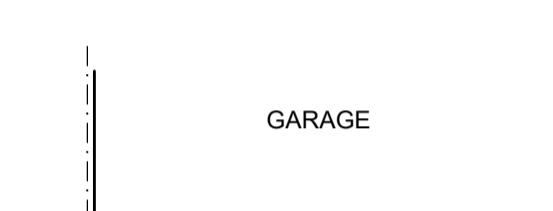


**PROPOSED SIDE ELEVATION**  
SCALE 1:100

**PROPOSED REAR ELEVATION**  
SCALE 1:100

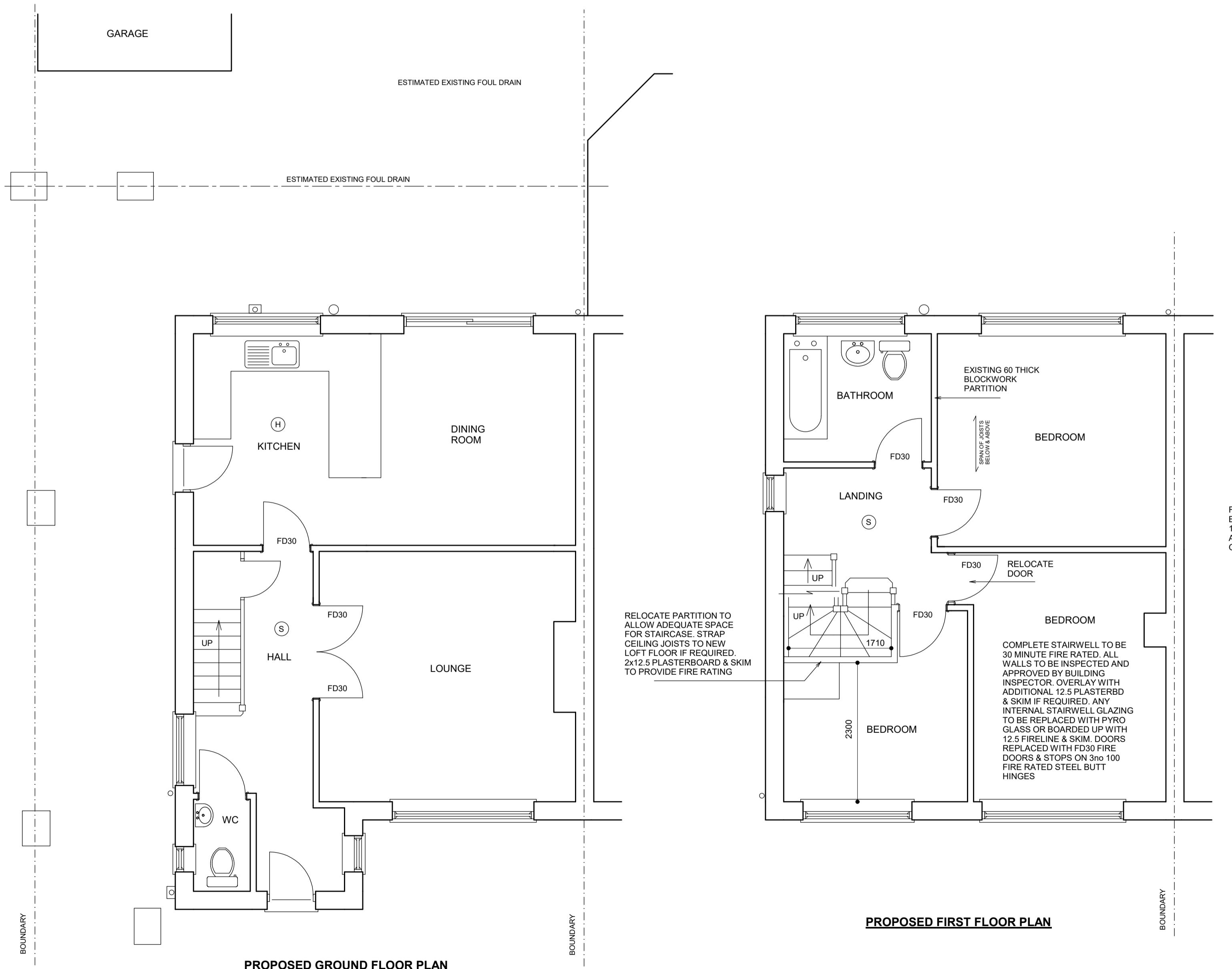
**PROPOSED SIDE ELEVATION**  
SCALE 1:100

**PROPOSED FRONT ELEVATION**  
SCALE 1:100

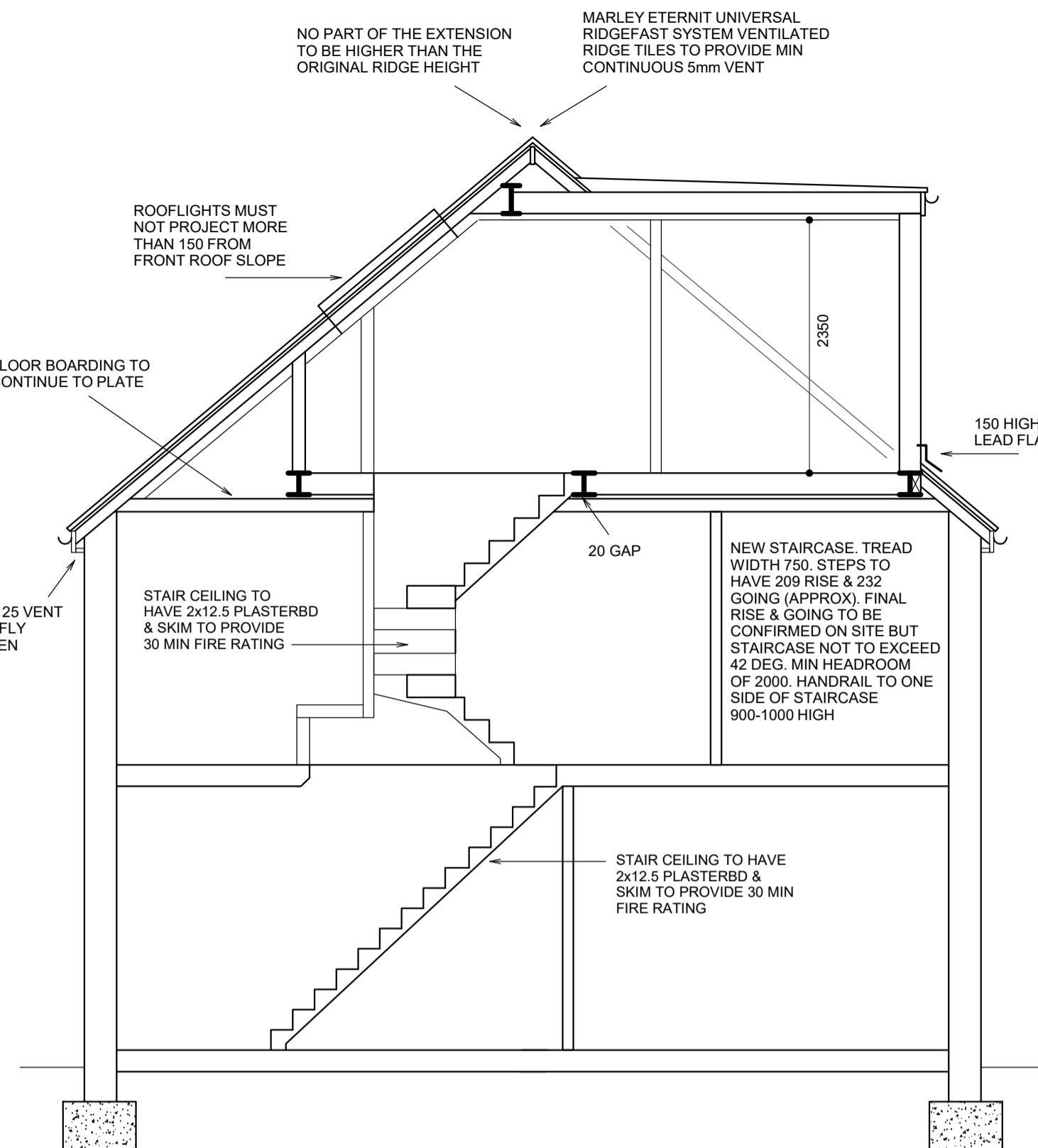


GARAGE

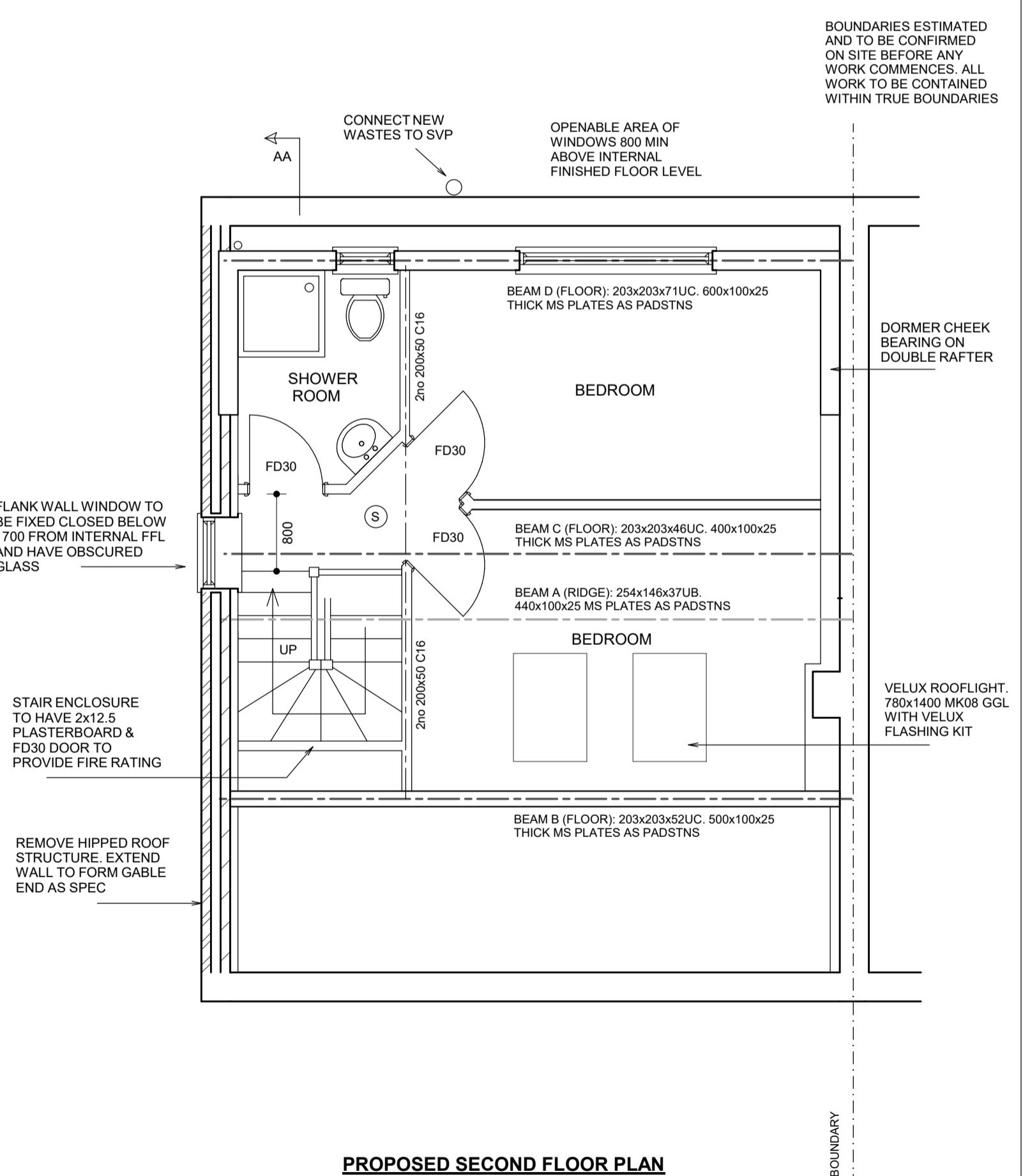
ESTIMATED EXISTING FOUL DRAIN



**PROPOSED GROUND FLOOR PLAN**



**SECTION AA**



**PROPOSED SECOND FLOOR PLAN**

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

It is assumed that existing house has cavity walls. To confirm on site. Cavity wall of 100 Celcon Standard lightweight block ( $K=0.15 \text{ W/m}^2\text{K}$ ) inner skin 102 facing brick outer skin to match existing. Cavity to match existing (70 approx) with 65 Knauf DriTherm-32 full fill insulation. 62.5 Celotex PL4000 insulation backed plasterboard dot & dabbed to wall with 3 skim. Stainless wall ties 750 horiz, 450 vert & 300 at reveals. Cavity reveals to be closed with Thermablock insulated cavity closer. Openings to have Catnic CG70/100 150 mm bearings (unless beam noted on drawing).

#### UPGRADING OF EXISTING PARTY WALL

Dry line wall with 72.5 thick Celotex PL4000 insulation backed plasterboard fixed to 47x47 battens. Additional 40 Celotex TB4000 between battens. 3 skim. Wall to achieve U-value of 0.18W/m2K.

#### 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.

#### LOFT FLOOR STRUCTURE

200x50 C16 joists at 400 cts (unless noted otherwise on engineers design). 22mm moisture resistant T&G particle board (18 WBP ply to bathrooms). 100 acoustic quilt located between joists with chicken wire. 5x30 steel restraint straps at 2000 cts over 2 joists & located in brick or blockwork. 200x38 straight strutting between joists. Loft floor to be 30 minute fire rated. Building inspector to inspect first floor ceiling and approve as adequate for fire and sound insulation. Overlay with additional layer of 12.5 soundblock plasterboard + skim if required.

#### STAIRCASE

32 engineered pine strings. 22 MDF treads. 9 ply risers. 90x90 newels. Tread & riser provisionally as plan but to be confirmed on site. Pitch not to exceed 42 degrees. 50 mm tread length at turns. Open banisters to have spindles spaced to prevent 100 dia sphere from passing at any point. Handrails 900-1000 high. 2000 min headroom over stairs.

#### INTERNAL PARTITIONS

75x50 stud. 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 staircase partitions with 12.5 fireline or 2x12.5 plasterboard. Clad bath/shower room partitions with 12.5 soundblock. Clad other partitions with 12.5 plasterboard. Skim all plasterboard.

#### EXISTING MAIN ROOF RAFTERS (PITCHED WITH SLOPING SOFFIT) - VENTILATED

Existing rafters 100x50 at 400 cts. Double up with additional 100x50 C16. 5x30 MS anchor straps at 1200 max cts screw fixed at three points to both roof structure and wall. 50 ventilation gap over 50 Celotex GA4000 insulation between rafters & 100 Celotex GA4000 insulation beneath rafters to achieve U-value of 0.15W/m2K. Ventilate at ridge and eaves. New hip & ridge tiles to be bedded on mortar in addition to a mechanical fixing.

#### FLAT ROOF (COLD DECK CONSTRUCTION)

200x50 C16 joists at 400 cts. 5x30 MS anchor straps at 2000 max cts. 18 WBP plywood fired to fall min 1 in 40. 3 layers roof felt to BS747 hot bonded to ply decking. Finish with bitumen bedded stone chippings covering the whole surface to a depth of 12.5mm. 150mm Celotex XA4000 insulation between joists with 50 ventilation gap over. 30 Celotex TB4000 below joists. Ceiling 9 plasterboard + skim. 25 continuous vent at eaves and abutment. Roof to achieve U-value of 0.15W/m2K. Roof covering to achieve AA, AB or AC surface spread of flame rating.

#### DORMER REAR WALL & CHEEKS

125x50 C16 timber stud on doubled up rafters. 2no 200x50 C24 bolted together as lintel over windows. 120mm Celotex GA4000 between studs. 30 Celotex TB4000 internally. Timber framed walls to achieve U-value of 0.18W/m2K. Fix 1000 gauge polythene membrane over studs and seal perimeter with mastic to provide a VCL. 12.5 plasterboard + 3 skim internally. 9 Superflux board to external face within 1m of boundary. Rest of dormer clad in 9 WBP ply. Cross batten externally and fix vertical hung tiles.

#### ROOFLIGHTS - PITCHED ROOFS

Install with manufacturers upstand/flashings kit and all to manufacturers instructions. Doubled up rafters and trimmers around opening to be bolted together with M12 bolts @ 600cts.

#### VENTILATION

Windows to match existing & provide vent of min 1/20 floor area & built in adjustable 8000mm<sup>2</sup> min vent. Install power vent to 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.

#### SURFACE WATER

112 dia PVC gutters. 68 dia PVC downpipes. Surface water downpipes connected into existing surface water drain. If not possible construct soakaway minimum 5 metres from any building. Volume of 1 cubic metre per 16.5 square metres of roof area served. Fill with hardcore.

#### ABUTMENTS

All exterior abutments to have code 4 lead min 150 flashing.

#### 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/m2K. All glass below 800mm, glass in doors or within 300mm of a door to be toughened safety glass.

#### ABOVE GROUND DRAINAGE AND PLUMBING

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. 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. 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.

(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

ALL FIRE DOORS TO BE FITTED WITH INTUMESCENT STRIPS TO DOOR OR FRAME. 3no 100mm C24 BUTT HINGES WITH MELTING POINT IN EXCESS OF 800 DEG C