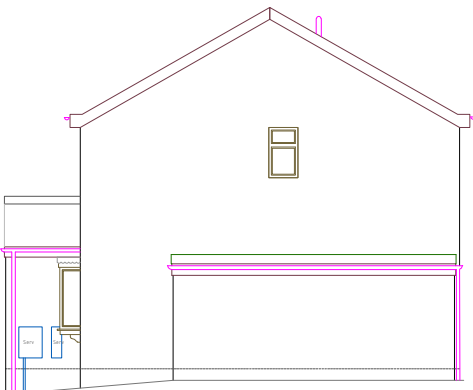
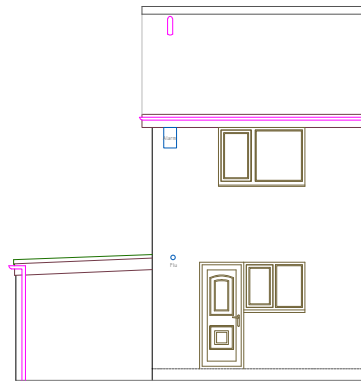


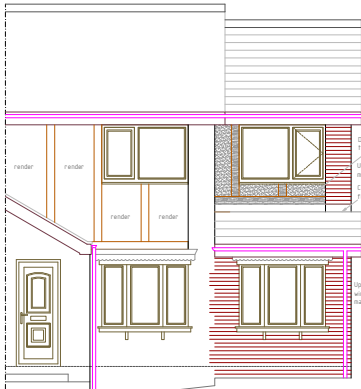
EXISTING FRONT ELEVATION "CC"



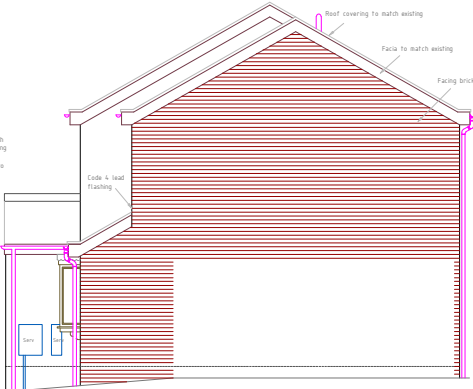
EXISTING SIDE ELEVATION "AA"



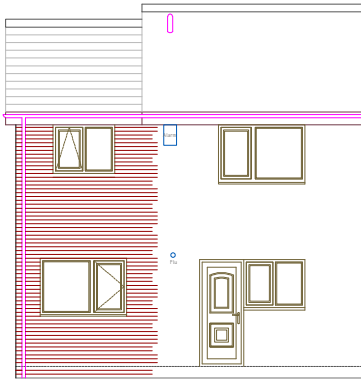
EXISTING REAR ELEVATION "DD"



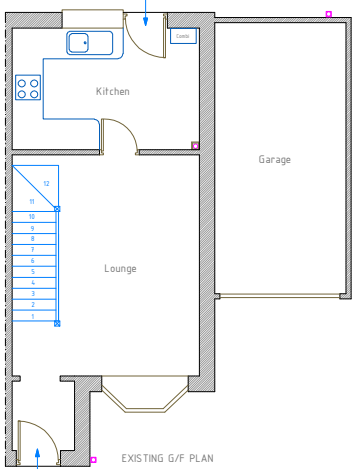
PROPOSED FRONT ELEVATION "CC"



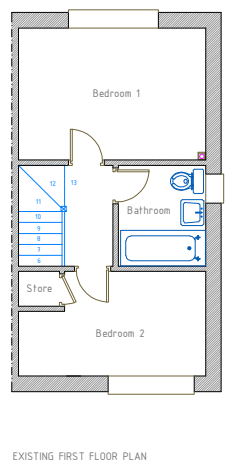
PROPOSED SIDE ELEVATION "AA"



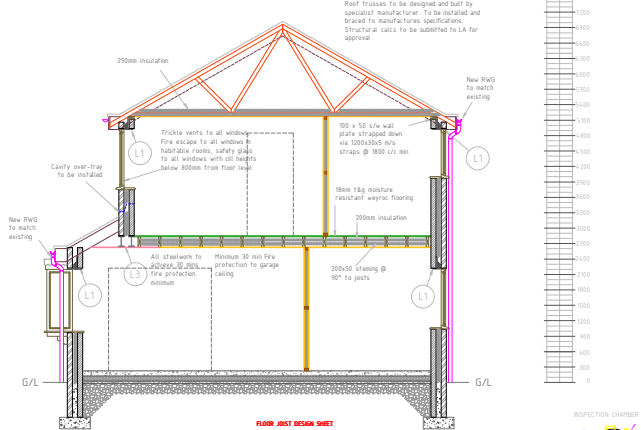
PROPOSED REAR ELEVATION "DD"



EXISTING G/F PLAN

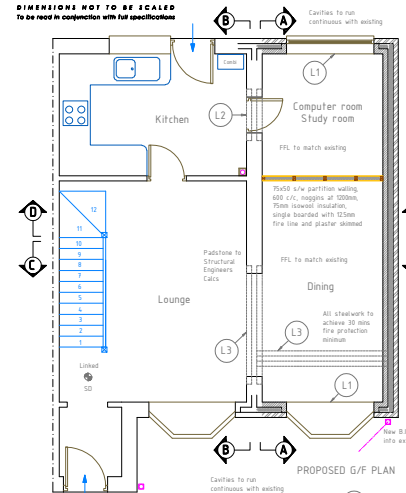


EXISTING FIRST FLOOR PLAN

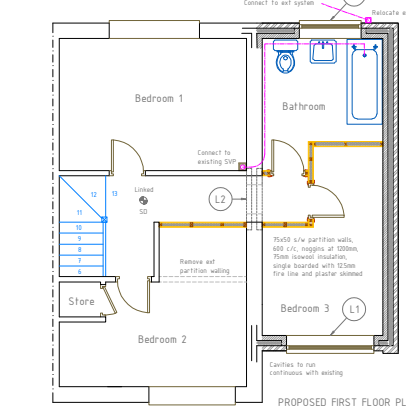


TYPICAL SECTION THROUGH "AA"

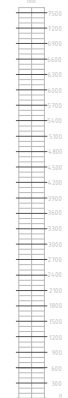
**FLOOR JOIST DESIGN SHEET**  
 Floor joists at 50mm x 200mm spacing 2300mm spaced at 400mm  
 Z = 117 x 3650mm  
 allowable loading  $P_{2+5} = 1700N/m$   
 max load for GDL  $W = 680N/m$   
 actual loading with live load  $50kN/m + 0.75kN/m$   
 max deflection  $span/500 = 83mm$   
 1 response =  $100kN \times 0.100m / 33.33 = 3.031$   
 1 (  $65/12$  ) = 33.33 therefore OK



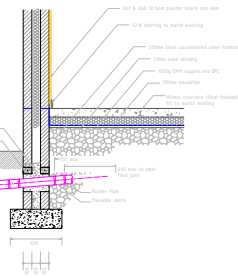
PROPOSED G/F PLAN



PROPOSED FIRST FLOOR PLAN



Typical foundation & drainage detail 130



TYPICAL DRAINAGE DETAILS 130

**FOUNDATIONS**  
 To be a minimum 450x250mm deep concrete strip foundation, minimum depth 900mm. Actual type and depth of foundation to be determined on site following inspection of ground conditions by local Authority Building Control Officer. If cleared ground conditions require more specialist Foundations than those specified above, the Client must seek the advice of a Structural Engineer. All Foundations to be taken down beyond any existing or grade levels.

**EXTERNAL WALLS**  
 300mm cavity construction, consisting of 100mm Facing brick outer leaf to match existing 100mm cavity 100mm Thermacore block work. Cavity insulation to consist of 40mm Kingspan Thermaflor TR90 (or similar approved to achieve minimum U value of 0.30). Provide galvanneal steel cavity wall ties 1000mm horizontally, 400mm vertically, depressed to 250mm vertically around openings. 10m Spigotbar board cavity closer. New cavities to run continuous with existing. Close cavities at openings including installation of insulated vertical DPC.

**LINTELS**  
 All lintels to be Galvalume insulated steel lintels or similar over all new openings, 500mm and bearing to all lintels over all new openings.

**GROUND FLOOR**  
 100mm thick concrete floor slab fixed finish on 50mm Kingspan Thermaflor TR9 insulation for similar to achieve minimum U value of 0.20. Turned up at all edges on 100g vapour dam on minimum 200mm thick wall. Construct cash show hardware with 50mm mineral-wool sand binding. All new DPC's to be minimum 500mm above ground level and to overlap silt and gravel. Provide an brick of minimum 1000mm courses ducted through to ventilate existing floor void if any existing air ducts are blocked by new extension. All new DPC's to be minimum 500mm above ground level and to lap into DPC.

**ROOF TRUSSES**  
 Roof Trusses to be designed & built by specialist manufacturer. All Trusses to be installed to manufacturer's specifications, all structural calculations to be submitted to building control for approval prior to installation.

**PITCHED ROOF**  
 Tiles to match existing on 38 x 25mm s/w battens on 100mm spaced rafters. 100mm spaced rafters to be installed to manufacturer's specifications, all structural calculations to be submitted to building control for approval prior to installation.

**VENTILATION TO PITCHED ROOFS**  
 (if not using breathable roofing felt)  
 Provide continuous 100mm with ventilation gaps to eaves and the equivalent of 50mm continuous ventilation gap (this needs to be at ridge level. All open ventilation to receive proprietary anti-suction mesh.

**ANCHOR STRAPS**  
 30 x 3mm galvanneal steel straps to be fixed at 900mm centres along 100mm x 100mm wall plate and tie down wall minimum 400mm, also to first floor joist to span 1000mm over joists if applicable.

**CEILING**  
 Generally to be 100mm plasterboard and 3mm skim to underside. Max 30mm fire check at all structural steelwork.

**BELOW GROUND DRAINAGE**  
 All drainage to connect to existing service, where drains pass through walls form openings with Spigotbar concrete lintels or similar leaving a minimum 50mm clear gap around drainage pipe. Provide cement floor outside to both sides of openings.

**ABOVE GROUND DRAINAGE**  
 All drainage to connect to existing service Gullies - 100mm PVCu half round  
 Rainwater pipes - 100mm diameter PVCu  
 Soil and vent pipes - 100mm PVCu

**VENTILATION**  
 Windows and doors to provide a minimum of 1000mm floor area natural ventilation. Background ventilation minimum 8000 sq cm to each habitable room, 4000 sq cm to Kitchens, Sanitary and W.C.

Provide mechanical extract ducted to the outside on to the following where applicable:  
 1) W/C  
 2) Bathrooms

**GLAZING**  
 All glazing to be double glazed sealed units into new UPVC frames with Pilkington "K" glass, to comply with Part 6 Building Regulations, with a minimum U-value to achieve a minimum U value of 2.0. Any glazing to windows under a height of 1800mm and to doors under 1500mm to be safety glass. Any glazing in adjacent panels within 300mm of doors to be safety glass. Pressure vents to be fitted to all new windows to provide 8000 sq cm per habitable room. Any glazing to a habitable room must have provision for an emergency fire escape, opening to be no more than 100mm from floor level and no less than 800mm from floor level.

**ELECTRICAL WORK**  
 All electrical work to comply with approved document P (electrical safety) must be designed, installed, inspected and handed by a person competent to do so. Prior to completion this work should be certified that the work has been completed with. This may require an approved BS 7671 electrical installation certificate to be issued by a person competent to do so.

**SMOKE DETECTORS**  
 Linked smoke alarms to be fitted at bedroom and top of stairs on each attraction of one will trigger the other. To be wired into mains on a separate fused circuit.

**NOTE**  
 All alterations are to be checked on site prior to the commencement of work. Any modification considered an improvement by the builder are to be submitted to the local Authority and comply with any approval necessary. All work to comply with current Building Regulations and good building practice. If the Contractor wishes to use any alternative materials to those specified, they must be submitted to the Building Control Officer for approval.

**LINTEL SCHEDULE**

L1	Galvalume 450/100 Steel Lintel
L2	Burwooder 450/100 Precast concrete lintel (100 x 225mm)
L3	Steel to match existing
L4	Low lintel to match existing

Min. bearing for all lintels to be 150mm

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**Gary Wheatley**  
 GWA ARCHITECTURAL DESIGN

Drawing No: M/06/001  
 Scale: 1:50  
 Drawn by: Gary Wheatley  
 Date: Sep 06