

FOUNDATIONS

Foundations to be designed by Structural Engineer and constructed in strict accordance with Engineers details and as directed by the Building Inspector. Concrete must not be poured in freezing conditions.

EXTERNAL WALL FOOTINGS

Walls below damp proof course to be built in solid or cavity construction to suit wall construction above and as shown on drawings. Footings to be constructed using FL or FN bricks or suitable brick specified by the manufacturer. Blockwork used for the inner skin of cavity construction or to internal walls should be strictly in accordance with manufacturer's specification. For cavity walls, provide concrete cavity fill to within 225mm of the DPC. Damp proof courses to be bitumen, to BS 6398, or minimum 0.5mm black polyethylene, with welded or 100mm lapped joints, to each skin of footings. Beadfill trenches in compacted layers to a maximum of 150mm below DPC.

GROUND FLOORS (Insulated suspended beam and block - 0.22 U-value)

Floor to be minimum 75mm sharp sand and cement screed, to BS 8204, reinforced with D49 fabric mesh poured on vapour control/slip layer over 100mm Polyfoam Floorboard ECO Floorboard Standard floor insulation, or similar equivalent performing floor insulation achieving 0.22W/m²k or better U-value. (P/A=0.51 elemental method). Insulation to be closely butted and taped with a 25mm upstand to perimeter, and laid in accordance with manufacturers details and Robust Details. Provide a 1200 gauge polythene DPM laid over pre-cast reinforced concrete beam and block suspended floor, to BS 8110.

Floor beams to be designed and supplied by specialist, with light weight infill blocks and laid in accordance with manufacturers details on DPC and over minimum 300mm void. Void to be provided with 1500mm² ventilation per metre run of external walls (typically 215 x 75mm truncated air bricks with 2400mm² ventilation capacity at 1.6m o/c to BS 493). Provide additional DPC on top of floor beams where underside of beam is less than 150mm above finished external ground level.

RAIN WATER DISPOSAL

Form flat roof internal concealed eaves box gutters as detailed on the drawings discharging to rainwater outlets to positions shown. Provide new rainwater pipes connected to new rottable bottle gullies concealed to drain runs discharging into new soakaway (where possible, subject to soil conditions). Soakaway size to be calculated in relation to the drained area and the permeability of the ground (calculated using percolation test if required) in accordance with BRE Digest 365 and/or NHBC Chapter 5.3. Soakaways to be constructed using honycomb brickwork or perforated concrete rings surrounded with granular material and positioned at least 5.0m from the nearest building's foundation.

BELOW GROUND DRAINAGE

Provide 110mm diameter PVC-U Camedrain, or similar equivalent, with flexible joints and laid to falls (minimum 1:40-fall, minimum 1:50-surface water) and bedded on minimum 50mm, surrounded by 150mm, and covered by 100mm of granular bedding material. Drains to be laid in accordance with manufacturers recommendations and discharge to inspection chambers/ manholes/connections with existing drains as shown. Where flexible pipes are to be laid shallower than 900mm below roads or drives the run affected is to be protected by a reinforced concrete raft supported beyond the width of the drainage excavation 100mm above the drain to allow for a cushion of fill. For flexible drain runs less than 600mm below non-vehicular areas provide bridging slabs. Protect drains passing through foundations by encasing drain in plywood ducting and 100mm glassfibre quilt within foundation and install 2no 12mm m.s. rods over. For shallow drains install concrete lintels over drains within brickwork with a minimum of 50mm void around the pipe.

SHALLOW INSPECTION CHAMBERS

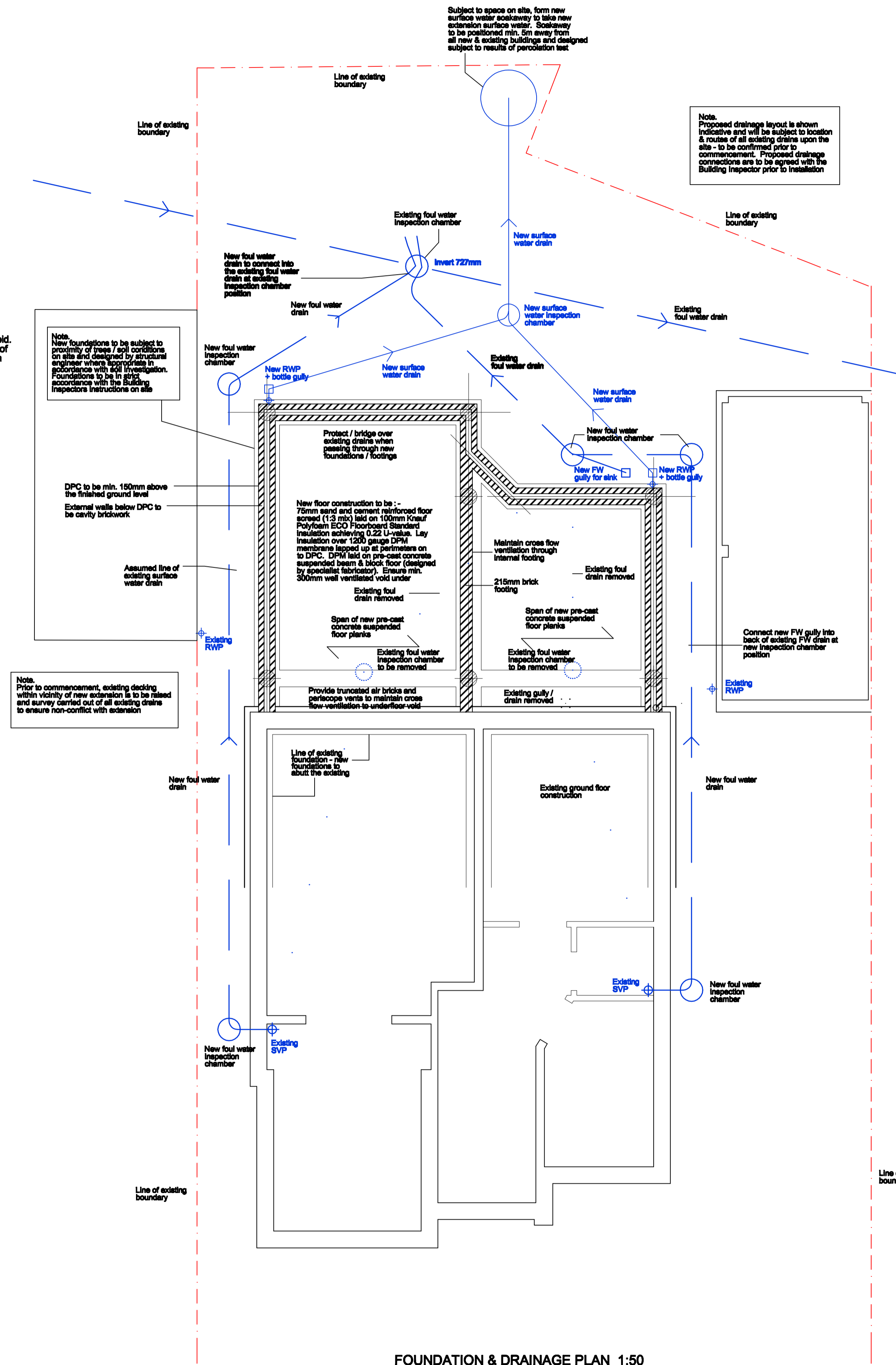
Shallow inspection chambers to be used only for invert depths of 800mm maximum. 250mm diameter one piece moulded polypropylene unit bedded on and surrounded with minimum 150mm granular material to BS 7158. Chamber to be fitted with 325mm diameter cast iron cover and frame. Only to be used in situations inaccessible to vehicles.

UNIVERSAL INSPECTION CHAMBER

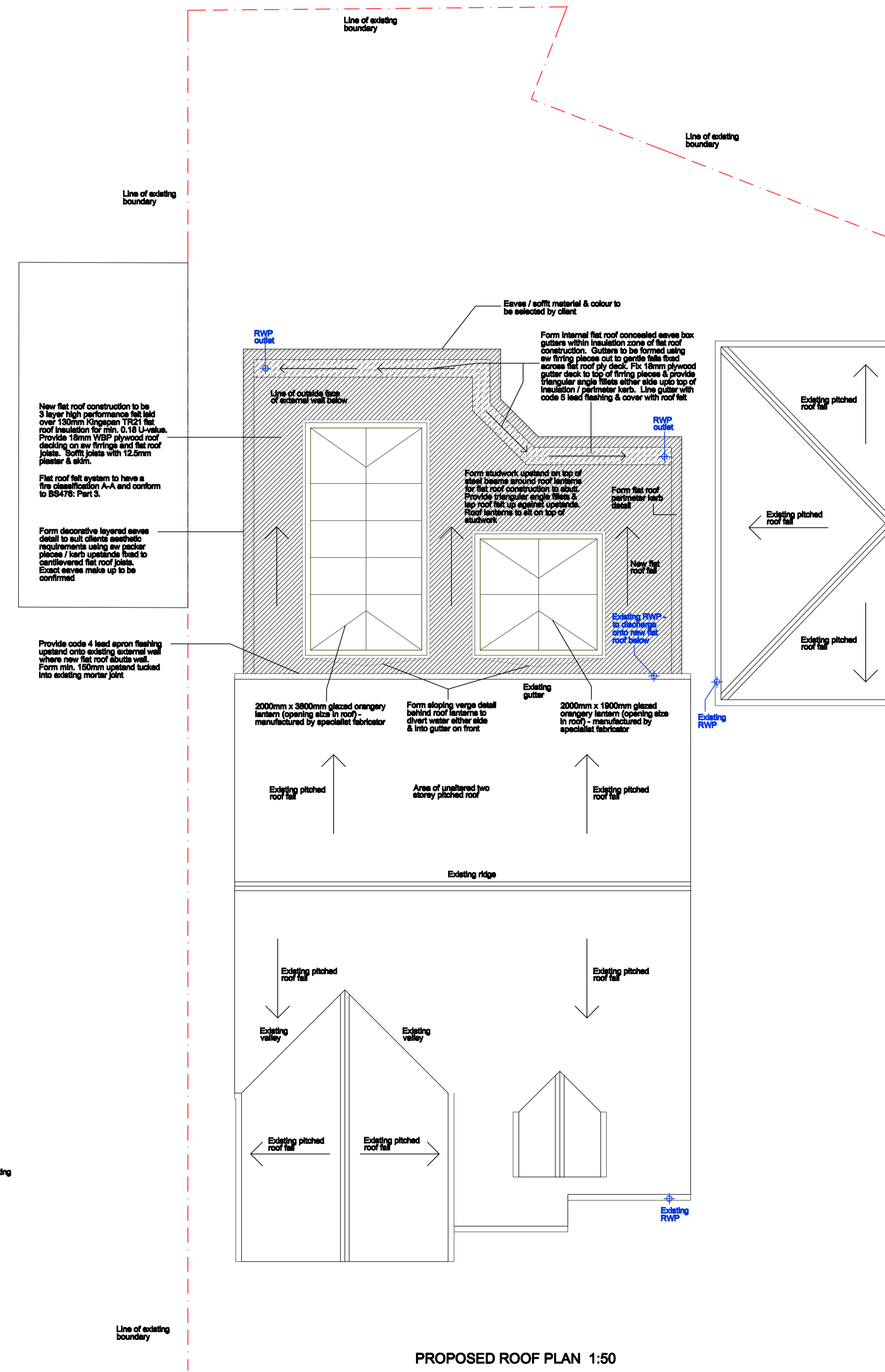
Universal inspection chambers to be used only for invert depths of 1000m maximum. 450mm diameter moulded polypropylene unit bedded on and surrounded with minimum 150mm granular material to BS 7158 with 150mm concrete around top of shaft to support 450mm diameter Class C cast iron cover and frame. Where situated on driveways provide shuttering around chamber and form 150mm thick concrete slab at a suitable level for Class B cover and frame.

MANHOLES (up to 2.7m deep)

Manholes to be 1200 x 750mm internally and consist of 150mm C15 concrete base with 225mm Class B engineering brick flush pointed internally with 1:3 cement mortar and fitted with a reinforced concrete cover slab. Alternatively use 1050mm diameter (1200mm diameter if deeper than 1.5m) pre-cast concrete chamber and shaft rings to BS 5911 fitted to manufacturers specification. Provide 600mm square or circular BS cover and frame suitable for loading situation. Form smooth rounded benching at a minimum fall of 1:12. Manholes deeper than 1m to be fitted with metal step irons or fixed ladders.



FOUNDATION & DRAINAGE PLAN 1:50



PROPOSED ROOF PLAN 1:50

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Do not copy from this drawing, use figured dimensions only.

The drawing must be read in conjunction with all other related drawings and documentation.

It is the contractor's responsibility to ensure compliance with the Building Regulations.

It is the contractor's responsibility to check all dimensions on site, any discrepancy to be reported immediately.

Details and sizes shown are indicative only and are subject to confirmation by the relevant Specialist Sub-contractor.

This drawing is not to be for Land Registry purposes.

Revision	Description	Date
A	Engineers Information added	13.03.13
B	Amendments following drainage layout inspection	18.04.13



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Scale	Drawn	Date
A1@1:50	PDE	JAN 2013
Job number	Drawing no.	Revision
ADP161BRG	03	B