPES
Size of waste pipes and max length of branch connections (if max length is exceeded then anti vacuum traps to be used).
Wash basins - 1.7m to 2.0m pipe size for 40mm pipe
Bathrooms - 1.7m to 4.0m pipe size for 40mm pipe
WCs - 6m for 100mm pipe for single WC
All branch pipes to connect to 100mm soil and vent pipe terminating min 900mm above any openings within 3m.
Or a 110mm pipe soil pipe with accessible internal air admittance valve complying with BS EN 12280, placed at a height so that the outlet is above the trap of the highest fitting.
Waste pipes not to connect on a 3/4" within 200mm of the VIC connection.
Supply hot and cold water to all fittings as appropriate.

UNDERGROUND FLOOR DRAINAGE
Underground drainage to consist of 100mm diameter UPVC proprietary pipe to give a 1.40 minimum fall. 100mm diameter drainage. Provide 60mm diameter over 900mm water level. Showdown pipe to be covered with 100mm reinforced concrete slab over compressible material. Provide access points at all changes of direction and junctions. All below ground drainage to comply with BS EN 1401-1: 2005.



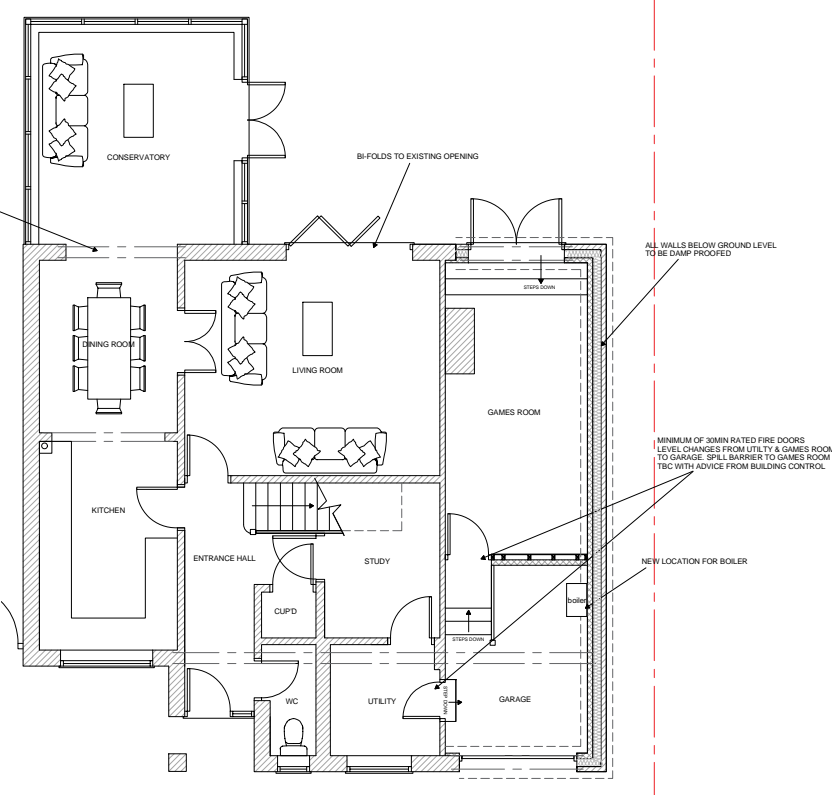
INSPECTION CHAMBERS
Underground quality proprietary UPVC 450mm diameter inspection chambers to be provided at all changes of level, direction, connections and every 45m in straight runs. Inspection chambers to have hot cover double sealed covers in buildings and be suitable for vehicle loads at all drives.

BACKGROUND AND PURSE VENTILATION
Background ventilation - Controllable background ventilation via trickle vents to BS EN 13141-3 with the window to be provided to new habitable rooms at a rate of 500mm² and to kitchens, bathrooms, WCs and utility rooms at a rate of 2500mm².
Purse ventilation - New habitable rooms to have operable area of at least 1/20th of their floor area, if the window opens more than 30° or 1/10th of their floor area if the window opens less than 30°.
Internal doors should be provided with a 10mm gap below the door to aid air circulation. Ventilation provision in accordance with the Domestic Ventilation Compliance Guide.

UNFINISHED PITCHED ROOF
To achieve U-value of 0.18 W/m²K
Timber roof structures to be designed by an Engineer in accordance with NBSIC Technical Requirement BS Structural Design. Calculations to be based on BS EN 1995-1-1. Roofing tiles to match existing on 25 x 38mm unshaded or treated boards on breathable sarking felt to relevant BS1. Gable. Certificate. Supporting structure to be 150mm girth C24 or 40mm Kingspan Nocturnal engineer's details. Rafters supported on 100 x 50mm treated sawn sleepers. Allow min 20mm air space to allow for shade of breathable felt. Insulation to be 150mm Kingspan Nocturnal thermal batts & Kingspan insulated dry-lining board comprising 12.5mm plasterboard and 25mm of insulation under rafters. 50mm sarn side of finishing plaster to be underside of all ceilings. Resistant strapping - Ceiling joists tied to rafters (if fixed roof, roof consult structural engineer). 100 x 50mm wall plates straddled over joists. Ceiling joists and rafters to be strapped to walls and gable walls, straps built into cavity, across at least 3 timbers with nogging. All straps to be 100 x 35mm galvanneal straps to be drilled in accordance to BS EN 845-1 at 2m centres.
THIS IS A GENERAL GUIDE BASED ON NORMAL LOADING CONDITIONS FOUND IN DOMESTIC CONSTRUCTION. IT IS NOT A DESIGN. ENGINEER'S DETAILS AND CALCULATIONS ARE REQUIRED. PLEASE REFER TO TRADOC DRAWING - SPAN TABLES FOR SOLID TREES MEMBERS IN FLOORS, CEILING AND ROOFS FOR DWELLINGS OR ASK YOUR BUILDING CONTROL OFFICER FOR ADVICE.



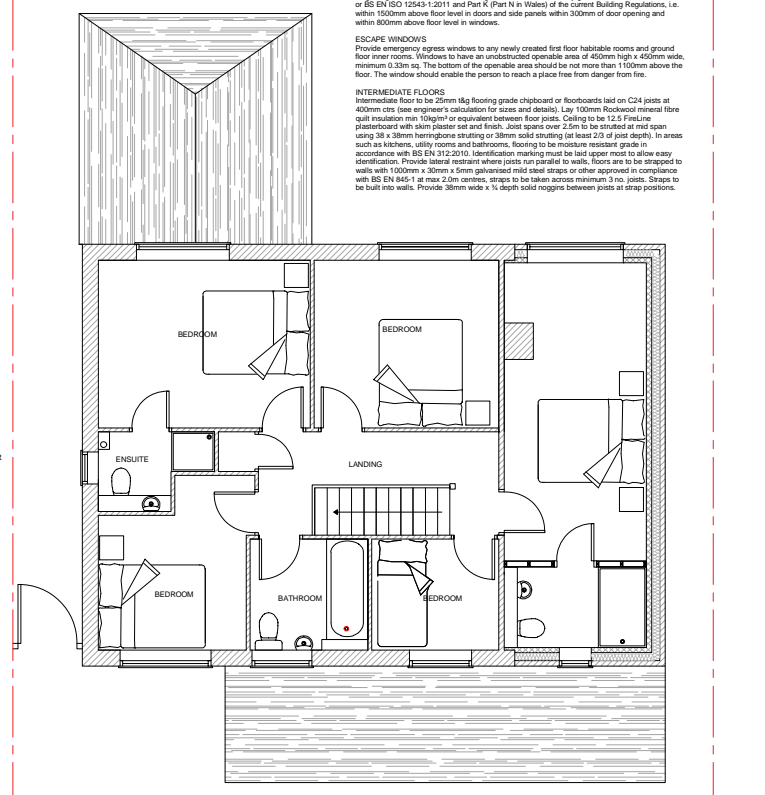
NEW LOCATION FOR BOILER
The new location for the boiler is indicated in the plan. The boiler is to be installed in the utility room, subject to the approval of the Building Control Officer.



PROPOSED GROUND FLOOR PLAN - 1:50



THIS BAR SHOULD SCALE 5M @ 1:50



PROPOSED FIRST FLOOR PLAN - 1:50

- NOTES**
- 1) ALL DIMENSIONS TO BE CHECKED ONSITE PRIOR TO CONSTRUCTION (INTERNAL DIMS MAY CHANGE DEPENDING ON EXTERNAL WALL CONSTRUCTION METHOD)
 - 2) A STRUCTURAL ENGINEER MUST BE CONSULTED FOR ALL STRUCTURAL WORKS
 - 3) WORKS TO BE CARRIED OUT BY COMPETENT, QUALIFIED CONTRACTORS
 - 4) ALL WORKS TO BE CARRIED OUT UNDER ALOCAL AUTHORITY BUILDING NOTICE ALL BUILD NOTES ARE GIVEN BASED ON STANDARD BUILDING REGULATIONS DETAILS AND MAY VARY, CONSTRUCTION METHODS MAY VARY ACCORDING TO BUILDERS PREFERENCE AND BUILDING CONTROL OFFICER REQUIREMENTS. THESE DRAWINGS ARE PRODUCED FOR PLANNING ONLY.

CLIENT/PROJECT:
MR & MRS PROSSER

PROPOSED TWO STOREY EXTENSION TO A BILBERRY GLOUSE, ABBEYMEAD, GLOUCESTER, GL4 5UT

TITLE:
PROPOSED PLANS & ELEVATIONS

SCALE:
1:100 & 1:50 @ A1

DATE:
JULY 2022

4BC-AP-002B