

MAIN CONSTRUCTION DETAILS

Proposed concrete strip foundations to be excavated carefully to avoid detriment to the stability of the existing structure. Minimum depth to underside of foundations is 1150mm as shown or agreed suitable sub-strata upon consultation with the Building Control Officer (BCO). On the proposed single storey rear extension, the depth adjacent to the existing foul water sewer and manhole will be such that the load bearing of sub-strata will be on a 45 degrees angle to the invert of the sewer and manhole. The 610mm wide concrete strip foundation will be min 250mm thick as shown. All foundations and excavations will be wholly within the boundaries of the property. The whole area under proposed extensions (except the Garage/Store area) cleared of existing surface/soil etc to a minimum depth of 450mm below proposed finish floor level. Lightly compacted granular backfill to foundation excavations. The Garage/store area will be concrete slab 150mm thick and finish minimum 2 courses below DPC and general floor level. A level working platform below suspended floor areas will be 1200 gauge Polythene Vapour control layer on sand blinding with minimum 75mm lightly compacted granular material over.

Foundation walls constructed in concrete common brickwork or dense concrete blockwork as agreed with the BCO to ground level with lean mix concrete fill to the cavity. Above ground level the external skin of facing bricks to DPC level set at proposed internal floor level and above.

The proposed ground floor of both extensions will be suspended timber design to provide continuous ventilation of existing suspended floors. Floors will be 18mm flooring grade T & G dense chipboard on 47 x 195mm C16(SC3) treated timber joists at 600 crs. Any span greater than 3m to be provided with centre bracing between joists. All floors at ground floor and first floor coated with 2 coats varnish on completion.

Ground floor insulation of 200mm thick Rockwool insulation suspended on Tenax insulation netting fitted over and between floor joists firmly stapled to top and sides. The P/A is 0.55 and 200mm rockwool satisfies the requirement of 0.17W/m2k. Ventilation ducts from existing dwelling to be maintained throughout with insulation breaks at existing air bricks. Ventilation of proposed floor areas via 215 x 140mm Terracotta air bricks around full perimeter at 2m crs including those at max 450mm from corners. (No ventilation from Garage/store area). Under floor joist support walls to be provided with equivalent ventilation ducting to provide adequate ventilation throughout.

External walls: 100 facing brickwork to outer skin to match existing as closely as possible. Load bearing inner skin of Thermalite Shield 100 blocks and to close reveals to all openings. Both skins provided with proprietary DPC at floor level and tied together with stainless steels safety ties at 750mm crs horizontally and 450mm vertically with additional ties at openings at the rate of 1 No tie per course of blockwork. New walls to be tied (both skins) to existing walls with proprietary stainless steel wall extension system fixed as per manufacturer's instructions. All openings in external walls to be spanned with Catnic lintols as detailed with DPC cavity tray and weepholes at max 900mm crs and minimum 3 per opening. Cavity between inner and outer skin is 110mm overall with Kingspan K108 insulation 60mm thick fixed to inner leaf to provide overall 0.21 W/m2k U Value. Top of cavity closed with proprietary cavity closers.

Internal finish to all walls will be 12.5m plasterboard and skim. Note: At front walls adjacent to Garage/store up-and-over door construction will be solid compromising external facing brick and 2 skins Thermalite block fully tied together (with full DPC) up to door lintol level. Internal wall between bedroom 4 and en-suite to be stud wall construction comprising 50 x 75mm treated softwood studs at 400crs with 50 x 75mm sole and head plates and 50 x 75mm horizontal noggins at min 1200 height. Space between timbers to be filled with 75mm thick rockwool acoustic/ insulation batts. 12.5mm plasterboard and skim finish to both sides.

Upper floor of side extension to be 18mm flooring grade T & G dense chipboard on 47 x 195mm C16(SC3) treated timber joists at maximum 600 crs to match existing floor level. Cavity between first floor joists to be fully filled with 2 x 100mm layers of rockwool. Ceilings generally 12.5mm plasterboard fixed with plasterboard screws at 200mm centres and skim finish. Ceiling of Garage/store area in 2 layers of 12.5mm plasterboard with staggered and taped joints and skim to underside. See joist layout plans for ground and first floor. All joists to be built into inner leaf of perimeter walls and where running parallel to external walls 30 x 5mm galv steel straps to fixed inner skin blockwork and span 3 No joists with noggins. All joists will have 100mm end bearing.

Windows will be UPVC double glazed to match existing with trickle vent or lockable semi-open feature. Opening lights will be minimum 1/20th floor area of adjacent room. All window openings with horizontal and vertical DPC and colour matched silicone sealant to both sides of frame. Window boards to be 25mm thick moisture resistant MDF with bullnosed edges and project 15mm beyond wall finish.

Proposed Utility room will be fitted with mechanical extraction ventilator with minimum 60 litres per second capacity and independent manual operation.

Proposed ground floor W/C and proposed en-suite bathroom to be provided with light switch operated mechanical extractor ventilation with 30 litres per second capacity and 15 minutes run-on facility.

Extractor ducting throughout external walls and fitted with proprietary external vent covers

Proposed double glazed Bi-fold patio doors to rear elevation of proposed Living/Dining room to comply with safety glazing standards as per BS6206 / BS.EN. 12600-2002 installation as per manufacturer's instructions with horizontal and vertical DPC.

Roof construction to 2 storey extension to marry continuously with existing roof. A survey will be carried out of existing traditional roof construction to determine accurate dimensions for new roof trusses to match exactly the existing pitch and allowing for 100mm wall recess at front. New trusses will provide continuous fascia and wider soffit to marry with the existing fascia and roof drainage gutters at front elevation. UPVC soffits and fascias to front and rear elevation to be continuous with existing. Roof comprising concrete interlocking tiles to match existing (under-lapped to existing tiles) on 25 x 50mm tanalised timber battens at gauge to suit existing head laps over Klobber Permoforte vapour permeable membrane laid on trusses at maximum 600mm centres. Membrane to be fixed and lapped as per manufacturer's instructions and allowing a minimum 450mm lap to existing roof. Where S&VP is extended through proposed roof the opening is to be sealed with a proprietary pipe gater and fully lapped to roof tiles. Matching ridge tiles to be bedded on mortar.

Roof trusses to be fixed with stainless steel truss shoes to 100 x 75mm treated softwood wall plate. Wall plate secured to inner skin blockwork with 100 x 900 x 30 x 5mm stainless steel straps at maximum 2000mm centres. All roof strutting and bracing to roof trusses as per the design which will be supplied by the manufacturer upon confirmation of order. Where trusses are parallel to external walls at gable ends to be provided with 150 x 30 x 5mm stainless restraint straps fixed to wall and spanning 3 No members. Noggins/blocking/wedging to be provided to straps at roof and ceiling level.

Roof of single storey extension to be generally in accordance with the above with new roof trusses at 24 degree pitch. Matching concrete interlocking tiles will be at head lap to suit proposed pitch. Roof construction of both roofs including all bracing, strutting etc all in accordance with BS5268:2002. Flashing to roof new roof abutment at rear main wall provided with Code 3 lead soakers and Code 4 lead flashing stepped to suit. Stepped cavity tray DPC retrofit to existing.

Insulation of attic spaces at ceiling level comprising rockwool in 3 No 100mm layers at 90 degrees alternately running between and over truss members. Compressed rockwool packing to eaves and verges to minimise air leakage. Fully sealed proprietary loft access points.

Ceilings in 12.5mm Foil backed plasterboard screwed to trussed rafter joist at 200mm centres and internal skim.

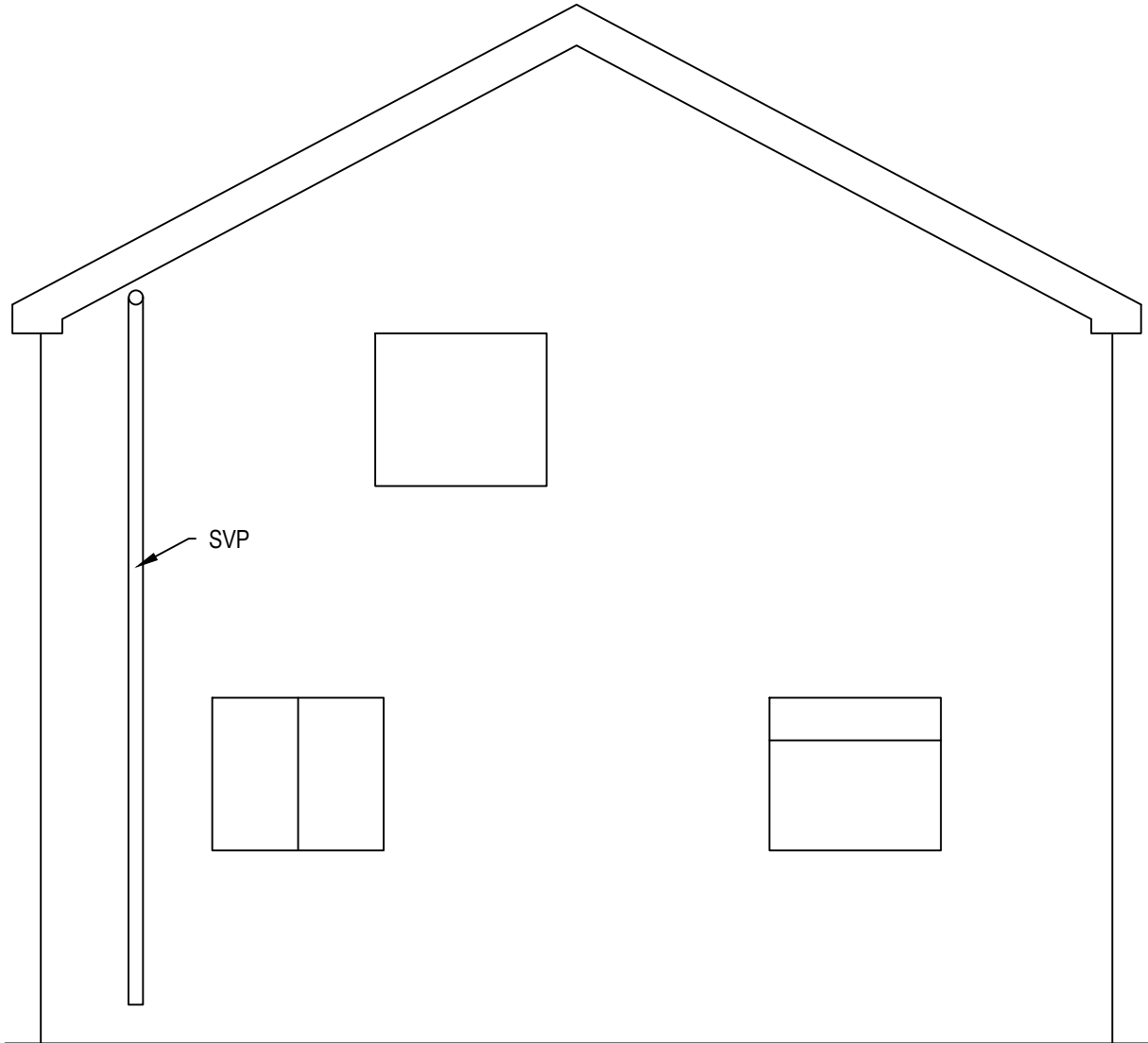
Surface water drainage: From 2 storey extension the existing ½ found gutters extended from existing house and outfall via existing downpipes. Single story rear extension with ½ round plastic gutters and 68mm downpipes to new soakaway minimum 1500 x 1500 x 1500mm sited 5m from any structure as agreed with the BCO, with clean stone rubble fill. 110mm polypipe below ground on granular bed and surround at minimum 1 in 150 falls.

Foul water drainage from new en-suite, ground floor W/C and utility room all to be connected to existing S & VP via polypipe connection pipework and U bend traps installed to sink and wash basins. All foul water to discharge then to existing manhole via existing underground pipework to main sewer. Existing S & VP to be boxed in to walls of proposed extension and provided with accessible rodding point.

Existing FW sewage connection pipework to be exposed below proposed rear extension and provided with granular bed and surround. Where existing pipework passes through foundation walls this will be spanned with PC concrete lintols.

Electrical installation to be extended from existing dwelling in accordance with current regulations. Design, installation, inspection and testing by a competent person who is to provide a certificate on completion in accordance with BS767:2018. All sockets and light switches set between 450 and 1200mm off floor level. All cable ducting sealed at wall entry and access points.

All plumbing and gas central heating to be extended from existing dwelling according to current legislation by a registered installer and provided with a certificate of completion.



EXISTING SIDE ELEVATION (SE)

Project: PROPOSED EXTENSION AT 1 ORCHARD VIEW, GRESFORD			
Drawing Title: EXISTING SIDE ELEVATION (SE) AND GENERAL NOTES			
Date: 18.05.21	Scale: 1:50	Drawing No: 4	Rev:
DO NOT SCALE FROM THIS DRAWING			