ROOFLIGHTS (STRUCTURE)

Rooflight installed in accordance with manufactures details

Provide double trimmers

NOTE:All roof designs must be

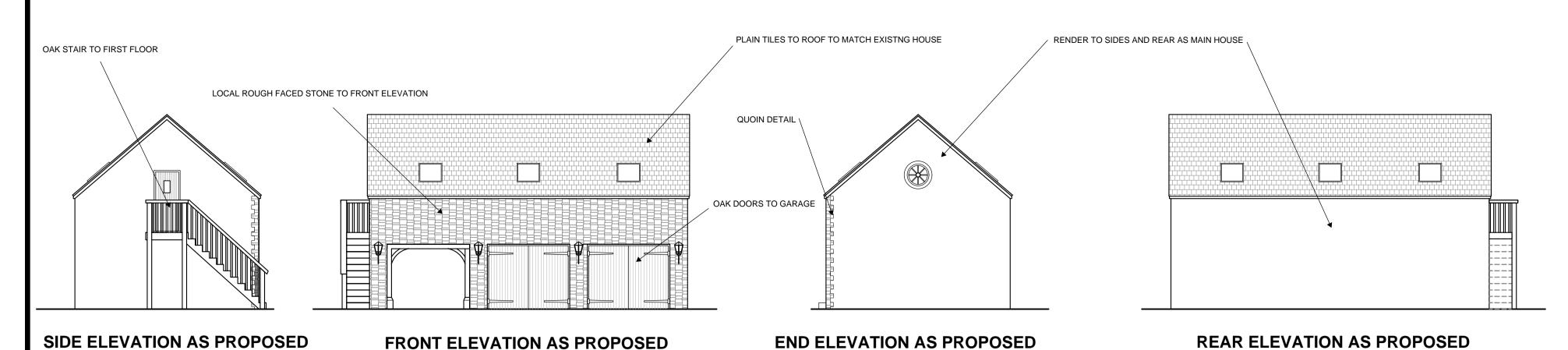
checked and calculated by a

structural engineer

where necessary

Structural head trimmer

This bar will scale 5m on a A1 sheet



STORAGE GARAGE/WORKSHOP

GROUND FLOOR PLAN AS PROPOSED

BEDROOM 2 OPEN PLAN KITCHING LIVING BEDROOM '

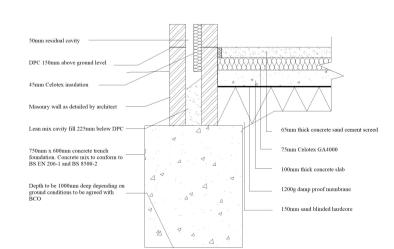
INTERNAL STUD PARTITIONS

FIRST FLOOR PLAN AS PROPOSED

OAK POSTS AND SUPPORTING BEAMS OVER TO BE DESIGNED BY STRUCTURAL ENGINEER

TRENCH FOUNDATION Provide 750mm x 600mm trench fill foundations, concrete mix to conform to BS EN 206-1 and BS 8500-2. 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. Sulphate resistant cement to be used if required. Please note that should any adverse soil conditions or difference in soil type be found or any major tree roots in excavations, the Building Control Officer is to be

contacted and the advice of a structural engineer should be sought. TRENCH FOUNDATION



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

FULL FILL CAVITY WALL To achieve minimum U Value of 0.28W/m²K 20mm two coat sand/cement render to comply to BS EN 13914-1:2005 with waterproof additive on 100mm block K value 1.13, e.g. Lafarge Stancrete with fully filled cavity of 110mm Rockwool Cavity insulation. Inner leaf to be 100mm block, K value 1.13, e.g. Lafarge Stancrete. Internal

finish to be 12.5mm plasterboard on dabs. Walls to be built with 1:1:6 cement mortar.

Provide horizontal strip polymer (hyload) damp proof course to both internal and external skins minimum 150mm above external ground level. New DPC to be made continuous with existing DPC's and with floor DPM. Vertical DPC to be installed at all reveals where cavity is closed.

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 abuts the existing walls provide a movement joint with vertical DPC. All tied into existing construction with suitable

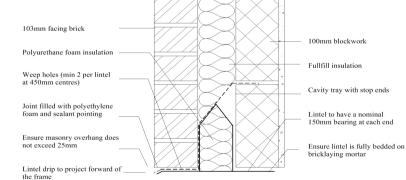
proprietary stainless steel profiles. CAVITY BARRIERS

30 minute fire resistant cavity barriers to be provided at at tops of walls, gable end walls and vertically at junctions with separating walls & horizontally at separating walls with cavity tray over installed according to manufacturers details.

CDW-EG-H-006C

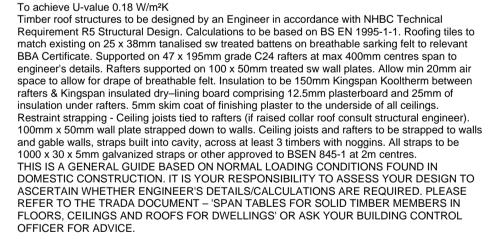
- For uniformly distributed loads and standard 2 storey domestic loadings only Lintel widths are to be equal to wall thickness. All lintels over 750mm sized internal door openings to be 65mm deep pre-stressed concrete plank lintels. 150mm deep lintels are to be used for 900mm sized internal door openings. 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 5977 Part 1. For other structural openings provide proprietary insulated steel lintels suitable for spans and loadings in compliance with Approved Document A and lintel manufactures standard tables. Stop ends, DPC trays and weep holes to be provided above all externally located lintels.

LINTEL AND CAVITY TRAY

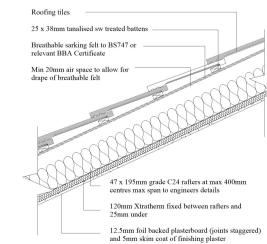


Intermediate floor to be 25mm t&g flooring grade chipboard or floorboards laid on C24 joists at 400mm ctrs (see engineer's calculation for sizes and details). Lay 100mm Rockwool mineral fibre quilt insulation min 10kg/m³ or equivalent between floor joists. Ceiling to be 12.5 FireLine plasterboard with skim plaster set and finish. Joist spans over 2.5m to be strutted at mid span using 38 x 38mm herringbone strutting or 38mm solid strutting (at least 2/3 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 marking 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 1000mm x 30mm x 5mm galvanised 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 38mm wide x ¾ depth solid noggins between joists at strap positions.

UNVENTED PITCHED ROOF Pitch 22-45°







RAINWATER DRAINAGE New rainwater goods to be new 110mm UPVC half round gutters taken and connected into 68mm dia UPVC downpipes. Rainwater taken to existing mains drains where possible, if no suitable drains then to a 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.

ELECTRICAL All electrical work required to meet the requirements of Part P (electrical safety) must be designed, installed, inspected and tested by a competent person registered under a competent person self certification scheme such as BRE certification Ltd, BSI, NICEIC Certification Services or Zurich Ltd. An appropriate BS7671 Electrical Installation Certificate is 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. Install low energy light fittings that only take lamps having a luminous efficiency 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

Kitchen to have mechanical ventilation with an extract rating of 60l/sec or 30l/sec if adjacent to hob to external air, sealed to prevent entry of moisture. 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. Intermittent extract fans to BS EN 13141-4. Cooker

100mm x 50mm softwood treated timbers studs at 400mm ctrs with 50 x 100mm head and sole

plates and solid intermediate horizontal noggins at 1/3 height or 450mm. Provide min 10kg/m³

density acoustic soundproof quilt tightly packed (eg. 100mm Rockwool or Isowool mineral fibre

partitions run parallel or provide noggins where at right angles, or built off DPC on thickened

plaster finish. Taped and jointed complete with beads and stops.

concrete slab if solid ground floor. Walls faced throughout with 12.5mm plaster board with skim

sound insulation) in all voids the full depth of the stud. Partitions built off doubled up joists where

INTERNAL LOAD BEARING WALL

hoods to BS EN 13141-3. All fixed mechanical ventilation systems, where they can be tested and adjusted, shall be commissioned and a commissioning notice given to the Building Control Body. 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 minute over run if no window in room. 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. Intermittent extract fans

MR AND MRS D WOOD PROPOSED TWO STOREY EXTENSION TO MAIN HOUSE & NEW GARAGE BUILDING CHELTONDALE. OLD ROSS ROAD, WHITCHURCH, HEREFORD HR9 6DD AS PROPOSED PLANS & ELEVATIONS OF NEW GARAGE SCALE: 1:50 & 1:100 @ A1 **DATE/DRAWING NUMBER:**

CLIENT/PROJECT:

SEPT 2020

DRAINAGE LAYOUT INDICATIVE ONLY, TO BE ACCESSED ONSITE BY CONTACTOR FOUNDATIONS, INTERMEDIATE FLOORS, GARAGE OPENNINGS, STAIRS & ROOF TO SPECIALIST DESIGN

ALL DIMS TO BE CHECKED PRIOR TO CONSTRUCTION STRUCTURAL ENGINEER MUST CARRY OUT OWN CALCULATIONS

to BS EN 13141-4. All fixed mechanical ventilation systems, where they can be tested and adjusted, shall be commissioned and a commissioning notice given to the Building Control Body. 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 bolt down double sealed covers in buildings and be adequate for vehicle loads in