

**GENERAL SPECIFICATION**  
(unless noted otherwise on drawings or engineer's design)

**FOUNDATIONS**

Concrete deep strip 30 N/mm<sup>2</sup> strength sulphate resisting cement. Depth & width provisionally as plan but final depth & width to be agreed on site with building inspector. Drains running through foundations or under new walls to have 150 RC lintel over with 50 clearance. Foundations exceeding 1500 deep to have 75 claymaster to inside face kept 500 from bottom of excavation. Foundations dug next to neighbouring structures to be constructed in 'hit & miss' sequence. Excavate alternate bays not exceeding 1m long. Fill with concrete and dig next bay after concrete has fully set. Connect pins with M16 MS dowels. Any eccentrically loaded foundation to be 600mm wide with the outer face of wall 60 from foundation edge.

**GROUND FLOOR - GROUND BEARING CONCRETE SLAB**

Min 150 rammed hardcore blinded with 50 sand 1200 PVC DPM lapped to DPC. 100 Celotex GA4000 insulation slab with staggered & taped joints. 75 screed. 500 gauge polythene separating layer between insulation & screed. All existing air vents ducted through 100 dia PVC pipe under DPC. Strip of insulation to perimeter of screed.

**EXTERNAL CAVITY WALLS WITH FACING BRICK OUTER SKIN**

Cavity wall of 100 Celcon Standard lightweight block (K=0.15 W/m<sup>2</sup>K) inner skin. 102 facing brick outer skin to match existing outer skin. 1:1:6 mortar mix. Class B eng brick with sulphate resisting cement below DPC. 150 cavity with 150 Knauf DriTherm-32 full fill insulation. Dryline internally with 12.5 plasterboard dot & dabbed to wall with 3 skim. Wall to achieve U-value of 0.18W/m<sup>2</sup>K. Fill cavity with weak mix concrete to 225mm below DPC. Stainless wall ties (275 long) 750 horiz. 450 vert & 300 at reveals. Join to existing building with furix movement joint. Provide thermalite expansion joint to external leaf on spans in excess of 6m. DPC to BS743 lapped to existing. Close cavity reveals with Thermabate insulated cavity closers. Openings to have Caticn CG150/100 lintels (unless noted otherwise on plan or engineers design). 150 min bearings.

**STEELWORK**

Beams to be clad with 12.5 fireline plasterboard + skim to provide 30 min fire rating. Alternatively steelwork to be painted with intumescent paint by suitably trained person to approval of building inspector on site.

**FIRST FLOOR**

200x50 C16 joists at 400 cts. Steel joist hangers. 22mm moisture resistant T&G particle board (18 WBP ply to bathrooms) 5x30 steel restraint straps at 2000 cts over 2 joists & located in brick or blockwork. 200x38 straight strutting between joists. Soffit clad with 9 plasterboard + skim. 100 acoustic quilt between joists

**INTERNAL PARTITIONS**

75x50 stud. 12.5 plasterboard + skim. 1981x762 doorways unless shown otherwise on plan. Lay DPC under sole plates where on concrete ground floor. Double up joists under partition bolting together with M12 bolts @ 600cts if on timber floor. All partitions to contain 75 acoustic quilt. Clad bath/shower room partitions with 12.5 soundblock + 3 skim each side.

**PITCHED FRONT ROOF**

100x50 C16 rafters at 400 cts. Spiked & B-mouthed to wall plate. Tyvek breathable membrane. 19x38 battens. 5x30 MS anchor straps at 1200 max cts screw fixed at three points to both roof structure and wall. Roof tiles to match existing. Pitch to match existing. 300 fibreglass quilt laid between joists & over joists. Ventilation not required. 9 plasterbd + 3 skim to underside of joists.

**PITCHED MAIN ROOF**

150x50 C16 rafters at 400 cts. Spiked & B-mouthed to joists & wall plates. 200x50 C16 hip & valley rafters. 200x38 ridge board. 150x75 purlins. 100x50 struts at 1000 max cts (where shown on sections). 150x50 C16 ceiling joists to 400cts. 1 layer roof felt. 19x38 battens. 5x30 MS anchor straps at 1200 max cts screw fixed at three points to both roof structure and wall. Roof tiles to match existing. Chutes to match existing. Ventilates at eaves. 300 fibreglass quilt laid between joists & over joists. Thru vents installed to perimeter to allow through eaves ventilation. 9 plasterbd + 3 skim to underside of joists. New hip & ridge tiles to be bedded on mortar in addition to a mechanical fixing

**PITCHED ROOF (WITH SLOPING SOFFIT) - UNVENTILATED**

175x50 C16 rafters at 400 cts spiked & B-mouthed to joists & wall plates. 5x30 MS anchor straps at 1200 max cts screw fixed at three points to both roof structure and wall. 150mm Celotex XR4000 insulation between rafters & 30mm Celotex TB4000 insulation beneath rafters to achieve U-value of 0.15W/m<sup>2</sup>K. 15 degree pitch. Tyvek breathable membrane. 19x38 battens. Sandtoft 20/20 interlocking clay tiles with 100 headlap laid to suit 15 deg pitch (or similar approved). Tile colour to match existing. 9 plasterbd + skim to soffit.

**FLAT ROOF (WARM DECK CONSTRUCTION)**

100x50 C16 joists at 400 cts on steel joist hangers. 5x30 MS anchor straps at 2000 max cts. 1 in 40 firings. 12 WBP ply. Bond vapour control layer to ply (Alutrix 600 or similar). Fully bond 150mm Celotex GA4000 to VCL. 18 OSB. Loose lay venting layer. 3 layer felt to BS747 hot bonded to OSB decking. Ceiling 9 plasterboard + skim. Roof to achieve U-value of 0.15W/m<sup>2</sup>K. Roof covering to achieve AA, AB or AC surface spread of flame rating.

**ROOFLIGHTS - PITCHED ROOFS**

Install with manufacturers upstand/flashing kit and all to manufacturers instructions. 15 degree min pitch for Velux rooflight. Doubled up rafters and trimmers around opening to be bolted together with M12 bolts @ 600cts.

**VENTILATION**

Windows/doors to match existing & provide vent of min 1/20 floor area & built in adjustable 8000mm<sup>2</sup> min vent. Open plan kitchen diners to have 3x8000mm<sup>2</sup> vents. Install power vent to kitchen to achieve 30 litres/sec if over a cooker or 60 litres/sec if elsewhere. WC/Bath/shower room to achieve 15 litres/sec and be connected to light switch with 15 min overrun. Vent to be ducted at ceiling level to outside air.

**DRAINS**

Clay 100 dia pipe laid in 150 pea shingle to fall min 1 in 40. Inspection chambers 150 concrete base. 215 shaft of engineering bricks type B flat pointed. Clay fittings in 1:3 mortar benching. 600x450 steel frame & cover. Alternatively use Osma preformed IC all to manufactures spec (only on private non shared drains). Drains shown on drawings are estimated and are to be confirmed on site before any work commences.

**SURFACE WATER**

112 dia PVC gutters. 68 dia PVC downpipes. Surface water downpipes connected to soakaway minimum 5 metres from any building. Volume of 1 cubic metre per 16.5 square metres of roof area served. Fill with hardcore. If clay found use grate system soakaway.

**ABUTMENTS**

All exterior abutments to have code 4 lead min 150 flashing let into brickwork or blockwork.

**WINDOWS & DOORS**

Double glazed with 16 air gap and soft low E coating. Built in 8000mm<sup>2</sup> adjustable vent. Windows & doors to achieve U value of 1.4 w/m<sup>2</sup>K. All glass below 800mm, glass in doors or within 300mm of a door to be toughened safety glass.

**ABOVE GROUND DRAINAGE AND PLUMBING**

Sink, bath & shower to have 40 dia waste. Basin with 32 dia waste. All with 75 D/S traps & rodding access at bends. WC with 110 dia waste. Plumbing to comply with British Standards. Air admittance valves (Durgo) to be installed above level of highest fitting that it serves. SVPs to vent 900 above any openable window within 3m. Wholesome water (ie water provided by statutory water supplier via a compliant water supply installation) to be provided to all taps. Baths & shower taps to be thermostatically controlled to ensure water does not exceed 48 deg C

**ELECTRICAL WORK**

All electrical work required to meet the requirements of Part P (Electrical Safety). Must be designed, installed, inspected & tested by a person competent to do so. Prior to completion the council should be satisfied the Part P has been complied with. This may require an appropriate BS7671 electrical installation certificate to be issued for the work by a person competent to do so. New light fittings to have LED bulbs. Electrical switches and sockets to be installed between 450mm and 1200mm from floor level where practical.

**HEATING**

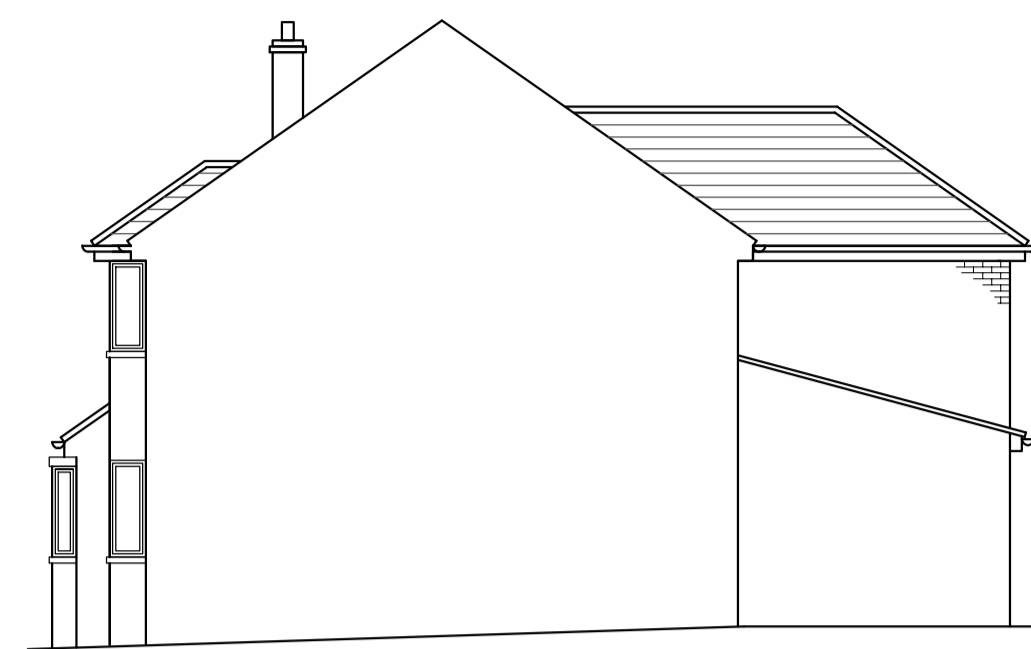
New radiators to be fitted with thermostatic valves. Work to gas pipework, boilers & appliances to be carried out, tested and certified by Gas Safe registered person.



**PROPOSED SIDE ELEVATION**  
SCALE 1:100



**PROPOSED FRONT ELEVATION**  
SCALE 1:100

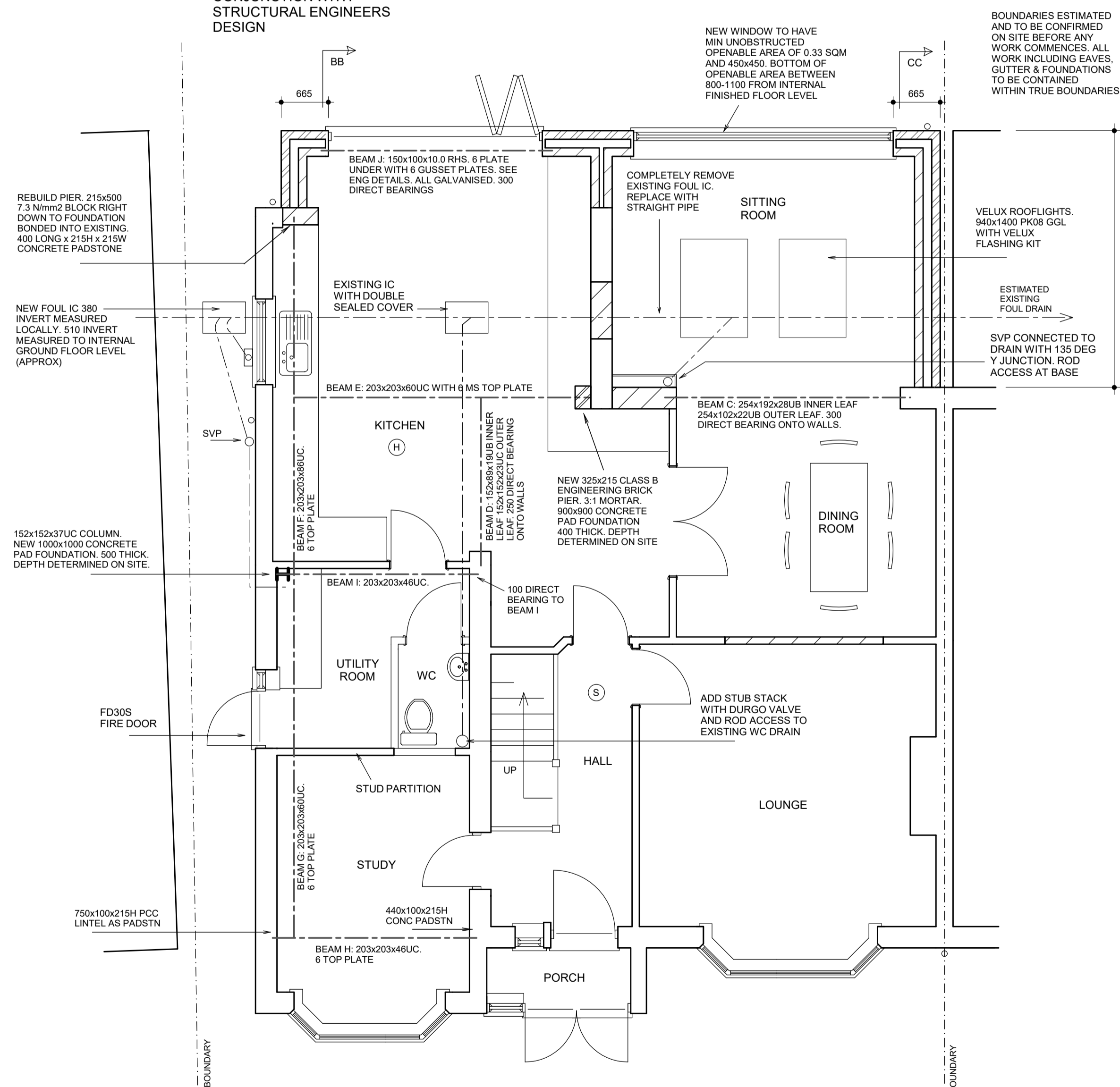


**PROPOSED SIDE ELEVATION**  
SCALE 1:100

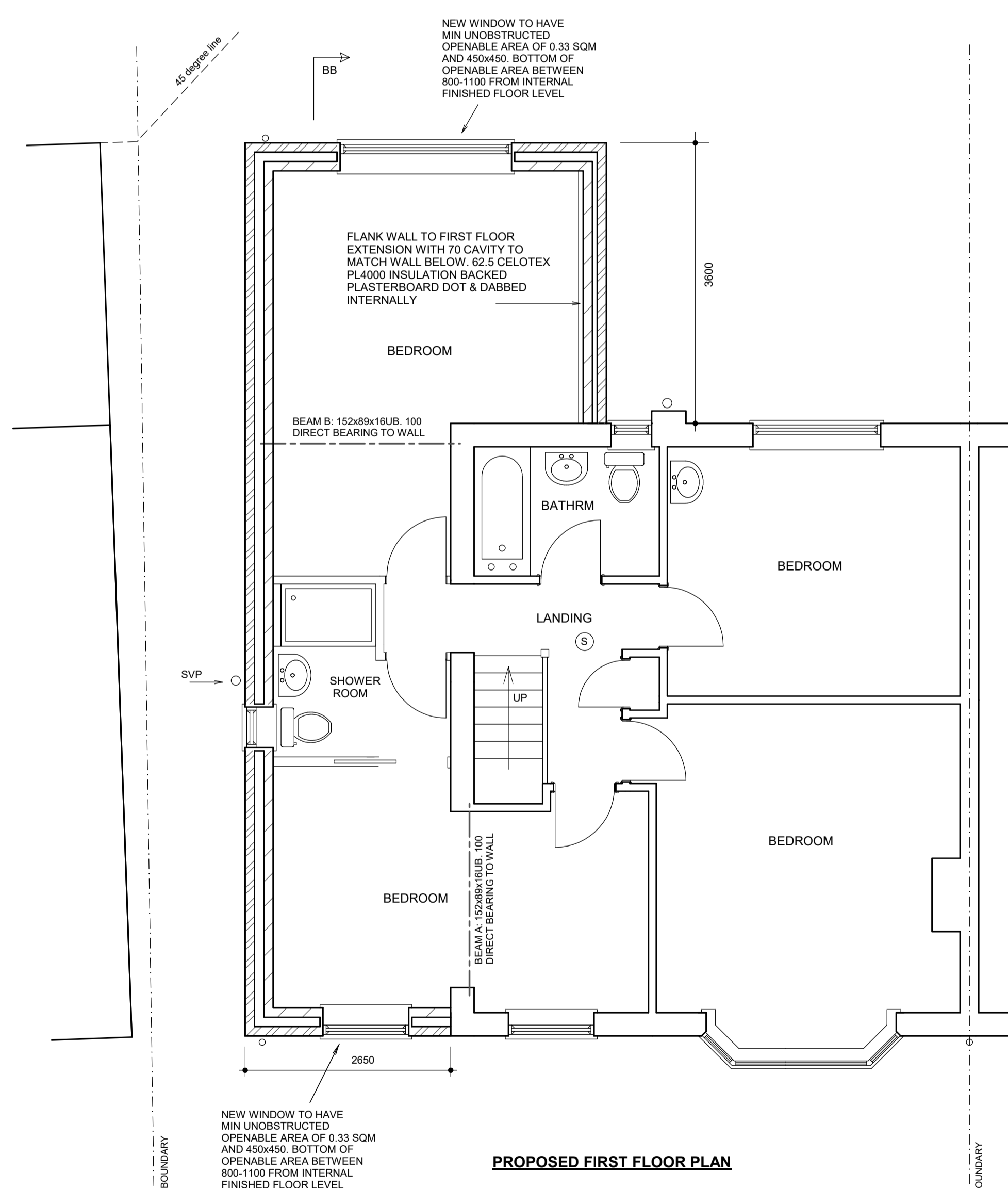


**PROPOSED REAR ELEVATION**  
SCALE 1:100

DRAWING TO BE READ IN CONJUNCTION WITH STRUCTURAL ENGINEERS DESIGN



**PROPOSED GROUND FLOOR PLAN**



**PROPOSED FIRST FLOOR PLAN**

- (S) SELF CONTAINED MAINS OPERATED INTERLINKED OPTICAL SMOKE DETECTOR SYSTEM IN ACCORDANCE WITH BS5839 OR BS5446. ALARMS TO HAVE BATTERY BACK UP. DETECTORS 300mm FROM WALLS
- (H) HEAT DETECTOR INTERLINKED WITH SMOKE DETECTORS

79 WHITELANDS AVENUE CHORLEYWOOD HERTS WD3 5RQ

SCALE 1:50 / 1:100 @ A1

DRG No. 2366.2 REV D

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10.00 METRES @ 1:100

5.00 METRES @ 1:50

BOUNDARIES ESTIMATED AND TO BE CONFIRMED ON SITE. ALL NEW WORKS TO BE CONTAINED WITHIN TRUE BOUNDARIES UNLESS STATED OTHERWISE ON PLAN. ALL NEW WORK TO COMPLY WITH CURRENT BUILDING REGULATIONS DIMENSIONS IN MILLIMETRES AND TO BE CONFIRMED ON SITE. ALL STEEL DIMENSIONS TO BE CONFIRMED ON SITE AND NOT BE TAKEN FROM STRUCTURAL CALCULATIONS. ALL DRAINS & TILES ARE ESTIMATED AND ARE TO BE CHECKED & CONFIRMED ON SITE BEFORE ANY WORK COMMENCES. CLIENT TO SERVE PARTY WALL ACT NOTICE BEFORE WORK COMMENCES. ALL WORK TO BE CARRIED OUT & SUPERVISED BY COMPETENT OPERATIVES.

DUE TO SURVEY LIMITATIONS EXISTING JOIST SPANS ASSUMED UNTIL CONFIRMED ON SITE. ALL WALLS & PARTITIONS TO BE CONSIDERED LOADBEARING UNLESS OPENED UP ON SITE AND CHECKED BY COMPETENT PERSON TO CONFIRM OTHERWISE. MUST BE CONFIRMED BEFORE ANY WORK COMMENCES. IF STRUCTURAL ENGINEERS DESIGN RELATING TO STRUCTURAL ELEMENTS CONTRACTS ARCHITECTURAL DRAWINGS SPEC. ENGINEERS DESIGN PREVAILS. THIS DRAWING IS FOR PLANNING & BUILDING REGULATION APPLICATION PURPOSES ONLY. BUILDING REGULATION TO APPOINT CON CONSULTANT TO ENSURE WORKS COMPLY WITH COM REGULATIONS BEFORE WORK COMMENCES. SINCE WE HAVE NO ACCESS TO THE DEEDS OF THE PROPERTY IT IS THE RESPONSIBILITY OF THE CLIENT TO ENSURE THAT THE WORKS DO NOT CONTRAVENE ANY RESTRICTIVE COVENANTS CONTAINED IN THE DEEDS.

HOUSE EXTENSION

APRIL 2024