



PROPOSED REAR ELEVATION  
SCALE 1:100

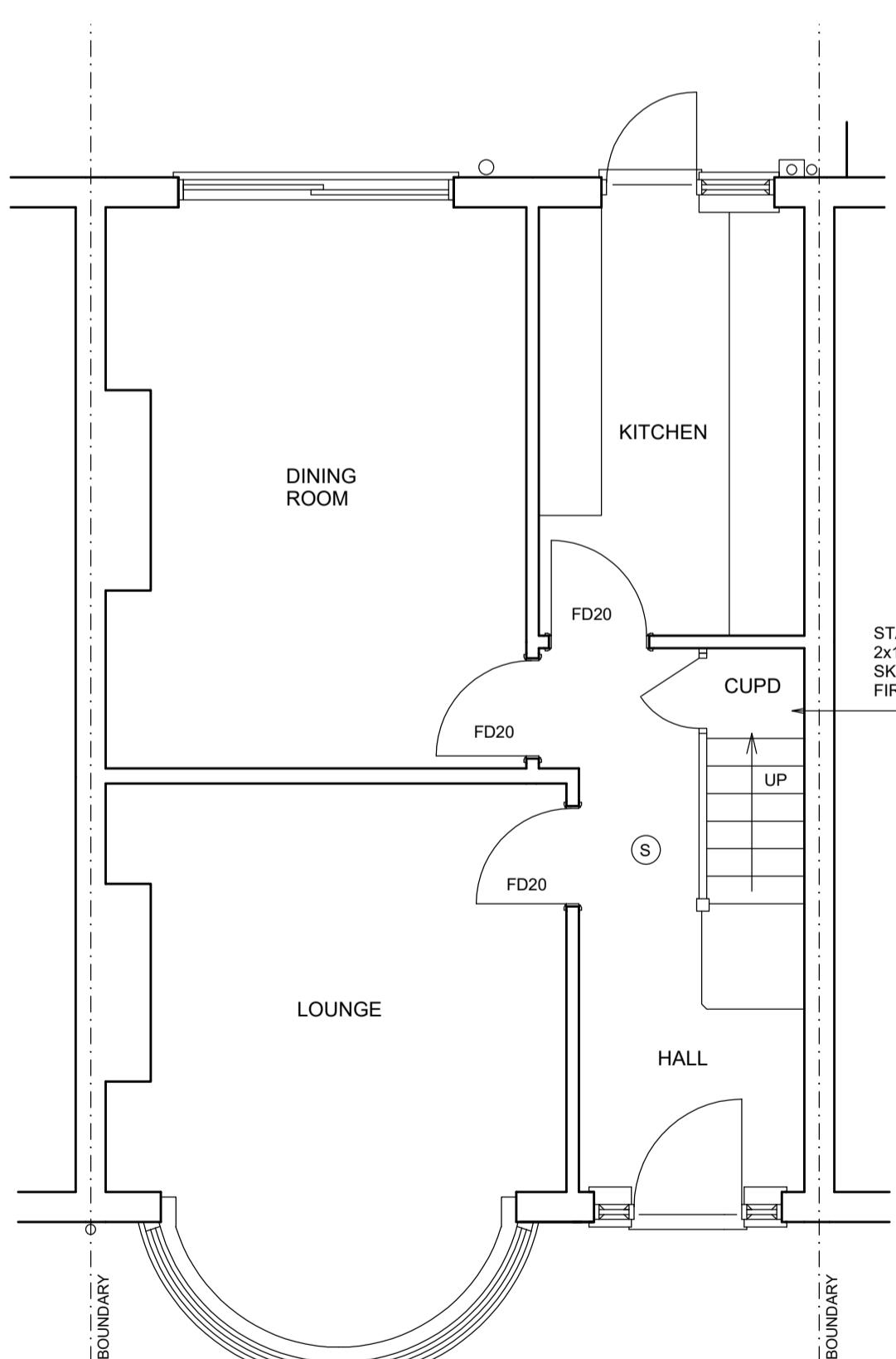
PROPOSED SIDE ELEVATION  
SCALE 1:100

PROPOSED FRONT ELEVATION  
SCALE 1:100

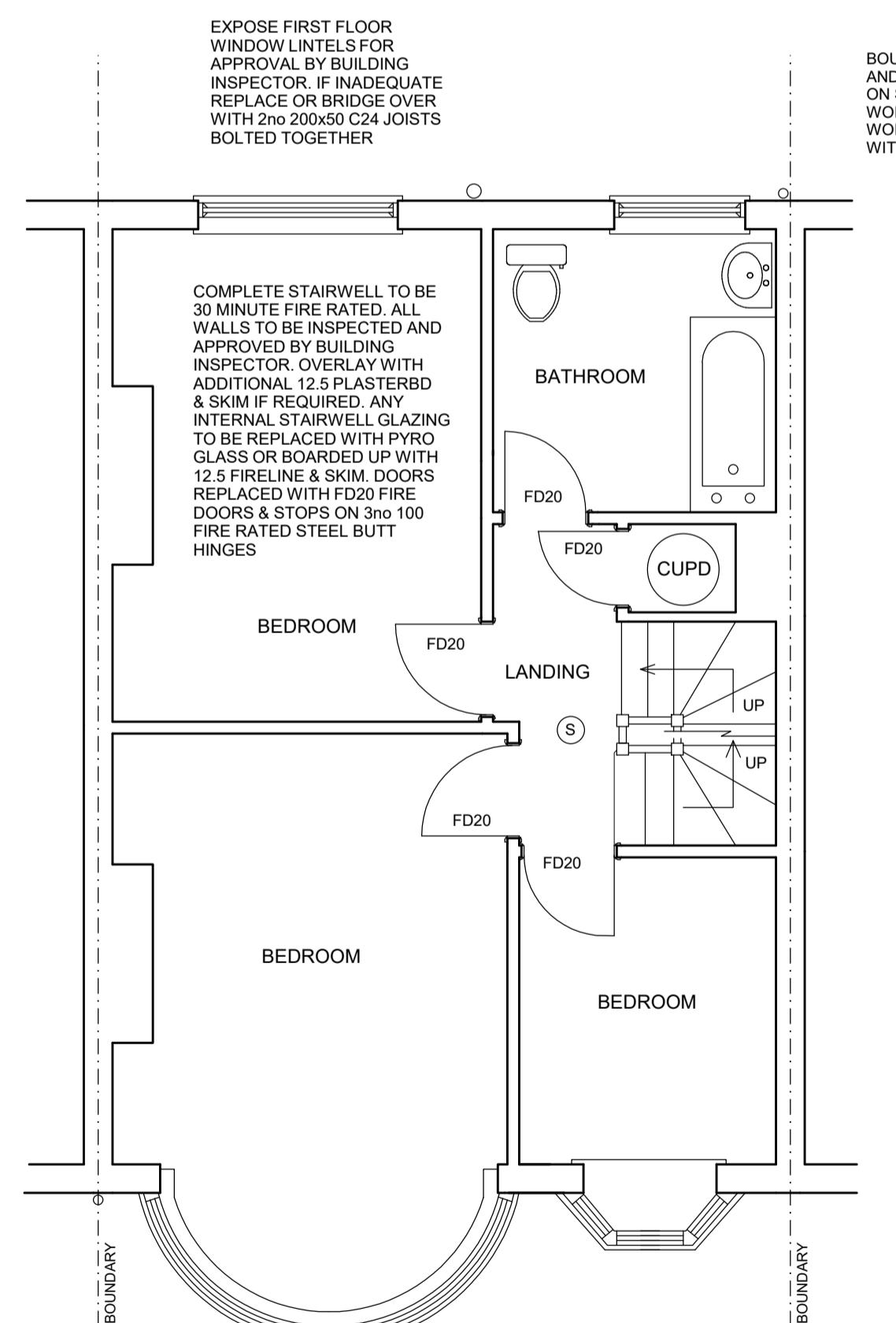
PROPOSED SIDE ELEVATION  
SCALE 1:100

ROOF EXTENSION VOLUME  
PROPOSED REAR DORMER  
EXTENSION  $5.30(w) \times 3.85(lg) \times 2.95(h)$  = 30.10 M<sup>3</sup>  
2

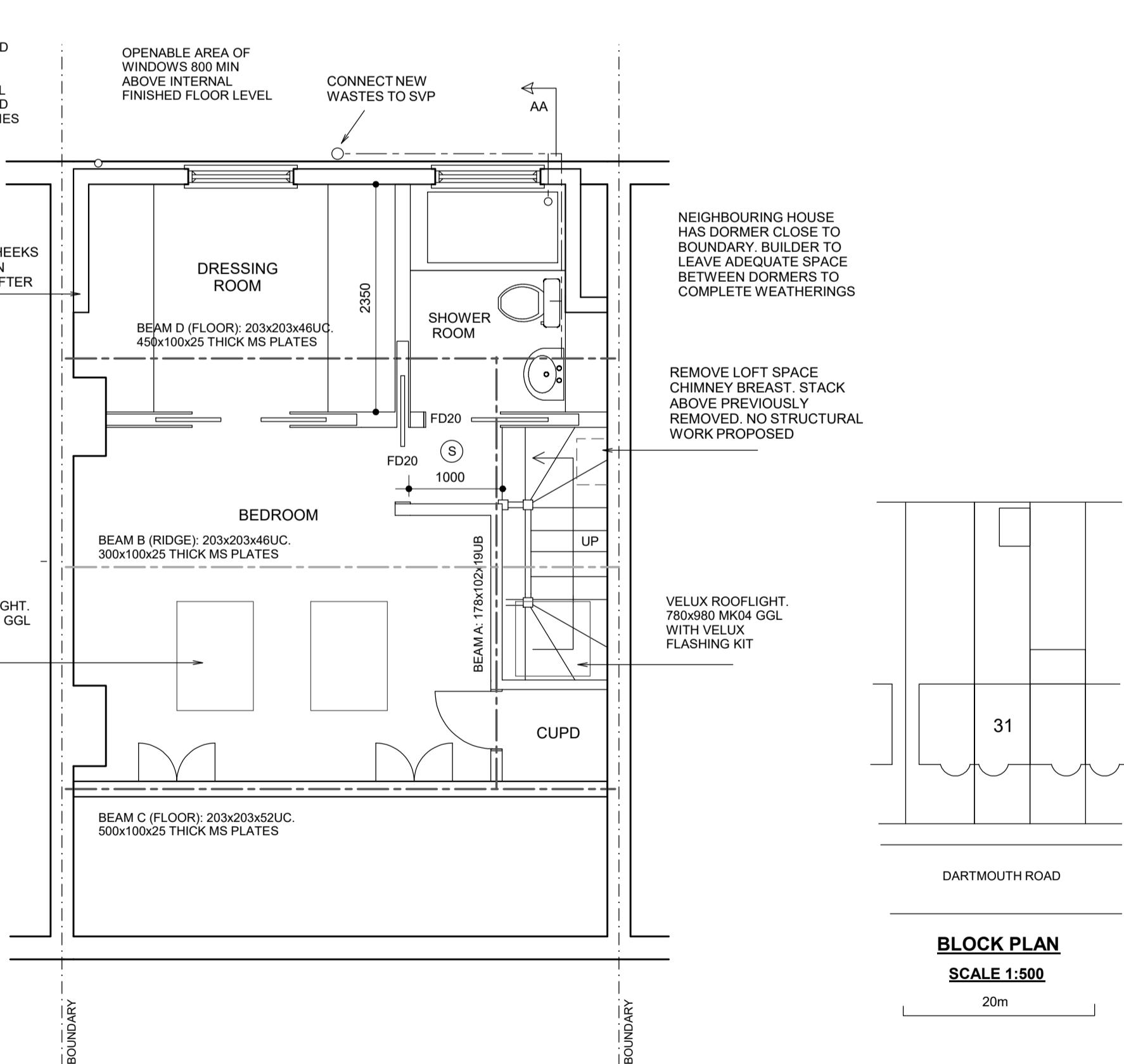
IMPORTANT NOTE:  
ALL DIMENSIONS TO BE CHECKED  
AND CONFIRMED ON SITE. TOTAL  
ROOF EXTENSIONS MUST NOT  
EXCEED 40 CUBIC METRES  
MEASURED EXTERNALLY. HEIGHT  
MUST NOT EXCEED HEIGHT OF  
ORIGINAL ROOF RIDGE. ALL  
WORK MUST BE CONTAINED WITHIN  
THE SITE BOUNDARIES



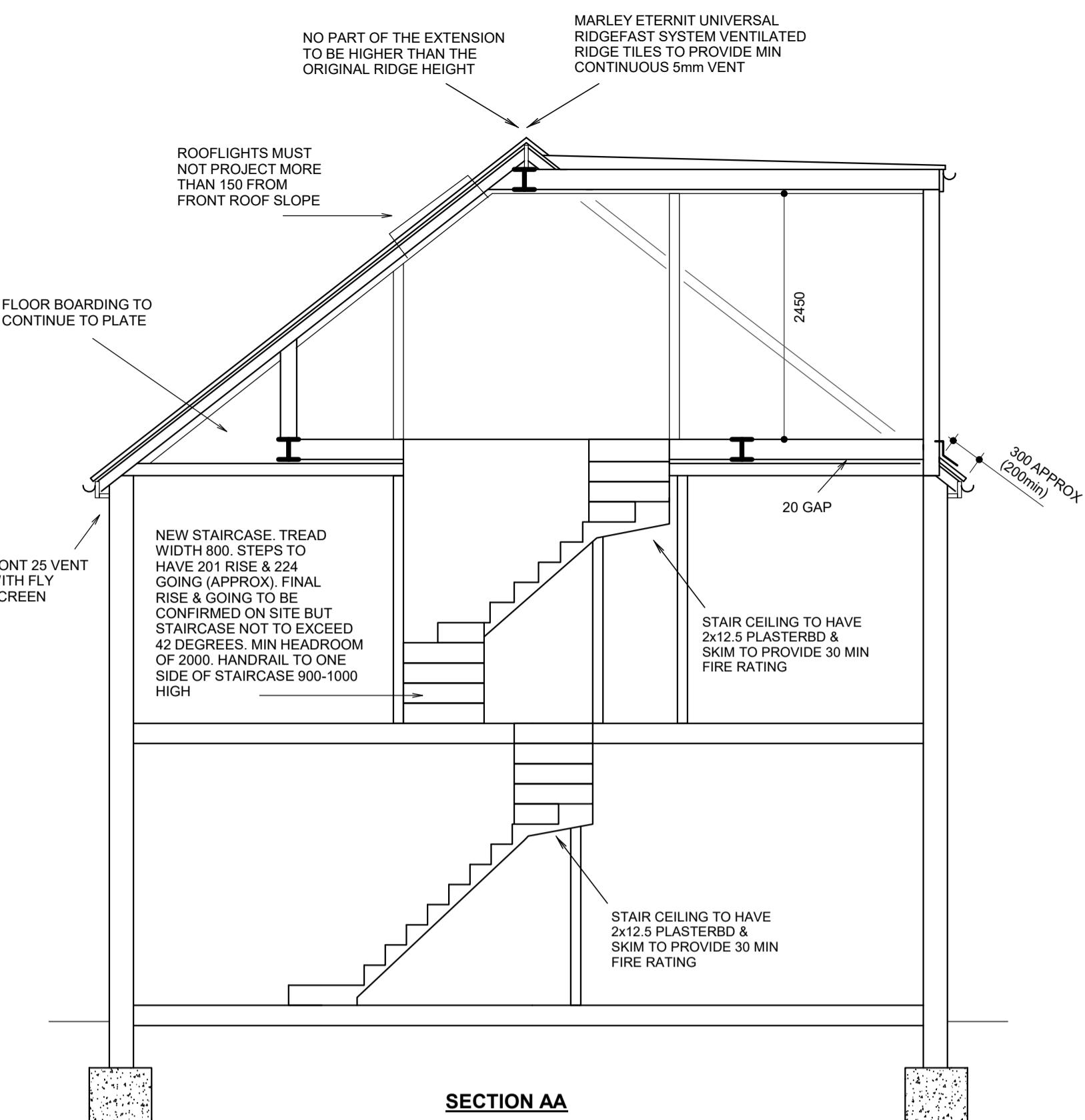
PROPOSED GROUND FLOOR PLAN



PROPOSED FIRST FLOOR PLAN



PROPOSED SECOND FLOOR PLAN



SECTION AA

UPGRADING OF EXISTING PARTY WALL – Neighbouring loft not converted

Dry line wall with 42.5 thick Kingspan Kooltherm K18 insulation backed plasterboard fixed to 25x50 battens on 1200 gauge DPM sheet. Additional 25 insulation between battens 3 skim. Wall to achieve U-value of 0.28W/m2K.

SOUND INSULATION TO PARTY WALL - Neighbouring loft previously converted

Provide sound insulation to party wall with either 52mm Gyproc Triline board adhered directly to brickwork or Gyproc Gyliner universal system of 25mm Isover APR 1200 acoustic insulation between lining channels clad with 2x 12.5mm Gyproc Soundblock plasterboard. All to manufacturers instructions and to satisfaction of building inspector.

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

220x50 C24 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 fixed 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 min 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. Can be reduced to 1900 at midpoint reducing to 1800 on side for a staircase accessing a loft conversion.

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 stairwell 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) - UNVENTILATED

Existing rafters 100x50 at 400 cts. Double up/replace with 120x50 C16 @ 400cts. 110mm Celotex XR4000 insulation between rafters & 40mm Celotex TB4000 insulation slab beneath rafters to achieve U-value of 0.18W/m2K. Tyvek breathable membrane. 19x38 battens. Roof tiles to match existing. New ridge tiles to be bedded on mortar in addition to a mechanical fixing.

FLAT ROOF (COLD DECK CONSTRUCTION)

200x50 C16 joists at 400 cts on 200 steel joist hangers. 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 XR4000 insulation between joists with 50 ventilation gap over. 12 Celotex TB4000 below joists. Ceiling 9 plasterboard + skim. 25 continuous vent at eaves and abutment. Roof to achieve U-value of 0.18W/m2K.

DORMER REAR WALL & CHEEKS

125x50 C16 timber stud. 100mm Celotex GA4000 between studs leaving 25 cavity. Timber framed walls to achieve U-value of 0.28W/m2K. Fix 10 gauge polythene membrane over studs and seal perimeter with mastic to provide a VCL. 12.5 plasterboard + 3 skim internally. Screw 9 WBP ply to external face of studs. 9 Superlux board in lieu of ply to areas within 1m of boundary. 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 to achieve U-value of 1.6 w/m2K. Doors to achieve U value of 1.8 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

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. 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.