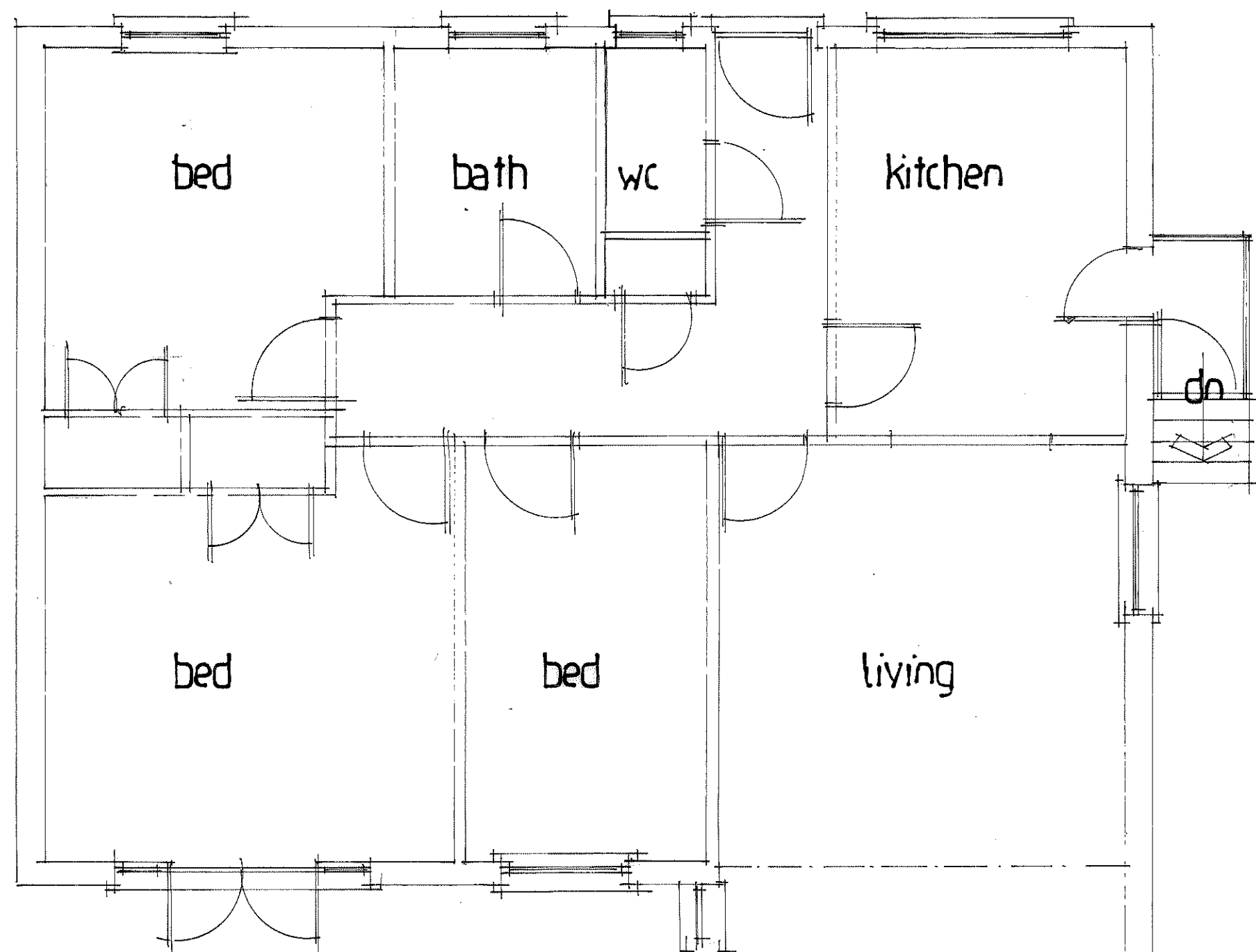




existing floor plan

TRENCH FOUNDATION - Provide 750mm x 600mm trench fill foundations, concrete mix to conform to BS EN 206 and BS 8500-2. All foundations to be min. 10m below ground level, exact depth to be agreed on site with Building Control Officer to suit site conditions. All constructed in accordance with 2010 Building Regulations A1/2 and BS 8004 Code of Practice for Foundations. Ensure foundations are constructed below invert level of any adjacent drains. Base of foundations supporting internal walls to be 450mm x 225mm and min. 600mm below ground level. Sulphate resistant cement to be used if required. Please note that should any adverse soil conditions or difference in soil type be found or any major tree roots in excavations, the Building Control Officer is to be contacted and the advice of a structural engineer should be sought.

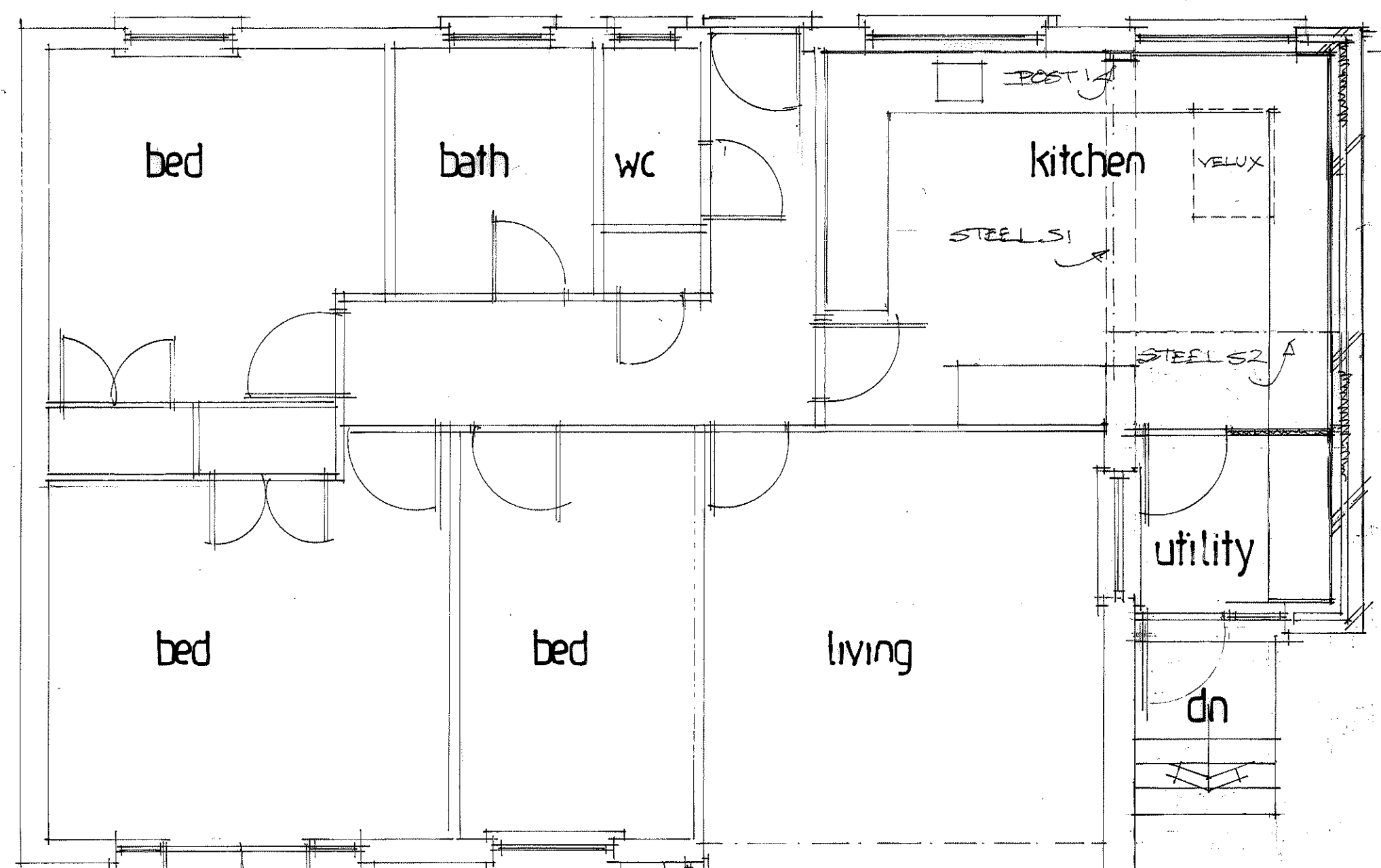
STEPPED FOUNDATION (TRENCH) - Stepped foundations should overlap by twice the height of the step, or 1m whichever is the greater. The height of the step should not be greater than the thickness of the foundation.

INNER PARTITIONS - 100mm x 50mm treated timbers studs at 400mm cts. with 50 x 100mm head and sole plates and solid intermediate horizontal noggins at 1/2 height or 450mm cts. Provide min. 10kg/m² density acoustic soundproof quilt tightly packed (e.g. 100mm 'Rockwool' or 'Isowool' mineral fibre sound insulation) in all voids the full depth of the stud. Partitions built off doubled up joists where partitions run parallel or provide noggins where at right angles. Walls faced throughout with 12.5mm plasterboard with 3mm skim plaster finish. Taped and jointed complete with beads and stops.

CAVITY BRICKWORK WALL - New cavity wall to comprise of 102mm suitable facing brickwork. Full fill the cavity with 90mm 'Celotex Thermoclass Cavity Wall 21' full fill insulation as manufacturer's details, leaving 10mm cavity between the insulation and outer skin. Inner leaf constructed using 100mm lightweight block, 0.15 W/m²K, e.g. 'Celcon solar' or 'Thermalite turbo'. Internal finish to be 12.5mm plasterboard on dabs with 3mm skim plaster finish. Walls to be built with 1:1.5 cement mortar. Vertical joints in the board must be staggered and all joints tightly butted. All details including corner and junction to be as relevant BBA certificate. Location to be assessed for suitability of insulation boards. All new walls below ground to be constructed using blockwork compliant with BS EN 771 and suitable for below ground level or semi engineering brickwork. Walls to be built using 1:4 masonry mortar mix or equal approved specification to BS EN 1996-1-1. Cavities below ground level to be filled with lean mix concrete min 225mm below damp proof course. Or provide lean mix backfill at base of cavity wall (150mm below damp course) laid to fall to weepholes. TO ACHIEVE A U-VALUE OF 0.17W/m²K.

PITCHED ROOF (INSULATION AT RAFTER LEVEL) - Roofing tiles to match existing on 25 x 38mm treated battens on breathable sarking felt to relevant BBA Certificate. Supported on 150 mm x 50 mm grade C24 rafters at max. 400 cts. Rafters supported on 100 x 50mm treated wall plates. Allow min. 20mm air space to allow for drapes of breathable felt. Insulation to be 150mm 'Celotex X04000' between rafters and 50mm 'Celotex G44000' under. Fix 12.5mm foil backed plasterboard (joints staggered) to the underside of all ceilings using galvanized plasterboard nails. Finish with 5mm skim coat of finishing plaster. Joists tied to rafters (if raised collar roof consult structural engineer). 100mm x 50mm wall plate strapped down to walls. Joists and rafters to be strapped to walls and gable walls, straps built into cavity, across at least 3 timbers with noggins. All straps to be 1000 x 30 x 5mm galvanized straps or other approved to BS EN 845-1 at 2m cts. TO ACHIEVE A U-VALUE OF 0.15W/m²K.

0 1 2 3 4 5 scale 1:50. m.
0 2 4 6 8 10 scale 1:100. m.



proposed floor plan

ROOF INSULATION - Insulation at ceiling level to be 150mm 'XR4000 Celotex' between ceiling joists with a further 25mm over joists. 18mm chipboard to be provided over insulation. Provide polythene vapour barrier between insulation and plasterboard. Provide opening at eaves level at least equal to continuous strip 25mm wide in two opposite sides to promote cross ventilation. TO ACHIEVE A U-VALUE OF 0.18W/m²K.

ROOF LIGHTS - To be double glazed with 16mm argon gap and soft low-E glass. Window Energy Rating to be Band C or better. Roof lights to be fitted in accordance with manufacturer's instructions with rafters doubled up to sides and suitable flashings etc. TO ACHIEVE A U-VALUE OF 1.6W/m²K.

LINTELS - Lintel widths are to be equal to wall thickness. All lintels over 750mm sized internal door openings to be 65mm deep pre-stressed concrete plank lintels. 150mm deep lintels are to be used for 900mm sized internal door openings. Lintels to have a minimum bearing of 150mm on each end. Any existing lintels carrying additional loads are to be exposed for inspection at commencement of work on site. All pre-stressed concrete lintels to be designed and manufactured in accordance with BS EN 1992-1-1, with a concrete strength of 50 or 40 N/mm² and incorporating steel strands to BS 5896 to support loadings assessed to BS 5977 Part 1. For other structural openings provide proprietary insulated steel lintels suitable for spans and loadings in compliance with Approved Document A and lintel manufacturer's standard tables. Stop ends, DPC trays and weep holes to be provided above all externally located lintels. Independent lintels to have an insulated cavity closure between the inner and outer lintel.

STEELWORK AND TIMBERS - Supply and install new structural elements such as new beams, roof structure, floor structure, bearings, and padstones in accordance with title attached structural calculations and details. Minimum bearing 100mm on concrete padstones, prestressed concrete lintels or metal bearing plates. New steel beams to be encased in 12.5mm 'Gyproc FireLine' board with staggered joints, 'Gyproc FireCase' or painted in 'Nulfire 5' or similar intumescent paint to provide 1/2-hour fire resistance as agreed with Building Control at floor levels. All fire protection to be installed as detailed by specialist manufacturer.

LENGTHS OF STEELS TO BE SITE MEASURED TO INCLUDE BEARINGS. FABRICATION DETAILS TO BE PROVIDED IF REQUIRED BY BUILDING CONTROL.

NEW AND REPLACEMENT DOORS/WINDOWS - Glazed areas to be double glazed with 16-20mm argon gap and soft low-E glass. Glass to be toughened or laminated safety glass to BS 6206, BS EN 14179 or BS EN ISO 12543-1 and Part K of the current Building Regulations. The door and window openings should be limited to 25% of the extension floor area plus the area of any existing openings covered by the extension. Insulated plasterboard to be used in reveals to abut jambs and to be considered within reveal soffits. Fully insulated and continuous cavity closers to be used around reveals. Windows and door frames to be taped to surrounding openings using air sealing tape. Windows to be fitted with trickle vents to provide min 8000mm² background ventilation in accordance with Approved Document F. Local authority may insist on a SAP calculation to prove areas with large amount of glazing. This will involve extra fee if required. TO ACHIEVE A U-VALUE OF 1.4W/m²K.

SAFETY GLAZING - All glazing in critical locations to be toughened or laminated safety glass to BS 6206, BS EN 14179 or BS EN ISO 12543-1:2011 and Part K of the current building regulations. E.g. 1.5m above floor level in doors and side panels within 300mm of door opening and within 800mm above floor level in windows.

MECHANICAL EXTRACT (KITCHEN) - Kitchen to have mechanical ventilation with an extract rating of 60 l/sec or 30 l/sec if adjacent to hob to external air, sealed to prevent entry of moisture. Internal doors should be provided with a 10mm gap below the door to aid air circulation. Ventilation provision in accordance with the Domestic Ventilation Compliance Guide. Intermittent extract fans to BS EN 13141-4. Cooker hoods to BS EN 13141-3. All fixed mechanical ventilation systems, where they can be tested and adjusted, shall be commissioned and a commissioning notice given to the Building Control Body. If applicable utility room provide mechanical ventilation ducted to external air capable of extracting at a rate of 30 l/sec.

ELECTRICAL WORKS - All electrical work required to meet the requirements of Part P (electrical safety) must be designed, installed, inspected and tested by a competent person registered under a competent person self-certification scheme such as BRE certification Ltd, BSI, NICEIC Certification Services or Zurich Ltd. An appropriate BS7671 Electrical Installation Certificate is to be issued for the work by a person competent to do so. A copy of a certificate will be given to the Council.

INTERNAL LIGHTING - Install low energy light fittings that only take lamps having a luminous efficiency better than 80 lumens per circuit watt. All fixed to have lighting capacity (lm) 185 x total floor area, to comply with Part L of the current Building Regulations and the Domestic Building Services Compliance Guide. Any recessed ceiling lights to be 30-minute fire resisting.

HEATING - Extend all heating and hot water services from existing and provide new TRVs to radiators. Heating system to be designed, installed, tested and fully certified by a GAS SAFE registered specialist. All work to be in accordance with the Local Water Authorities by laws, Gas safety requirements and IEEE regulations.

RAINWATER GOODS - New rainwater goods to be new 110mm UPVC half round gutters taken and connected into 68mm dia UPVC downpipes to existing drainage system.

TIMBER SUSPENDED FLOOR - Remove topsoil and vegetation, apply weed killer and 150mm min. thick sand blinded hardcore, then either provide concrete ground cover of at least 100mm thick or prepare the ground to an even surface and lay a ground cover of concrete at least 50mm thick, on a damp-proof membrane of at least 1200-gauge polyethylene, laid on a bed of fine blinding material. Floor construction - min. 20mm tongue and groove softwood boards or moisture resistant particle/chipboard grade type C4 to BS EN 312:2010 as required. Lay with staggered joints on 350 mm x 50 mm C24 joists at max. 400mm cts. Joists to be supported off proprietary galvanized joist hangers built into new masonry walls or fixed to treated timber wall plates resin bolted to walls at 600mm cts. If required, floor joists also to be supported on 100mm x 50mm treated wall plates and DPC fixed to masonry honeycombed sleeper walls built on thickened oversite concrete. Joists to be infilled with 150mm 'Celotex X04000' insulation between joists fixed with Celotex clips. The top surface of the ground cover under the building shall be above the finished level of the adjoining ground. The underside of the floor joists are not to be less than 150mm above the top of the ground cover. The underside of any wall plate is to be not less than 75mm above the top of the ground cover. Provide cross-ventilation under floor to outside air by ventilators in at least 2 opposite external walls of the building. Ventilation openings having an opening area of 1.5m² per metre run of perimeter wall or 500mm² per square metre of floor area whichever gives the greater opening area. All sleeper walls or similar under floor obstructions shall be of honeycombed construction or have similar provision for distribution of ventilation. The under-floor space shall be free from debris. Ducts to be sealed using gas proof tape if they pass through the radon barrier. TO ACHIEVE A U-VALUE OF 0.18W/m²K.

This drawing and the information provided is the property of Thorns Young Architectural and shall not be copied whole, in part, or used for any other purpose without written permission from the company.

Principle Contractor is to ensure all materials and workmanship complies with Regulation 7 of the Building Regulations whether or not specifically stated on these drawings. It is the Principle Contractors' duty to ensure all works on site are approved by an appointed Building Control body.

Principle Contractor is to ensure dimensions are taken on site before procurement of any materials/work proceeding. Structural members are not to be ordered scaling from this drawing.

Existing structure including foundations, beams, walls and lintels carrying new and altered loads are to be exposed and checked by Principle Contractor before commencing the works for adequacy prior to commencement of work and as required by the Building Control Officer. Any discrepancies please contact Thorns Young.

Principle Contractor to ensure full compliance with the amended CDM Regulations (2015) if the project requires.

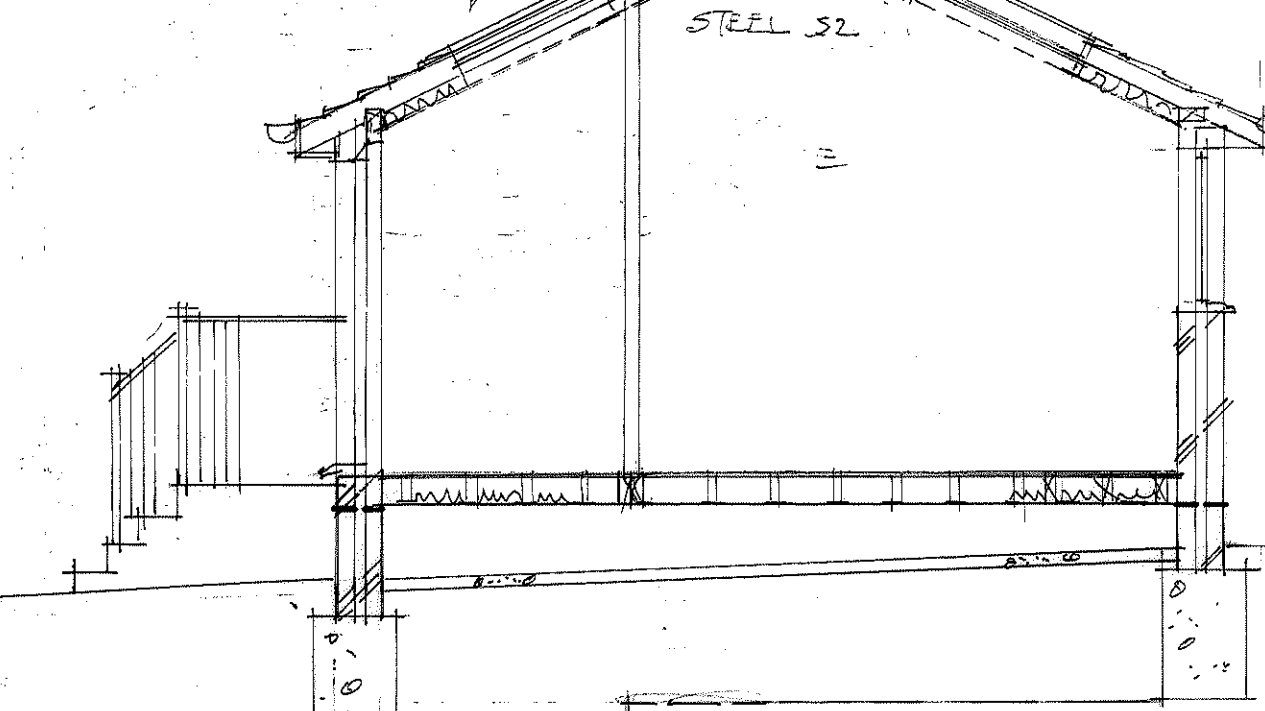
This drawing, unless noted, does not represent compliance with the Party Wall Act 1996 and if required, all agreements are to be in place before works commence.

It is the Principle Contractors' responsibility to ensure Planning/Building Control approvals are in place prior to works commencing. Should works commence prior to relevant approvals Thorns Young Architectural accept no responsibility.

Do not scale from this drawing except for the purpose of Local Authority Planning department.

STEPPED CAVITY TRAY AND LEAD FLASHING AT JOINT

STEEL S2



section a-a

B	14/04/22	Client's amendments
A	14/04/22	Client's amendments
Date	Revision	

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THORNS YOUNG
ARCHITECTURAL

THORNS-YOUNG LTD
CHARTERED BUILDING CONSULTANTS
Website: www.thornsyounyoung.co.uk

Portsmouth
232 London Road
North End
PO2 9JQ
Tel: (02392) 672 883

Client
MR AND MRS. R. NICHOLAS

Job Title
18 BOSMERE ROAD
HAYKIG ISLAND

Drawing Title
PROPOSED SIDE
EXTENSION

Scale 1:50 + 1:100

Date APRIL 2024 Drawn by CMC

Drg. No. 8075:24 Rev. A