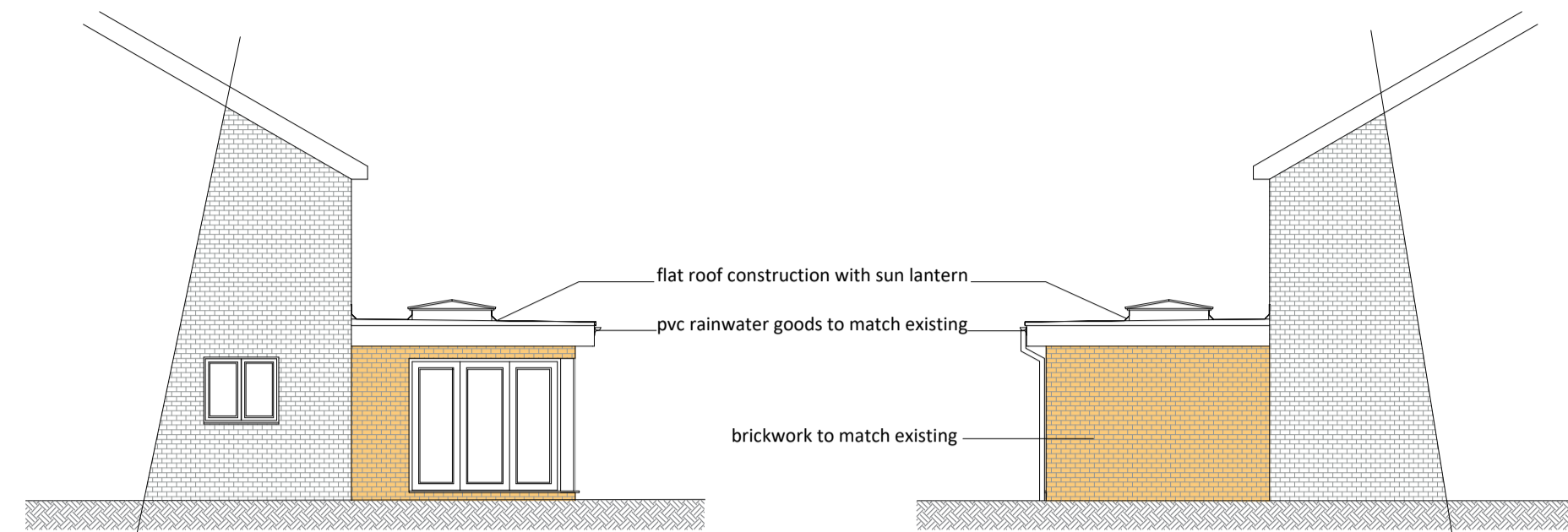


EXISTING SIDE ELEVATION  
scale 1:100



PROPOSED REAR ELEVATION  
scale 1:100

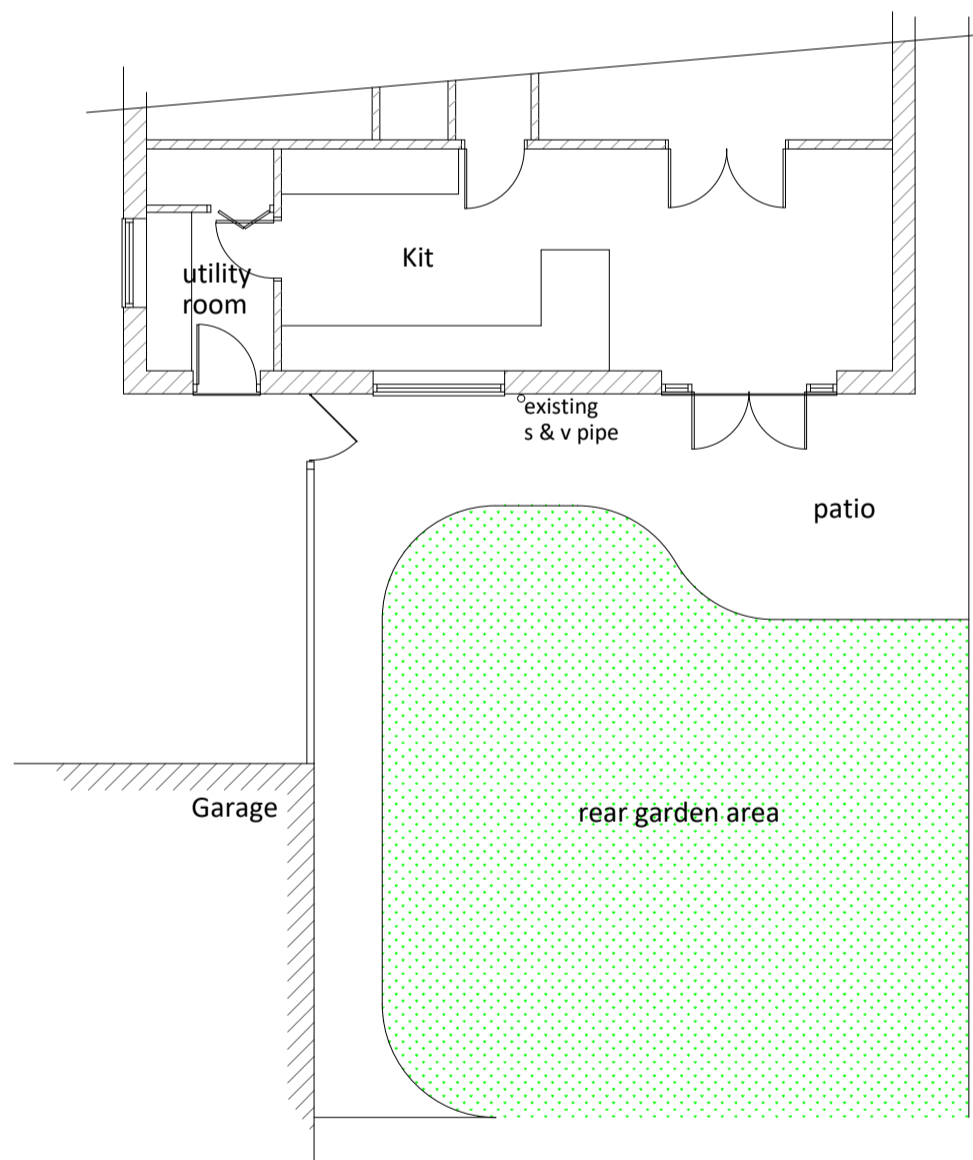


PROPOSED SIDE ELEVATION  
scale 1:100

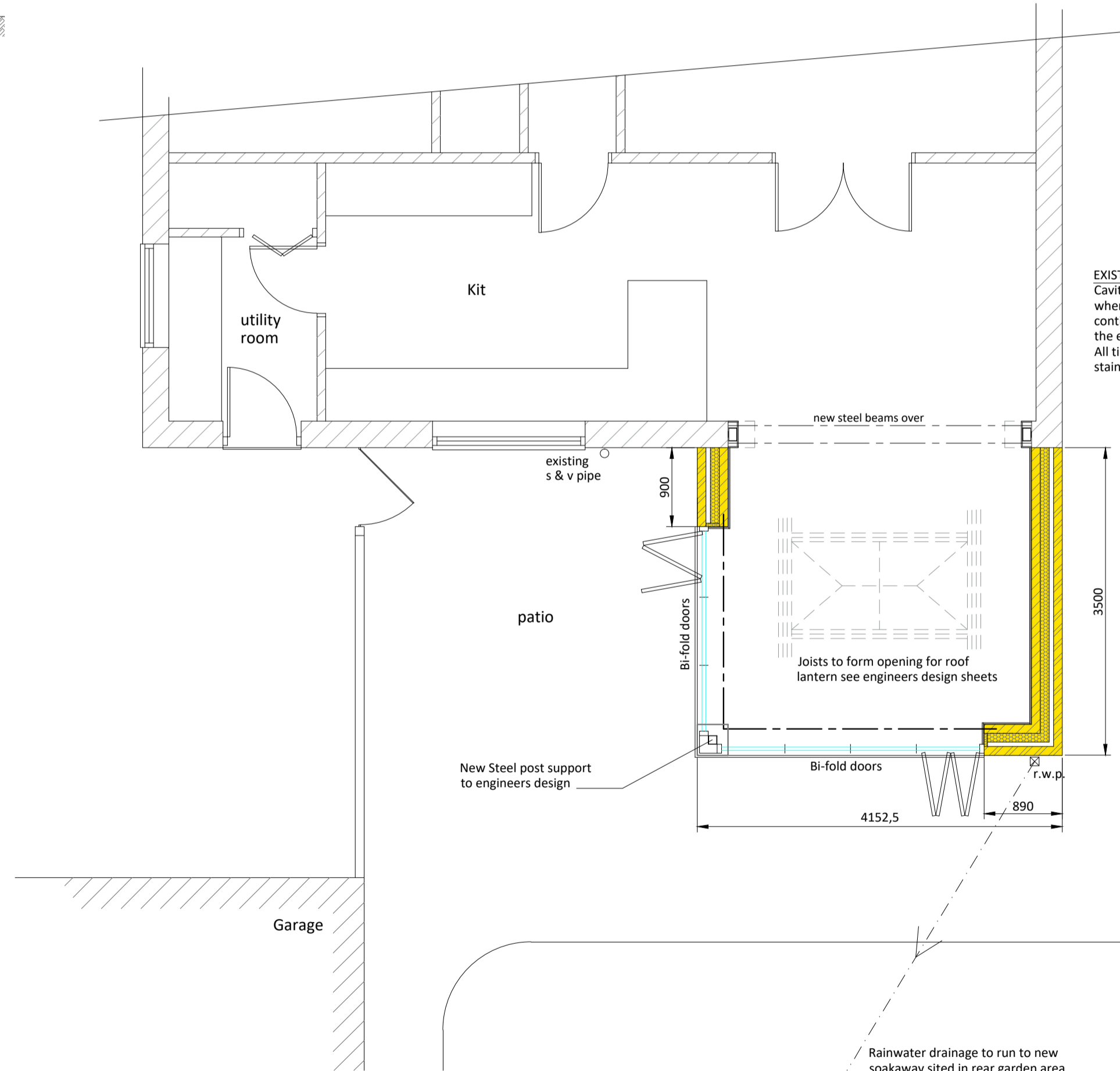
PROPOSED SIDE ELEVATION  
scale 1:100



EXISTING REAR ELEVATION  
scale 1:100



EXISTING GROUND FLOOR PLAN  
scale 1:100



PROPOSED GROUND FLOOR PLAN (part)  
scale 1:50

REAR GARDEN AREA

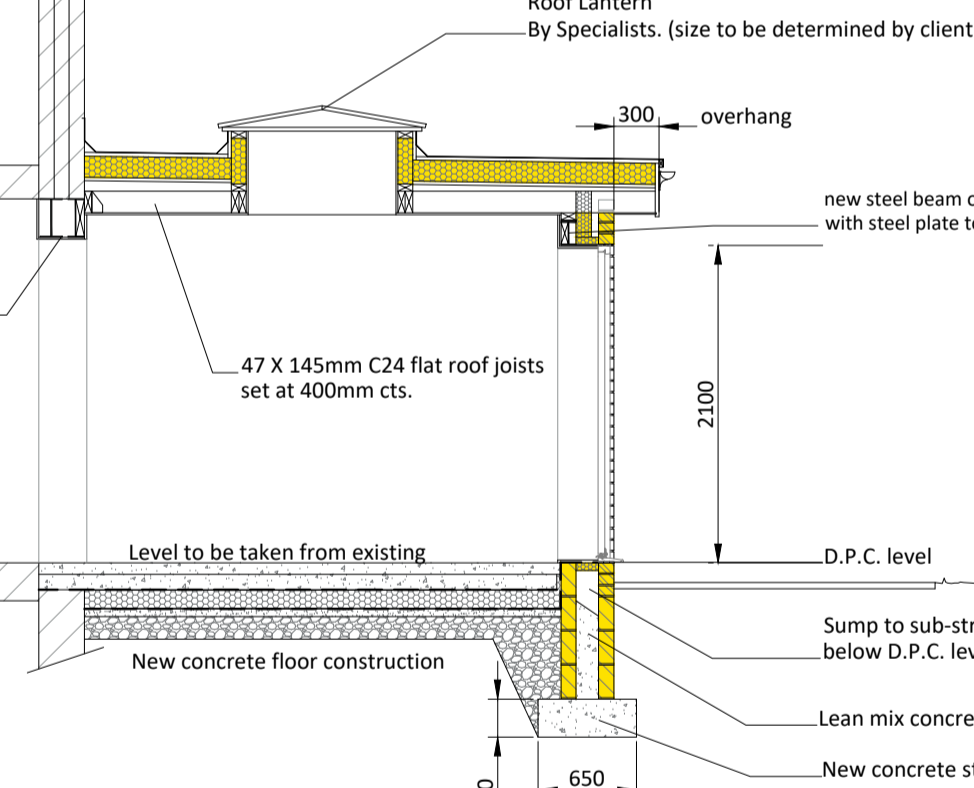
**DRAINAGE**  
Generally:  
All new drainage to be constructed using 110 Marley or similar with falls to run to new soakaway sited in rear garden

Standard 150 mm back inlet gulleys to be used where shown, all gulleys to be bedded in concrete.

**RAINWATER DRAINAGE**  
New rainwater goods to be new 110mm UPVC half round gutters taken and connected into 68mm dia UPVC downpipes. Rainwater taken to new soakaway, situated a min distance of 5.0m away from any building, via 110mm dia UPVC pipes surrounded in 150mm granular fill. Soakaway to be min of 1 cubic metre capacity (or to depth to Local Authorities approval) with suitable granular fill and with geotextile surround to prevent migration of fines. If necessary carry out a porosity test to determine design and depth of soakaway.

**WARM FLAT ROOF**  
(Imposed load max 1.0 kN/m<sup>2</sup> - dead load max 0.75 kN/m<sup>2</sup>) To achieve U value 0.13 W/m<sup>2</sup>K Flat roof covering to be glass reinforced plastic (GRP) system with BROOF(L4) fire rating and a current BBA or other approved accreditation be laid in compliance with manufacturers details by flat roofing specialist onto 18mm exterior quality plywood over 80 + 90mm Celotex GA4000 insulation. Insulation bonded to vcl on 18mm external quality plywood decking or similar approved on sw firings to minimum 1 in 40 fall on sw treated 47 x 145mm flat roof C24 timber joists at 400mm cts. Fix 12.5mm plasterboard over vapour barrier to underside of joists, finish with plaster skim. Provide cavity tray where new roof abuts existing house. Provide restraint to flat roof by fixing of 30 x 5 x 1200mm ms galvanised lateral restraint straps at maximum 2000mm centres fixed to 100 x 50mm wall plates and anchored to wall.

**EXISTING TO NEW WALL**  
Cavities in new wall to be made continuous with existing where possible to ensure continuous weather break. If a continuous cavity cannot be achieved, where new walls abut the existing walls provide a movement joint with vertical DPC. All tied into existing construction with suitable proprietary stainless steel profiles.



PROPOSED SECTION  
scale 1:50

**D.P.C.'s**

To be visqueen polyethylene used throughout both internally and externally, to be used in 100mm widths to external skin of cavity wall and 225mm widths to windows / door reveals, cills etc. d.p.c. to be taken well into cavity and secured to rear of door / window frames.

**CAVITY TRAYS**

Provide polythene lapped and continuous cavity trays with stop ends above all lintels. Provide open perp ends or uPVC perpend at 300mm cts. min. 2 per opening.

**NEW DOORS**

New and replacement doors to achieve a U-Value of 1.80W/m<sup>2</sup>K. Glazed areas to be double glazed with 16mm argon gap and soft 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.

**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 and Part N of the current Building Regulations, i.e. within 1500mm above floor level in doors and side panels within 300mm of door opening and within 800mm above floor level in windows.

**CEILING**

Generally to be 12.5mm thick Gyproc Wallboard plasterboard ceilings. Foil backed plasterboards to be used in Kitchen and Bathrooms. All plasterboard to have min. weight of 10 kg/m<sup>2</sup>.

All plasterboard joints shall be reinforced with proprietary joint reinforcement tape (Gyproc FTS0) in the preparation for a smooth, seamless plaster skim finish.

**ROOF LANTERN**

Roof Lantern By Specialists. (size to be determined by client)

**NEW STEEL BEAMS OVER**

new steel beam over with steel plate to engineers design

**LEVEL TO BE TAKEN FROM EXISTING**

D.P.C. level  
Sump to sub-structure to be 225mm below D.P.C. level  
Lean mix concrete fill  
New concrete strip foundation

**NEW CONCRETE FLOOR CONSTRUCTION**

Level to be taken from existing

**NEW CONCRETE STRIP FOUNDATION**

Level to be taken from existing

**LEAN MIX CONCRETE FILL**

Sump to sub-structure to be 225mm below D.P.C. level

**NEW CONCRETE STRIP FOUNDATION**

Level to be taken from existing

**LEAN MIX CONCRETE FILL**

Sump to sub-structure to be 225mm below D.P.C. level

**HEATING**

Existing central heating system to be extended to accommodate the new extension. System to be checked for capability and any heating installation should be under taken by a qualified person who must also provide all relevant installation / testing certification prior to occupation. If a new boiler has to be installed then it is to be of the condensing type.

**ELECTRICAL**

The electrical installation is to be covered under the Competent Person Scheme to demonstrate that all fixed electrical installation works has been designed, installed, inspected and tested in accordance with BS7671:2001 (as amended) (IEE Wiring Regulations - Competent Person Scheme).

**CONSTRUCTION NOTES**  
All works to be carried out in accordance with the current Planning, Building Regulations and Subsequent Amendments. No variations should be made to the approved drawings without the express permission of the Local Authority Building Inspector.

This drawing is intended only for Planning & Building Control Usage. This is not a construction drawing. This drawing may be scaled for planning purposes only.

The contractor must check dimensions prior to commencement of works and report any discrepancies. The contractor is responsible for locating existing services on site and ensure that any diversions, terminations, extensions are carried out by an approved sub-contractor.

**THERMAL BRIDGING**  
Care shall be taken to limit the occurrence of thermal bridging in the insulation layers caused by gaps within the thermal element, (i.e. around windows and door openings). Reasonable provision shall also be made to ensure the extension is constructed to minimise unwanted air leakage through the new building fabric.

**CDM REGULATIONS 2015**  
The client must abide by the Construction Design and Management Regulations 2015. The Client must appoint a Contractor, if more than one Contractor is to be involved, the Client will need to appoint (in writing) a Principal Designer (to plan, manage and coordinate the planning and design work), and a Principal Contractor (to plan, manage and coordinate the construction and ensure there are arrangements in place for managing and organising the project).

**Domestic Clients**  
The Domestic Client is to appoint a Principal Designer and a Principal Contractor when there is more than one Contractor, if not your duties will automatically be transferred to the Contractor or Principal Contractor.

The Designer can take on the duties, provided there is a written agreement between you and the Designer to do so.

The Health and Safety Executive is to be notified as soon as possible before construction work starts if the works:

- (a) Last longer than 30 working days and has more than 20 workers working simultaneously at any point in the project. Or
- (b) Exceeds 500 person days.

**SITE PREPARATION**  
Ground to be prepared for new works by removing all unsuitable material, vegetable matter and tree or shrub roots to a suitable depth to prevent future growth. Seal up, cap off, disconnect and remove existing redundant services as necessary. Reasonable precautions must also be taken to avoid danger to health and safety caused by contaminants and ground gases e.g. landfill gases, radon, vapours etc. on or in the ground covered, or to be covered by the building.

**FOUNDATIONS**  
To be concrete strip foundations taken to a suitable depth but to a minimum of 750mm below existing ground level to solid bottom, to be inspected and agreed by Local Authority Building Inspector. Foundations should suit the site conditions and be changed to suit accordingly. Where practicable foundations to be taken below invert level of all drains within 1000mm. Foundations to be 650 mm wide x 250 mm deep. Provide 100 mm thick class 'A' concrete blockwork to internal and external skin with face brickwork above ground level, taken up to horizontal d.p.c. with cavity fill of lean mix concrete taken up to within 225mm of d.p.c.

**SOLID FLOOR INSULATION OVER SLAB**  
To meet min U value required of 0.15 W/m<sup>2</sup>K P/A Ratio 0.5

Solid ground floor to consist of 150mm consolidated well-sanded hardcore, bladed with 50mm sand binding. Provide 100mm ST2 or Gen1 ground bearing slab concrete mix to conform to BS 8500-2:2023 and BS EN 206 over a 1200 gauge polythene DPM. DPM to be lapped in with DPC in walls. Floor to be insulated over slab and DPM with min 120mm thick Celotex X8400 insulation. 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 skirting, all joints to be lapped by 150mm and sealed. Finish with 75mm sand/cement finishing screed with light mesh reinforcement.

**PARTIAL FILL CAVITY WALL**  
To achieve minimum U Value of 0.18 W/m<sup>2</sup>K Provide 103mm suitable facing brick. Ensure a 50mm clear residual cavity and provide 100mm Celotex CW4000 insulation fixed to internal leaf. Inner leaf constructed using 100mm, 0.45 W/m<sup>2</sup>K standard block. Internal finish to be 12.5mm plasterboard on dabs. Walls to be built with 1:1.6 cement mortar.

**WALL TIES**  
To be galv. metal wall ties with insulation restraining disc, to be capable of spanning a 125mm cavity including insulation. Position of wall ties to be as recommended by insulation manufacturers, but to be positioned at a min. of 750mm cts. horizontally and 450mm cts. vertically, double up at all window and door reveals.

| Revision | Date | Description |
|----------|------|-------------|
|----------|------|-------------|

**H. D. WILLIAMS Ltd.**  
F.R.I.C.S.

**CHARTERED QUANTITY SURVEYOR**  
MAINTFESURWR SIARTREDIG

123, Trealaw Road, Tonypandy,  
Mid Glam., CF40 2NP.  
Tel. (01443) 441078 Fax (01443) 434191  
email: hdwilliams1@hotmail.co.uk

**Client**  
Mr & Mrs D. Sherdel  
13, The Ferns,  
Quakers Yard, Treharris.  
CF46 5LQ

**Project**  
Proposed single storey flat roof rear extension  
at  
13, The Ferns, Quakers Yard, Treharris

**Title**  
Existing and Proposed Ground Floor Plan (part)  
Existing and Proposed Elevations and Section

**Date**  
April, 2025

**Scale**  
As noted at A1

**Drawing Number**  
hdw/ph/ds.01

