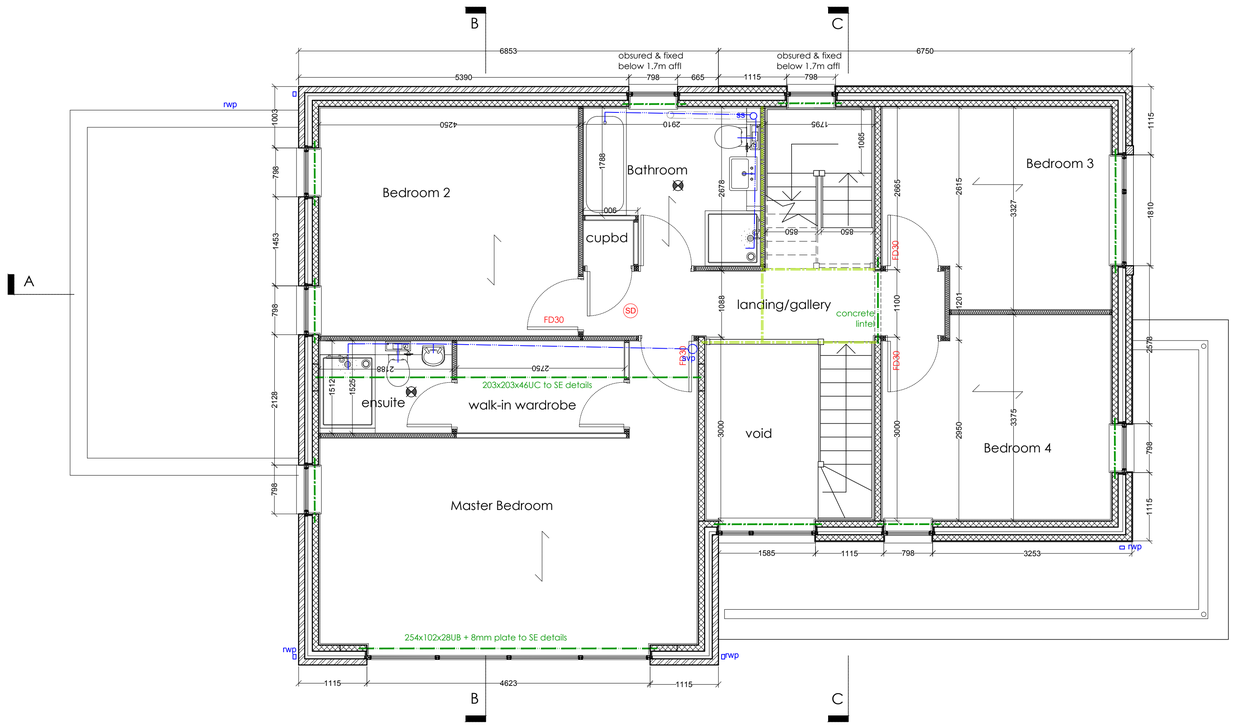
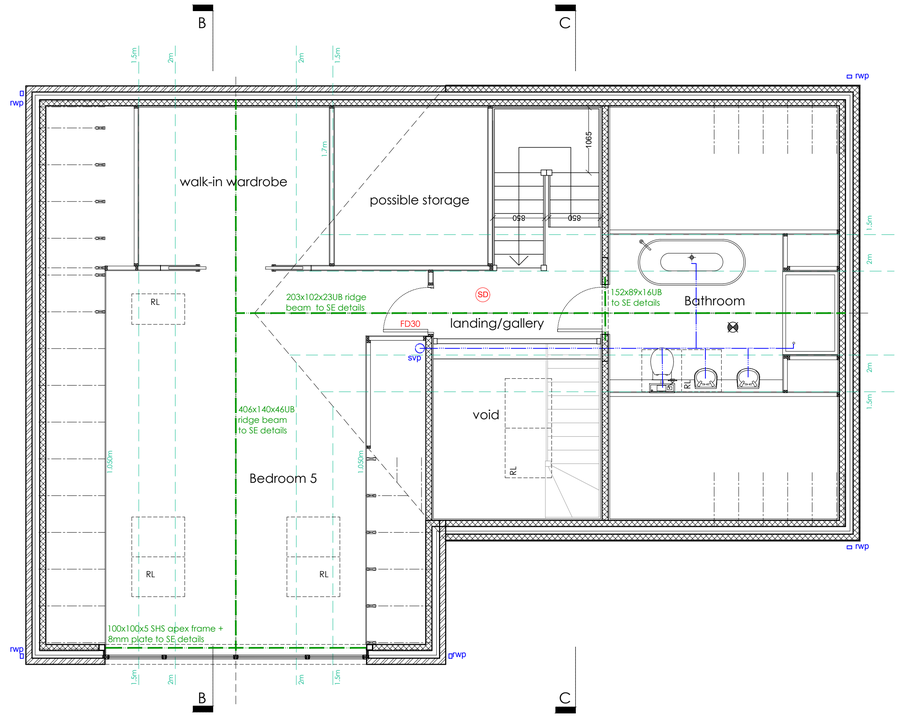
Date	Drawn	Check	Description	Rev.
10/05/21	***	***	Structural Engineer information added.	A



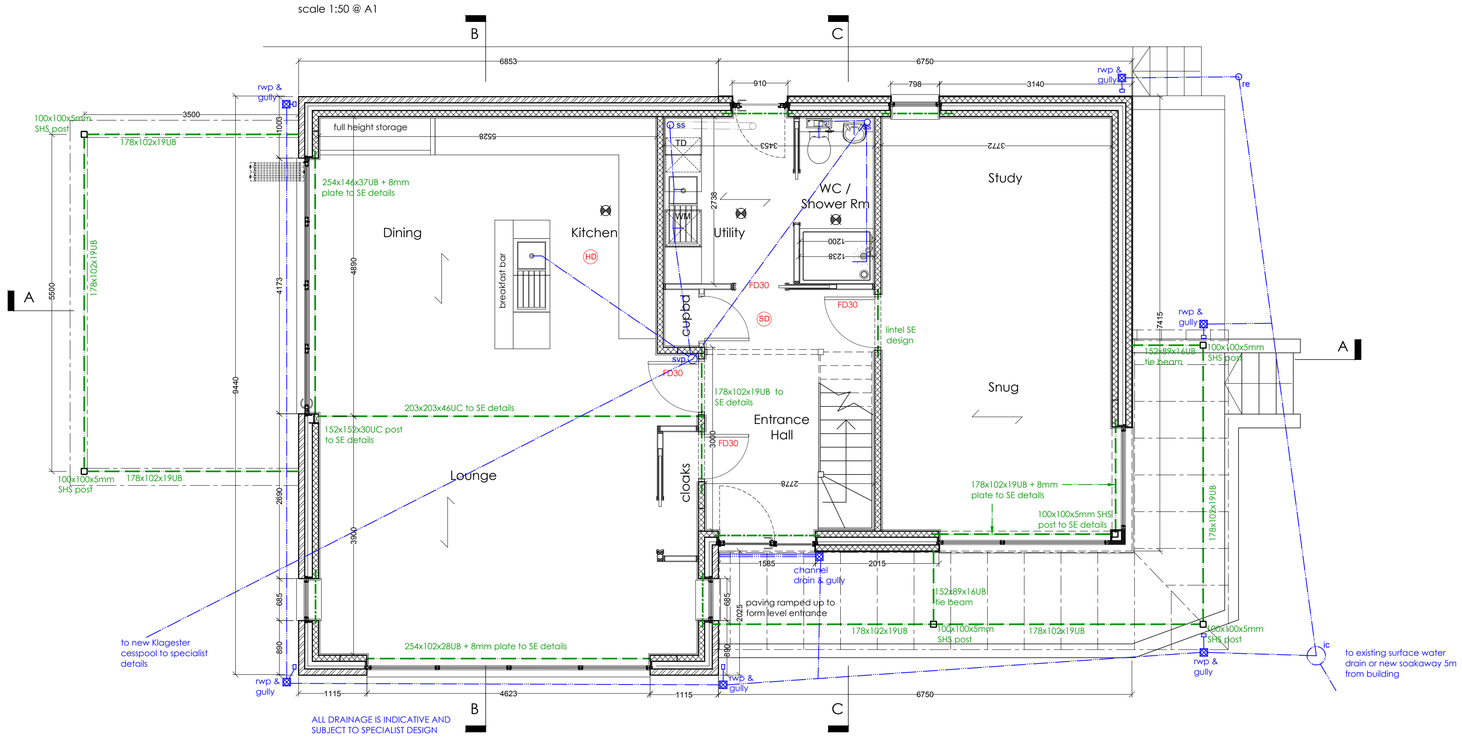
FIRST FLOOR PLAN

scale 1:50 @ A1



LOFT FLOOR PLAN

scale 1:50 @ A1



GROUND FLOOR PLAN

scale 1:50 @ A1

Construction Notes

PITCHED ROOF
Roof to achieve a minimum U-value of 0.13 W/m²K.
Single ply membrane installed strictly in accordance with manufacturer's instructions and specification.
Outline specification:
Icopal Monarplan PVC adhered warm roof:
Roof structure to comprise truss and attic truss to specialist design.
18mm wpb plywood or OSB3 deck over truss
Icopal S.A. Primer
Vapour Control Layer ref TorchSafe T.A. VCL - Sanded, adhered to primed deck
175mm Thermazone Roofboard insulation adhered to VCL
Monarplan GF Fleeceback membrane fully bonded to Roofboard
Monarplan Coated Metal drips, trims etc mechanically fastened and joined as manufacturer's details.
Monarplan Standing Seam Profile hot welded to membrane at nom 600mm centres
12.5mm plasterboard ceiling with 3mm skim finish
Trusses to be strapped over top of walls using proprietary Expamet or similar straps at maximum 2m centres subject to truss specialist details.

EXTERNAL WALLS
New External Walls - to be cavity construction to achieve a min. U-value of 0.18 W/m²K and should meet the requirements Approved Document C5 of the Building Regulations.
Outer skin - 100mm facing brick or 100mm dense concrete block (1.13λ)faced with 10mm silicone polymer render, cavity - 125mm wide, containing 75mm thick Kingspan K108 partial fill cavity board insulation, inner skin - 100mm medium density concrete block (0.51λ).
Walls to be finished externally with through colour render on external blockwork leaf or facing brick outer leaf (refer to Elevation drawings) and internally with dot and dab 12.5mm plasterbd with 3mm gypsum plaster skim finish. Inner and outer skins to be tied together with stainless steel RT2 type ties, with insulating retaining clips positioned at 750mm centres horizontally and 450mm centres vertically in staggered pattern and doubled up at openings and at wall returns less than 550mm.
Cavity insulation to be taken down minimum 150mm below top of perimeter floor insulation and remaining cavity to be filled with lean mix concrete up to 225mm below ground level with sloping top surface to allow any water in cavity to escape.
Precast concrete lintels to SE design and structural composite stone door/window surrounds to outer wall leaf with cavity tray over to be inserted in external walls over openings, with a minimum end bearing of 150mm.
Hyload DPC (or similar) to be built into both skins of cavity wall min. 150mm above ground level with DPC to inner skin lapped to DPM/radon barrier. Proprietary insulated finned cavity closers - Kingspan "Thermabate" or similar approved, to be fitted horizontally and vertically to all openings inserted in accordance with B.S. 5628 part 3, B.S. 8215, and B.S. 8000 part 3.
Cavity wall to be closed at high level with proprietary insulated cavity closer.
Outer leaf brickwork below DPC to be min Class B engineering brick or similar.
Substructure walls to be class A concrete blockwork (or similar approved) taken down to foundation level.
Openings to be provided where necessary to allow drainage / service pipes to pass through substructure walls, leaving a min. clearance of 50mm around diameter of pipe sealed with flexible foam to prevent vermin infestation. Holes to be bridged with 100x100mm section precast concrete lintels, length to suit opening width plus end bearings.
If required by Structural Engineer, 10mm movement joints to comprise polysulphide foam filler with colour matched mastic sealant, all subject to Structural Engineer's design.

LATERAL RESTRAINT
Provide 30x5mm galvanised mild steel anchor straps at maximum 2000mm ctrs, fixed along gables, ceilings of roofs and at first and second floor joist level (subject to easi-floor joist and truss manufacturers requirements), over timber noggins between the main members, at least half the depth of the main members, by minimum 50mm wide packed tight to outside wall. Straps to span minimum three joists/rafters.

GROUND FLOOR CONSTRUCTION
Overall floor construction to achieve maximum 0.13 W/m².K U-Value.
To comprise 75mm reinforced sand/cement screed on min 500 gauge polythene separation layer overlapped 150mm at joints and turned 100mm up at perimeter.
120mm Kingspan Kooltherm K103 Floorboard insulation with min. 25mm thick perimeter insulation board to face of walls to insulate edge.
150mm thick concrete floor slab to SE design under Visqueen or similar Radon DPM , lapped and sealed with compatible cavity wall DPC in accordance with manufacturer's instructions.
Slab laid over min 150mm well compacted hardcore with sand blinding.

Key

- Denotes direction of span to floor above
- Easi-joist floor to specialist design
- infill opening with construction to match existing wall
- existing drainage (indicative)
- proposed drainage (indicative)
- beam/lintel to SE design
- insulated lintel with dpc
- extent of new foundations / pads to SE design
- (SD) interlinked smoke detector with battery backup
- (HD) interlinked heat detector with battery backup
- Mechanical ventilation
- Non load-bearing internal partitions

New Dwelling
Land at St Ederyn's Church
Old St Mellons, Cardiff

Job No. 20.059
Dwg No. AL(10)10
Rev. A

Title: GA Plans

Date: Jan 2021
Drawn: ***
Scale: 1:50 @ A1

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