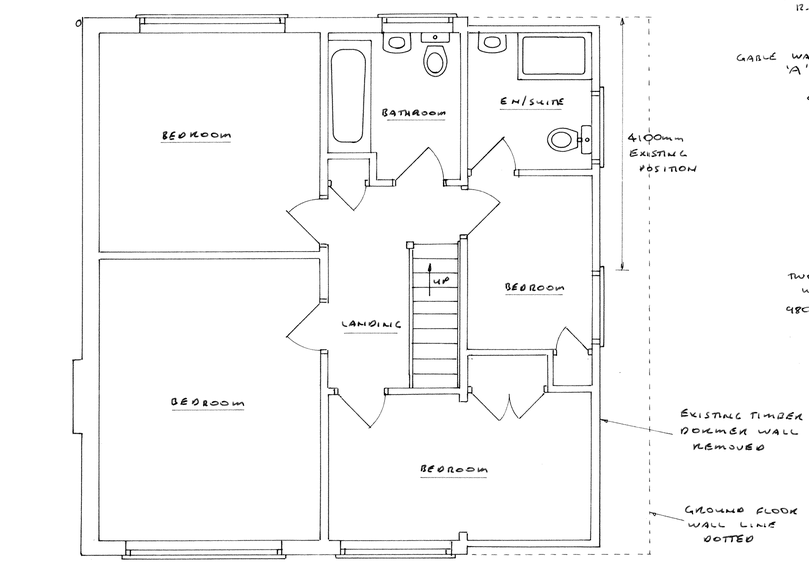
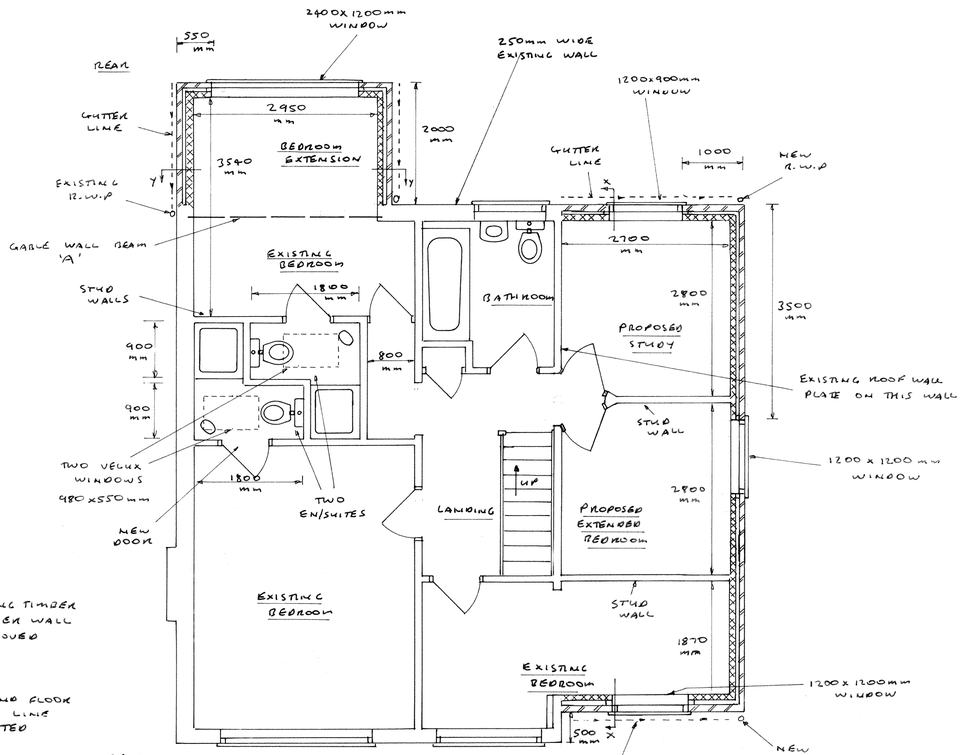
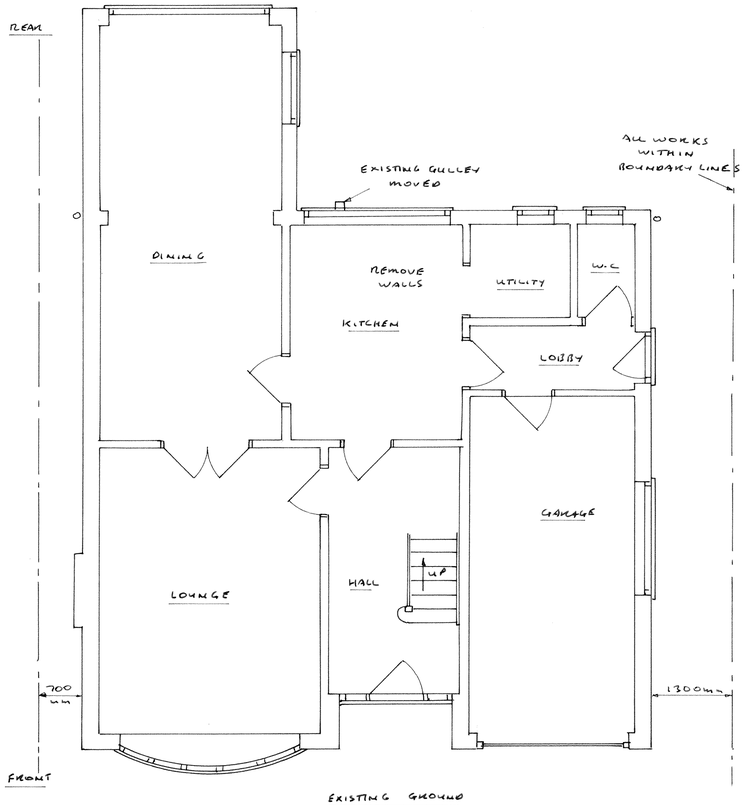


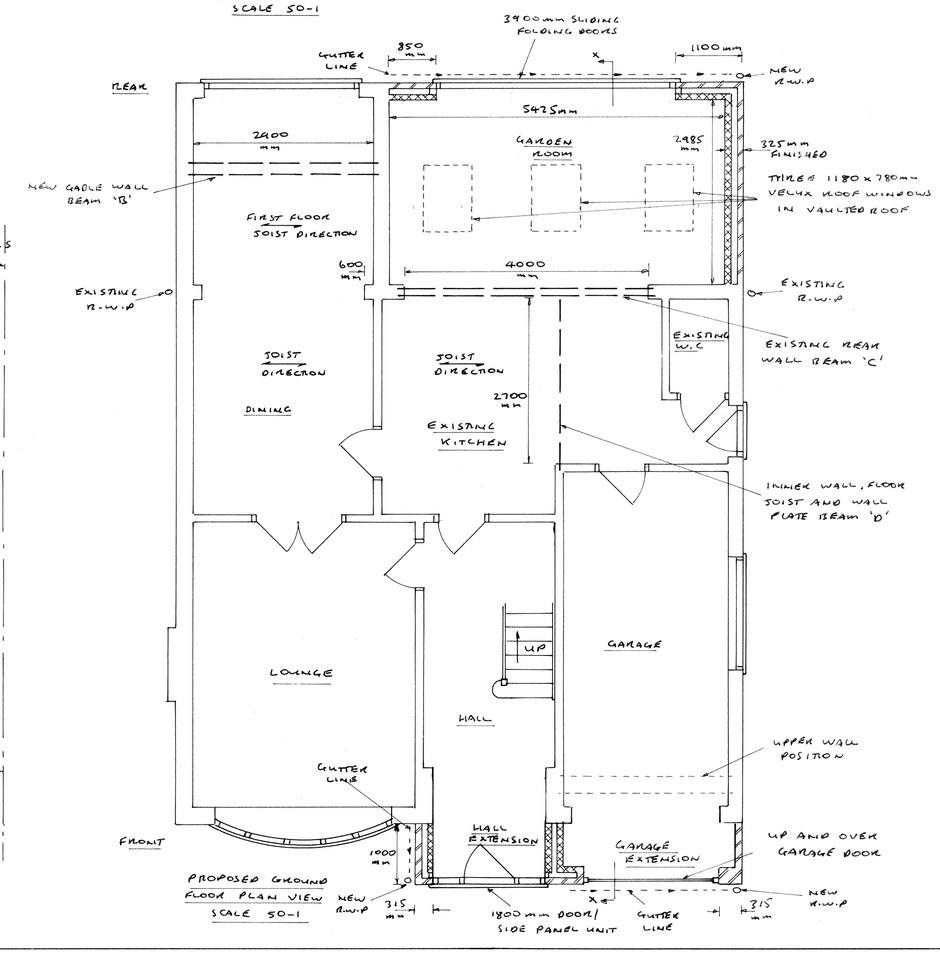
EXISTING FIRST FLOOR PLAN VIEW
SCALE 50-1



PROPOSED FIRST FLOOR PLAN VIEW
SCALE 50-1



EXISTING GROUND FLOOR PLAN VIEW
SCALE 50-1



PROPOSED GROUND FLOOR PLAN VIEW
SCALE 50-1

A, Walls, Floor and Foundations.

- Trench-fill concrete foundations, 500 mm wide, minimum one metre deep or to existing foundation depth, onto solid ground to local authority approval. If any trees are close enough that will affect the ground conditions, the foundation should be deep enough not to be affected by ground movement.
- Lean fill-mix in the cavity up to 225mm below the damp proof course (D.P.C.).
- The garage floor is to have a 100mm concrete slab onto 1200 gauge damp proof membrane (D.P.M) taken up and tucked into damp proof course (D.P.C) onto 150mm of well consolidated sand blinded hardcore on vegetation free subsoil.
- The house floor is to have a 65mm screed onto 100mm concrete floor slab on insulation onto 1200 gauge damp proof membrane (D.P.M) taken up and tucked into damp proof course, onto 150mm of well consolidated sand blinded hardcore on vegetation free subsoil.
- The outer wall is to be built of 100 mm facing bricks to match existing building, 100mm cavity on the new walls 50mm cavity onto existing walls, the inner wall is to be 100 mm solid Optilyte-Ultra blocks or Celcon Solar blocks. Ensure that cavities are kept clean of mortar snots and other debris.
- Profile bond or strongholds to all new wall junctions, tooth bond where the new wall is flush with the existing
- Plaster board on dabs with continuous ribbon of adhesive to all edges and openings and 5mm skim to all inner block wall surfaces.
- Stainless steel wall ties between cavity walls 750mm spacing horizontally, 450mm vertically and 225mm at reveal openings.
- I.G. lintel, L1/S 100 over all openings 150 mm end bearing with cavity trays over and weep holes at 450 mm C.T.S. The lintel over the existing garage door is to be checked and the lintel over the sliding doors is to be specified by the engineer.
- The floor joists for the bedroom extension are to be 200 x 50mm at 400mm centre's, and built into wall and seal the joint with silicon. The floorboards are to be 22mm thick tongue and groove timber or chipboard.
- Floor joist to be supported with 38mm noggins at least three quarters the depth of joist with folding wedges between wall and joist, strapped with 30x5mm steel straps onto three joist and turned over wall at minimum 2000mm centres to give lateral support of the gable wall.

A, Structure, Roof.

- The rafters on the mono-pitched roof are to be 150 x 50mm at 400mm centres doubled up each side of the Velux roof windows
- Fascia board and soffit to all roof edges to match existing.
- Proprietary valley trays or code 4 lead to the valleys.
- Lead flashing where the roof meets the brickwork, 150mm upstand and 300mm onto the roof.
- Wall plate to be 100 x 75mm timber, tied to the wall with 30 x 5mm galvanized steel ties at 1800mm C.T.S.
- If a trussed roof construction is used, chevron braced to internal supports to B.S 5268. Fix trusses to wall plate using proprietary truss clips. Truss centre's to be 600mm. Truss calculations to be supplied prior to construction on site.
- If a traditional cut roof construction is to be used, use 100 x 50mm rafters and ceiling joists at 400mm centres with a 175 x 32mm ridge board. Two purlins positioned equally in each span of 225 x 75mm and four ceiling binders equally spaced of 225 x 75mm.
- The roof angle is to be approximately 42° to ensure the new ridge is the same height as the existing. The existing pitch is 42°.
- Gable end tied to roof structure at verge and ceiling level with 30 x 5mm galvanized steel anchors to span three joists with timber packers between joists at 1800mm centre's.
- Klober Permo Forte vapour permeable breather membrane or Tyvek Supro over rafters with Klober eave carrier at eaves.
- Slating battens over membrane with concrete roof tiles and ridges to match existing. The mono-pitched roof will have a pitch of approximately 20° to finish below the first floor windows, use tiles to match the low pitch.

B. Fire safety, Means of escape.

- The steel beams to be clad with double 12.5mm plasterboards, break joints and 5mm skim to give half hour fire resistance. Alternatively use Gypsum Fire Line 12.5mm with 5mm skim to give half hour protection.
- Mains smoke alarms with battery backup fixed to ceiling to BS 5839; Part 6. The smoke alarms should be sited so that there is a smoke alarm in the circulation space within 7.5 metres of the door to every habitable room and are ceiling mounted. Radio link alarm for the second alarm is acceptable. One alarm positioned on each floor as a minimum.
- Roof windows to be constructed to class 1 fire resistance, either timber or steel and not plastic.
- Escape windows in all habitable rooms on the first floor of at least 0.33m² or 450mm x 750mm high minimum dimensions with the bottom of the openable window not more than 1100mm above the floor. The study may need to have a fixed step near the window to achieve 1100mm the the bottom of the window
- All internal surfaces fireproofed to class 1, e.g.12.5mm Plasterboard and skim.

C. Site preparation and resistance to contaminants and moisture.

- The floor is to be protected from damp by installing a 1200 gauge damp proof membrane within the floor construction and tucked up into the wall damp proof course, a separating layer of building paper between P.I.R. insulation and the concrete.
- Blue bricks on outer wall and a felt damp proof course on the inner wall to form a D.P.C.
- Ground level to be a minimum of 150 mm below damp proof course (D.P.C).

E. Resistance to the passage of sound.

- Internal walls and floors between habitable rooms, and habitable rooms and a room containing a water closet, not an en-suite toilet from the associated bedroom or a wall containing a door should have a minimum sound insulation of 40 Rw db
- The internal stud wall to be 75 x 50mm timber studs, line each side with a single layer of plasterboard and skim with 50mm of Crown Acoustic Partition Roll or Rocksilk Flexible Slab between the studs and all joints well sealed.
- A timber floor is to have a 22mm timber floor with a mass of 15 kg/m² with 12.5mm plasterboard and skim beneath the joist with the joist cavity filled with 100mm of Crown Acoustic Joist Roll.

F, Means of ventilation.

- Mechanical ventilation in kitchen of 60 litres/second with an extractor fan or 30 litres/second on a cooker hood.
- Mechanical ventilation in bathrooms and toilets of 15 litres/second with 15 minutes overrun by using an extractor fan.
- Trickle vents in windows approx 1.7m above floor level in all habitable rooms of not less than 8000mm² and 4000 in the kitchen and bathrooms.
- Natural ventilation in all habitable rooms of minimum $^1/_{20}$ of total floor area to be provided by opening windows.

G. Sanitary, bathrooms and waste storage.

- The water supply is to be wholesome water supplied by the local water authority.

H, Drainage and waste disposal.

- Soil and vent pipe should terminate at least 900mm above any opening to the building and three metres from it and be fitted with a cage, which does not restrict airflow. Insulate within any boxed in area.
- The underground foul and storm drains are to be 110mm diameter bedded on pea gravel and laid to a fall of 1 in 40. There is no evidence of the underground drains without excavating, drain runs are to sorted on site.

The wastes from the two new en-suites are to be pumped up into the existing soil and vent pipe with a 'Saniflo' system.

- Any new inspection chambers are to be a minimum of 190mm diameter if the depth is less than 600mm, if the depth is 600 – 1200mm deep use a 450mm diameter chamber or equivalent rectangle.
- Inspection chambers and manholes to have removable non-ventilating covers of durable and of suitable material, lightweight covers to be secured to deter unauthorized access.
- Sink and washing machine waste to be 40mm diameter and 75mm deep seal trap.
- Basin waste to be 32mm diameter and 75mm deep seal trap.
- Shower waste to be 40mm diameter and 50mm deep seal trap
- If drains pass through walls, lintel over drain, 50 mm compressive material all around masked with rigid sheet to prevent entry from vermin.
- 100mm wide guttering and 68mm rain water pipe into existing storm drain with permission of local water authority.
- Any connection to drains to be made obliquely in the direction of flow

J. Combustion appliances and fuel storage systems.

- If the boiler is to be replaced and moved, use an approved gas safe registered contractor and an installation and commissioning certificate supplied on completion of installation. The SUDBEK rating of the boiler is to be band 'A'. The position of the boiler is to be to Building Regulations Part J and to be approved by LBC officer.
- Heating system extended into new area with thermostatic radiator valves.

L, Conservation of fuel and power.

- 100 mm loft roll insulation between roof joists at ceiling level and 200 mm across joists to give 0.16 'U' value
- Sloping ceiling to be insulated with 100mm Kingspan TP10 between rafters with 50mm air gap over and 50mm of Kingspan TP10 to the underside of the rafters (to avoid cold bridging) and plasterboard and skim to give 0.18 'U' value.
- 100mm outer brick wall, 100mm Dritherm 37 to cavity down to 150mm below top of finished floor level and 100mm solid Optilyte block or Celcon Solar blocks and plasterboard on dabs with continuous ribbon of adhesive to all edges and openings and 5mm plaster skim to give 0.28 'U' value. If 100mm of Dritherm cannot be achieved in the cavity width of the existing walls, line the inner face of the walls with 25mm of Kingspan wall insulation.
- Polyfoam cavity and sill closures, or similar, to all cavity closures around doors, windows etc.
- 75mm Kingspan Thermafloor TF70 under floor slab with 25mm thick turned up at edges to give 0.22 'U' value. Alternatively use 100mm Springvale Platinum Floorshield (expanded polystyrene) with 25mm turned up at the edges to give 0.21 'U' value.
- PVCu frame windows to match existing style, Low 'E' double-glazing to give a minimum 'U' value of 1.6 W/m²K. Window frame to cloak cavity by 30mm to avoid cold to transfer onto inner surface and in turn reduce condensation.
- One of every four new fixed lights or one every 25m² of floor area to be energy efficient, whichever is the greater, e.g. fluorescent, or low energy lamps.

N, Glazing, safety to impact, opening and cleaning.

- Glazing below 800mm high from floor in windows and partitions and below 1500mm in doors and side panels to be to Part 'N' glazing or B.S. 6262: part 4:1994. If broke on impact, break in a way, which is un-likely to cause injury.

P, Electrical Safety.

- All electrical work must be carried out to Part 'P' regulations by a person competent to do so. Prior to completion the local building control office are to be provided with a copy of either of the following.
  1. An electrical installation certificate issued under a competent person scheme.
  2. Electrical installation certificate signed by a person competent to do so.

Proposed single and first floor rear extensions to a dwelling, a single storey front extension and a first floor side extension to replace the existing dormer for:-
Mr M Crothers
8 Parkside, Groby. LE6 0EB

Drawing N° A1-17-08-2011/1 Sheet 1 of 2

Robin Taylor 01664 857456, email taylorrobin@ntlworld.com