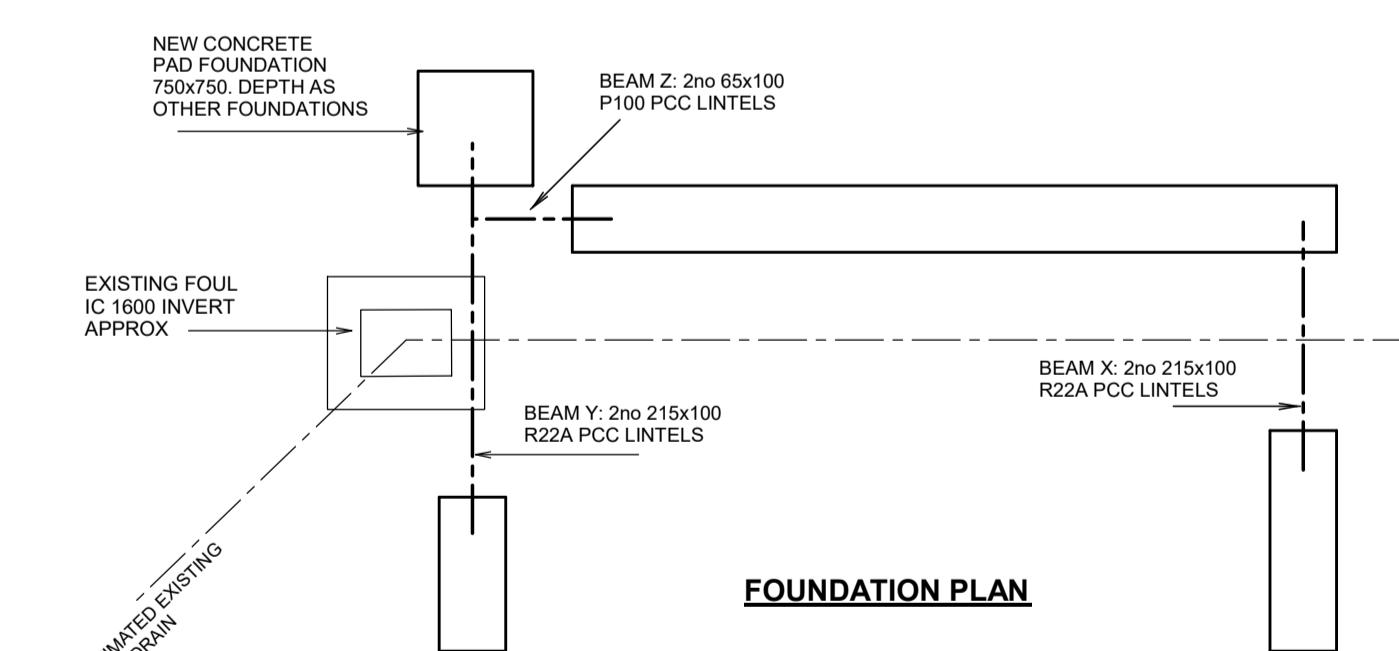
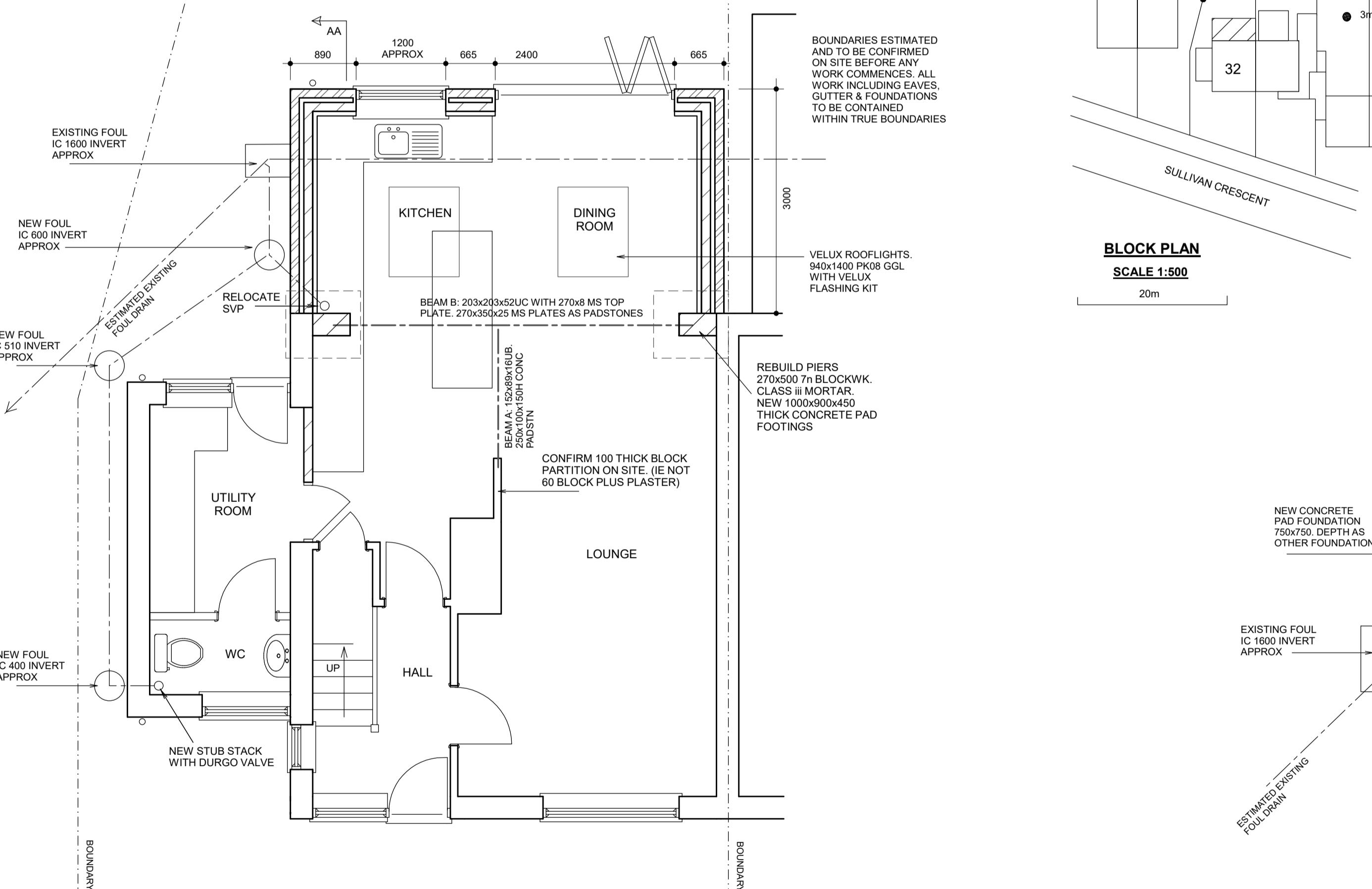


SECTION AA

NOTE:
FOUNDATION DEPTHS ESTIMATED AND TO BE CONFIRMED ON SITE BASED ON SITE CONDITIONS BY BUILDING INSPECTOR.
PROVISIONAL DEPTHS AS SECTIONS UNLESS OTHERWISE AGREED ON SITE. TRIMMING TO BE COMPLETED ON SITE BEFORE ANY WORK COMMENCES. FOOTINGS TO BE 600 BELOW LOWEST ROOT ACTIVITY AND BELOW ANY ADJACENT DRAINS. 75 CLAYMASTER TO BE USED FOR ALL FOUNDATIONS EXCEEDING 1.5m. DEPTHS MEASURED TO ORIGINAL GROUND LEVEL NOT TO TOP OF BUILT UP GROUND

EXISTING SHARED DRAINS 500 MM FROM NEW FOOTINGS, WHERE DRAIN PENETRATES FOUNDATION BRIDGE OVER 150 MM. DRAINS 500 MM DEEP, 500 MM C/D BETWEEN FOUNDATION AND OUTSIDE DIAMETER OF DRAIN. LEAVE 500 MM GAP BETWEEN NEW FOUNDATIONS AND OUTSIDE FACE OF IC WALLS. 150 PEA SHINGLE AROUND DRAIN PIPES



FOUNDATION PLAN

FOUNDATIONS

Concrete deep strip 30 N/mm² 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 - SUSPENDED TIMBER CONSTRUCTION

50 lean mix concrete oversite on lapped 1200 gauge DPM. Top of oversite to be above external ground level. 150 void (increase void to 160 if high shrink soil). 200x50 C16 joists at 400 cts on steel joist hangers. 18mm moisture resistant T&G particle board. 150 Celotex XR4000 insulation slab between joists held in position with chicken wire screwed to joists. DPC to be below floor joists. Plastic airbricks at 1800 cts to perimeter of extension to ventilate void.

EXTERNAL CAVITY WALLS WITH FACING BRICK OUTER SKIN

Cavity wall of 100 Celcon Standard lightweight block (K=0.15 W/m2K) inner skin. 102 facing brick outer skin to match existing outer skin. 1:16 mortar mix. Class B eng brick with sulphate resisting cement below skin. 100 cavity with 100 Knauf DriTherm-32 full fill insulation. Dryline internally with 52.5 Celotex PL400 insulation backed plasterboard dot & dabbed to wall with 3 skim. Wall to achieve U-value of 0.18W/m2K. Fill cavity with weak mix concrete to 225mm below DPC. Stainless wall ties (225 long) 750 horiz, 450 vert & 300 at reveals. Join to existing building with furfix 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 Thermabloc insulated cavity closers. Bifold doors to have Catnic CX90/100. Other opening to have Catnic CG90/100/150. 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.

INTERNAL PARTITIONS

75x50 stud. 1981x762 doorway. 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 WC partitions with 12.5 soundblock + 3 skim each side.

PITCHED ROOF (WITH SLOPING SOFFIT) - UNVENTILATED

150x50 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. 120mm Celotex XR4000 insulation between rafters & 50mm Celotex TB4000 insulation beneath rafters to achieve U-value of 0.15W/m2K. 15 degree pitch. Tyvek breathable membrane, 19x38 battens. Sandtof 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.

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 8000mm² min vent. Install power vent to kitchen to achieve 30 litres/sec if over a cooker or 60 litres/sec if elsewhere. Utility room to achieve 30 litres/sec. WC/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 bedding. 600x450 steel frame & cover. Alternatively use Osma preformed IC all to manufacturers 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.

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 8000mm² 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

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 (Durogo) 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.

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.