

Foundations

Foundations to cavity walls to be constructed of concrete common brickwork up to 150 mm below ground level with Class B engineering brickwork from GL to DPC level externally and concrete block work internally. Walls built off 750 x 200 (C20 mix-20N/mm²) concrete strip foundations, at min depth of 1000mm, to suit local ground conditions. If the ground is found to clay the footings are to be in accordance with NABCC guide 'Building Near Trees' and to be in accordance with BS 8004, BS 5837 and to satisfaction of the Local Building Authority Inspector. Precast concrete lintels to be laid over all openings for drainage and service runs with minimum 150 mm and bearing onto adjacent brickwork. Concrete mixes to be in accordance with BS 8000 - 2.1. All existing foundations and structure that is to take new structural loading to be exposed for Building Control to determine its suitability. Strengthen and underpin existing as necessary to carry new loads. Where new foundations arise in vicinity of old foundations, existing should be fully grubbed up and new foundations laid at least the same depth. Foundations to be taken down to the invert level of any drain passing within 1 metre.

RC lintels to be provided over drains passing through walls. Walls below ground level to be filled with concrete cavity filling to 225mm below lowest dpc level.

Super Structure 150 cavity full fill (U value 0.18W/m²K)

New external walls - Facing brickwork to extend min 2 courses below ground level. New facing brickwork to match existing with 150mm cavity, fully filled with 150mm Dritherm 32 Ultimate. Installed in strict accordance with the manufacturers instructions. Inner brickwork to be - 0.15W/mk (4N/mm²) - Externally finish with 12.5mm plasterboard on dabs with minimum 10mm airspace.

Brickwork good building practice

All new brickwork to be bonded to existing and cavities to be maintained - alternatively use proprietary bolted starter anchor system together with inserted insulation V.d.p.c. (installed in accordance with manufacturers recommendations) All return corners to be min 665mm unless otherwise indicated. Proprietary stainless steel DB140 wall ties to be provided to cavity walls at maximum 450mm vertical centres and 750mm horizontal centres - staggered across wall elevation. 225mm max vertical centres at reveals. Ties to be long enough to have 50mm minimum embedment into wall. Proprietary insulation clips to be provided to suit cavity insulation system. Wall ties to comply with BS1234:1978 type DB140. All lintels to have 150mm end bearing.

Cavity fill

Weak concrete mix. Fill in cavity to be 225 mm below DPC level.

Cavity closer

Insert Isofoam XCC insulated cavity closer to all new openings all as document 1 2013. Width and fixing to suit opening

Ground Floor Construction (u value 0.18W/m²K)

Leveling screed finish on 150mm concrete slab bed on a separating layer of building paper to BS 1521:1972 on 80mm thick Kingspan 'Kooltherm' K103 floorboard insulation on Visqueen 1200 d.p.m. on 20mm sand blinding on min. 150mm well consolidated hardcore. Provide 25mm 'Kooltherm' insulation to external perimeter edges of slab. Visqueen d.p.m. to be turned up around perimeter edges of slab and tucked in under horizontal dpc of inner leaf.

Dpc

External leaf min 150 mm above ground level with internal dpc at slab or floor level

Overlap

DPC and DPM to perimeter to overlap by 50 mm

New openings

To have vertical and horizontal DPC's close reveals with thermabate insulation

Roof Access Hatches

To be insulated and draught sealed to same standard as roof. Water pipes and tanks in lofts to be fully insulated to prevent freezing. Where roof structures abut external walls - ensure all residual gaps/edges are insulated

Ceilings

To be 150x50 mm sw ceiling joists at 400 mm centres under drawn with 12.7 mm foil-backed plasterboard and skim finish

New Roof Construction

Pitched roof with interlocking tiles to Marley smooth 18 degree with min headlap of 100mm on 50x38mm sw battens on 1 layers Tyvek Supro felt on 150x50mm C16 sw rafters @ 400mm centres. Batters fixed to wall-plate with framing anchor or truss clip. Fix 12.5mm foil backed plasterboard and skim to underside of 125x50mm C16 sw ceiling joists @ 400mm centres.

Roof void Insulation (U value 0.15W/m²K)

To be 2 layers 150mm thick Rockwool laid between joists and cross-laid with 150mm Rockwool to give total thickness of 300 mm and a U value of 0.15W/m²K

Fixings

Strap down new roof and ceiling with 1000 x 5 x 38 mm mild steel straps at 2 centres fixed across two rafters/joists with 3.35x50 wire nails at rafter and ceiling level

Ventilation

To be achieved at eaves with continuous 25 mm gap with fly mesh inserted to give through ventilation passage to BS 5250

Continuous Ventilated Ridge

Provide new continuous ventilated ridge to be mechanically fixed and bedded in sand/cement mortar, or dry fixed system in accordance with BS 5534 2014

Soil and vent pipe

100 mm diameter upvc with airtight rodding access above floor level and sealed into Hepworth 'Hepseal' drain connector at floor level. Stack taken up and terminated 450 mm above springing level with PVC bird cage (900 mm above any opening lights)

New En-Suite

Provide mechanical extract ventilation to give min extract rate of not less than 15 litres per second which can be run intermittently but has a 15 minute over-run. Extract fan to be ducted to external air via 100mm dia flexible duct to terminate on outside wall at fitted grille. Extract fans to be positioned less than 400mm below ceiling. Ducts to be connected appropriate extract and discharge grilles (min 85% of the duct free area) with back draught device fitted to prevent draughts. New 50mm dia waste shower, 40mm sink and 100mm WC waste to be provided to new en-suite and bathroom and connected to new soil and vent pipe. Anti-vac deep seal traps to be fitted to internal pipes. No opposed waste connections to be made within 200mm of W.C. connection with SVP

Partition

Non load bearing acoustic stud partitions to be 100 x 50 mm sw studding at 300 mm staggered centers onto 100 x 50 mm sole plates faced both sides with 12.5 plasterboard and skim. Acoustic quilt 50 mm Rockslit woven between studs. Where partitions are parallel to joists span, the joists shall be doubled up and spiked together directly under the line of the partition.

Gutters and fascia

100 mm upvc gutter connected to existing falls to outlet. Fixed to 19 mm exterior grade plywood fascia boards. Provide 12 mm exterior grade plywood soffits fixed directly to underside rafters with continuous upvc soffit ventilators to vent roof space to BS 5250.

Heating

To be supplied by balanced flue gas boiler condensing type, radiators and cylinder min Sedbuk efficiency rating of 88%

Heating

Extend all heating and hot water services from existing and provide new thermostatic valves to radiators. Heating system is to be designed, installed, tested and fully certified by a GAS SAFE registered specialist. All work to be in accordance with the Local Water Authority by laws, gas safety requirements and IEE Regulations.

Radiators

Provide and fit thermostatic control valves to radiators.

Timber

All new timber to be tanalized and stress graded 4 BS-4471 Part 1 (1978) Dimensions for softwood BS-5268: Part 5 Preservatives Treatment for Structural Timber

Skirting

120 x20 mm half round skirting primed and painted three coats (1 gloss) to new extension

Drains

100 mm drains min fall 1:40 all to comply with BS en 295

Drain Testing

The whole of the drainage system shall be tested when laid and again on completion to the satisfaction of the approved inspector.

Drainage

Any drains new or existing that pass through external walls, insert concrete lintels over (allow 50mm clearance between drain and underside of lintels) Drains that run under a building to have min 100mm of granular or other flexible filling provided round the pipe if depth of drain below the surface exceeds 600mm. Where pipes have less than 600mm cover the pipes should, where necessary, be protected from damage by a reinforced concrete cover slab with a flexible filler and min 75mm granular material between the top of the pipe and the underside of the flexible filler below the slab. On sites where excessive subsidence is present additional flexible joints to be provided or other solutions such as suspended drainage where the pipe is adjacent to structures or where soil conditions change in the course of the pipe run. Where the crown of the pipe is within 300mm of the underside of the slab, special protection is to be provided in accordance with Part H of Building Regulations Below ground drainage to be approved 100mm plastic or clay drainage system laid at minimum 1 in 40 falls - bedded and installed in accordance with manufacturer's recommendations. Proprietary inspection chambers to be provided as indicated and as necessary to provide rodding access to drainage runs. Sizes to suit depth - as recommended by manufacturer. All gullies to be back inlet and roddable - wastes to discharge below grating but above water line.

Inspection chamber

Provide 600 mm diameter polypropylene inspection chamber positioned over new drain at change in direction. Cut down height of chamber to suit ground level and finish with cast iron cover

Windows and Doors.

New window and doors to be PVCu, Pilkington glass, K glass range with 16 mm Argon filled air gap optitherm 4mm Qpyfloat, soft low e coating u value to be 1.4W/m²K. To windows and doors with fully draught stripped open able light equivalent to minimum 1/20 floor area for purge ventilation and including minimum 8000mm² trickle vents per habitable rooms and kitchen, 4000mm² for non habitable rooms (bathroom, en-suite) for background ventilation in accordance with Part F 2010 Edition System1 Table 5.2a and based on 277m² floor area-total equivalent ventilator area 194000m². Frames to be lapped minimum 30 mm across cavity closer in accordance with Part L1A section 5.9 and Accredited Construction details under section 5.12 to limit thermal bridging. Details to be inspected on site in accordance with checklist to maintain quality assurance. Any glazing within 800 mm of floor level, and within 1500 mm of floor level where within 300 mm from a door and all glazing to bifold doors to be safety glass to comply withBS6206.

900 Internal doors

900 door set comprising 1981x836x44 solid core flush doors painted three coats , set in softwood frame 13 mm rebated and with ex. 50x25 sw architraves. Doors fitted with 1.5 pairs 100 mm bolts and 1 set lever handles. Style and type of paneled door to client's choice.

Lead work and flashings and any valleys.

Use Code 5 lead and laid according to lead development association. Flashing to be provided to all jambs and below window openings with welded up stands. Joints to be lapped min 150 mm and lead to be dressed 200 mm under tiles.

Condition Notes

1. The drawings relating to the proposed project are for the purpose of obtaining Building Regulations approval only. All work thereafter is undertaken solely at the Clients/ Contractors discretion and liability is therefore transferred.
2. In order to prepare these drawings, certain assumptions have been made which have to be verified both before and during the course of the works. Should at any time the existing construction be exposed which does not agree with these drawings or dimensions vary, then the engineer should be informed immediately and suitable actions taken.
3. All work must be carried out in accordance with the relevant building regulations and codes of practice.
4. Do not scale from drawings. Work only from figured dimensions. All dimensions to be checked on site and any discrepancies to be notified to the relevant bodies immediately.
5. The drawings relating to the proposed project must be read in conjunction with and checked against any structural engineer's or specialist drawings and details provided.
6. The Contractor is to notify Building Control at the appropriate stages of construction - necessary for them to determine the works statutory compliance.
7. Before work commences - ensure all Planning and/or Building Regulations Conditions have been resolved to the satisfaction of the Local Authority.

Cotnic lintels

Insert new lintels with min end bearing 150 mm. Cavity tray over

Background ventilation

All new habitable rooms to have background ventilation not less than 8000 sq mm kitchen and en-suites to have 4000 sq mm. Insert permanent trickle vents to heads of all windows to rooms affected. Al to regulation F1 2010

Lighting

Provide 100% of new primary light fitting units to new extension to be of type, which will only take high efficiency lamps Provide min one third of primary lights to have a luminous efficiency greater than 40 lumens per circuit watt. The amount/type of light fittings and electrical wall sockets is to be agreed with the owner before work commences on site.

Electrical Contractor (Competent Person)

All the wiring and electrical work will be designed, installed, inspected and tested in accordance with the requirements of BS 7671, the IEE 18th edition wiring guidance and Building Regulations Part P (electrical safety) by a competent person registered with an electrical self certification body authorised by the Secretary of State, AND

The competent person is to send to the approved inspector a 'self certification certificate' within 30 days of the completion of the electrical works. The Client is to be provided with a copy of the 'self certification certificate' and a BS 7671 electrical installation 'test certificate.

Flagging

Lay 900 x 600 x 50 mm thick pre-cast concrete flags on 50 mm sand blinding to new patio area

Boiler

To comply with Approved Document J. Check flue and overflow meet regulation standars. (Boiler may need repositioning)

Electrical Fittings.

All sockets to be positioned above 450 mm from floor level, and all switched to be positioned between 1350mm and 1450mm from finished floor level to comply with Part M of the Building Regulations. 100% internal light fittings and all external lights to be LED lamps-luminous efficiency greater than 45 lumens/circuit-watt and total output greater than 40 lamp lumens, with and external lights to incorporate daylight sensor, all in accordance with Part L1B section 4.24 Building Regulations (2010 Edition with 2013 amendments) and Table 42 of Domestic Building Service Compliance Guide 2013 Edition. Electrical installation to be designed and installed and tested on completion by an NICEIC registered contractor in accordance with BS 7671:2001 to comply with Part P of Building Regulations.

Notes

These drawings are for the purpose of obtaining Building Regulations and Planning permission only. All work thereafter is undertaken solely at the clients/contractors discretion and liability is therefore transferred. With regards to any matters relating to Planning or Building Regulation, they are solely at the discretion of the client, no information or advice given prior to or after the drawings are completed are for information only and not binding. All work must be carried out in accordance with the relevant building regulations and codes of practice. Do not scale from drawing. All dimensions to be checked on site and any discrepancies to be notified to the relevant bodies immediately. Services i.e. Electric, heating, plumbing etc. Are not included in these drawings.

Shower room fittings to be considered.

1. Internal Shower Room To Be 2000 X 1900 Minimum.
2. Shower Area 1000 X 1000 Mm 1 in 40 Fall
3. Shower Room Door To Be Min 900 mm Wide
4. Shower Room Ceiling To Be Emulsion Paint Applied
5. Minimum Tiling To Two Shower Room Walls Or Fully Tiled
6. Shower Room Floor To Be Altro Marine 20
7. A Threshold To Be Fitted
8. Shower Gravity Waste Position Must Not Be Altered
9. Fit A Wall Mounted Wash Hand Basin With Lever Taps
10. Supply and install grab rail 1x 600mm position horizontal at a height of 900 mm and distance from internal corner of 300 mm.
11. Fit A Classic Ho (White) Wc And Connect Waste As Indicated
12. Wc And Whb Position Must Not Be Altered As Indicated
13. Provide A Suitable Radiator Position As Indicated Or Electric Wall Heater To Be Fitted 300 Mm Below Ceiling Level
14. Provide Thermostatic Instant Electric Shower Unit Redring S195s Or Mira Advanced Or Triton T100, anti-scald device fitted. Water temperature should not exceed 43 degrees centigrade.
15. Provide Extract As Indicated Up To 30 Mins To Run With Draught Shutter
16. Provide A S.D 26 Watts Ip65 Light Including Pull Switch Connecting To Extract
17. Provide A Separate 63a Rcd 3 Way Isolator Controlled And Connect Shower Room Appliances
18. Riser bar position to start at 1000mm above finished floor level approx 500 mm from inner corner of shower area. The riser bar should be 1000mm long to ensure shower usable for seated and standing users.
19. Provide Akw Shower Seat Model 04070p
20. Supply and install full length weighted shower curtain to be fitted inside shower area.
21. Shower control unit position at approx 1000mm above finished floor level x approx 750 mm from inner corner of shower area.
22. Supply and install extended flexible shower hose of minimum length 1500/2000mm for assisted use.
23. Supply and install soap dish mounted on riser bar at a height of 1200mm from finished floor level.
24. Minimum turning circle required 1500mm
25. Window sill to be 800 mm above floor level
26. Provide temperature mixing valve to shower to prevent the temperature of water delivered not to exceed 48degreeC. All as per (Part 6), Hygiene.

Disabled requirements

Light switches at max 1200 above floor level sockets 450 mm above floor level, level access front door and new 1:20 ramp

Bathroom door

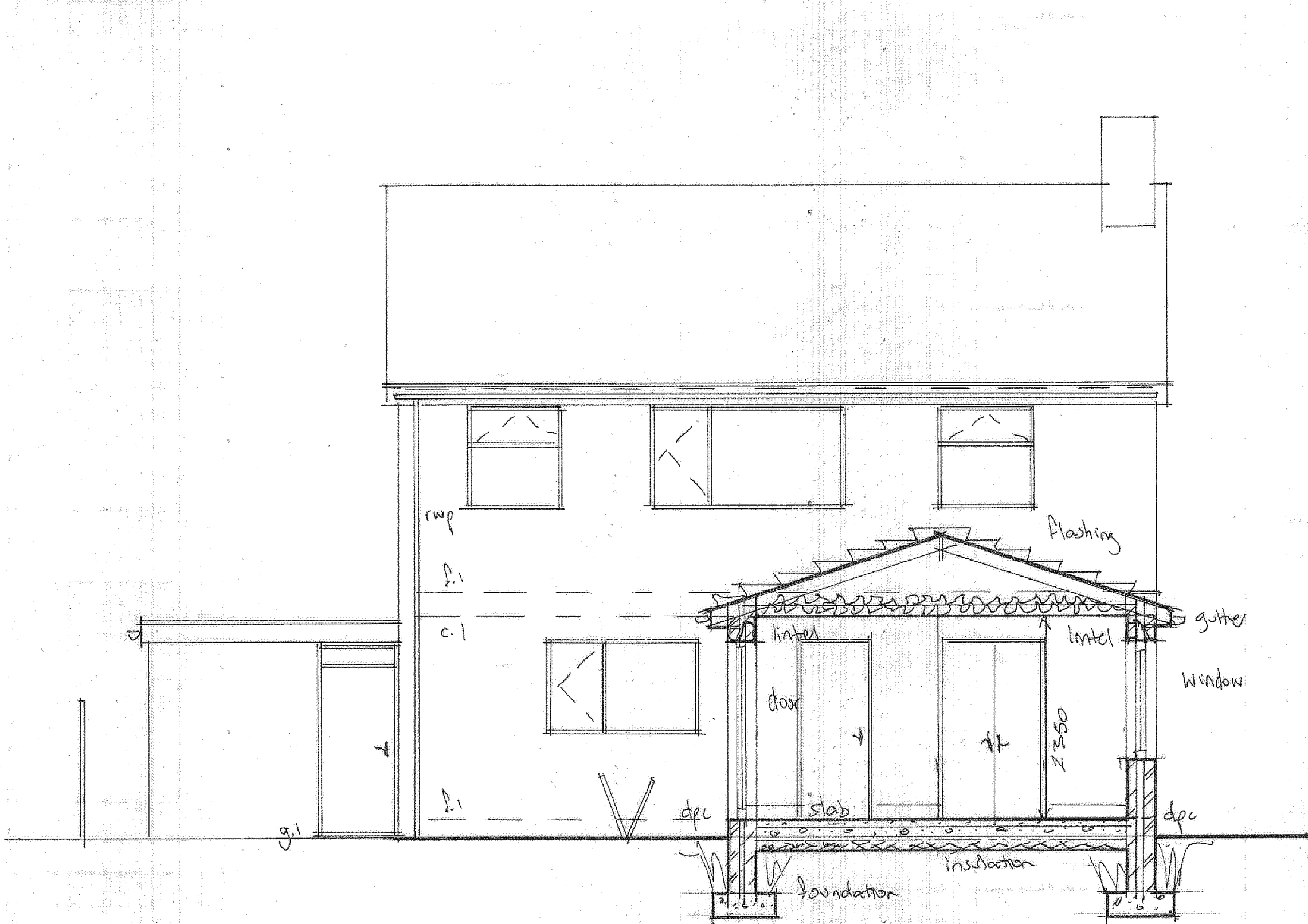
New bathroom door to open outwards.

Lighting

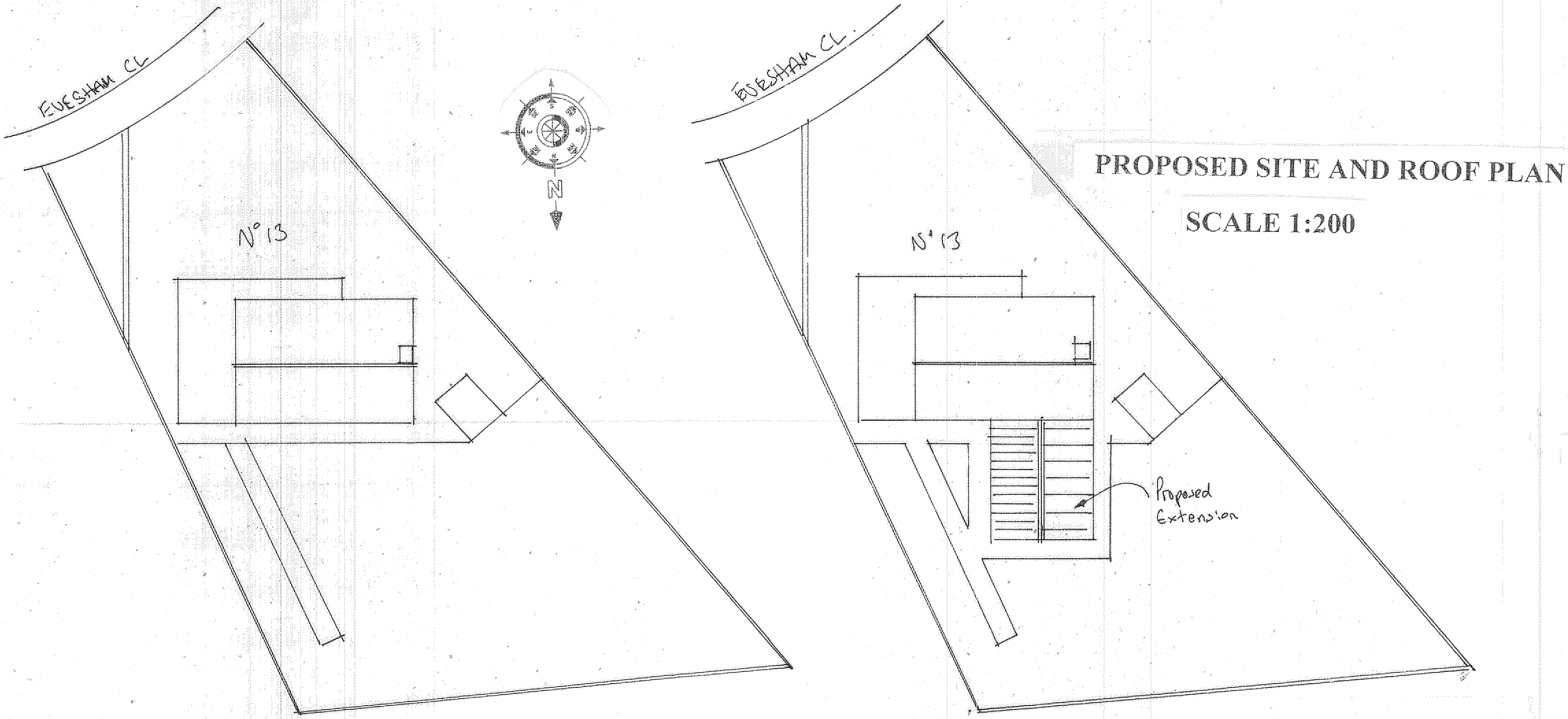
All lighting to be energy-efficient. Metering and Energy Monitoring Equipment The electricity metering provision shall be supplemented by additional metering to measure the energy yield from the photovoltaic system. Propose a single point smart meter arrangement to facilitate this with a simple visual display of instantaneous and cumulative energy data. The amount/type of light fittings and electrical wall sockets is to be agreed with the owner before work commences on site.

Smoke alarms and heat detectors.

Fire Safety Approved Doc B Where new habitable rooms are provided above ground level, a fire detection system shall be installed. Provide a mains linked smoke alarm in the circulation space on all levels in accordance with Paragraph 1.10 to 1.18. Also provide 1 no smoke detector to ground floor. There will be a compatible interlinked heat detector or heat alarm in the kitchen, in addition to whatever smoke alarms are needed in the circulation space.



TYPICAL SECTION

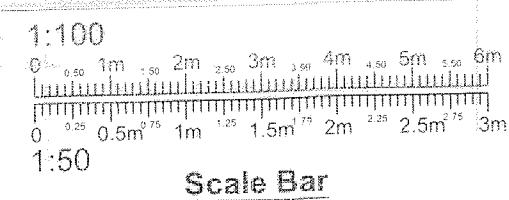
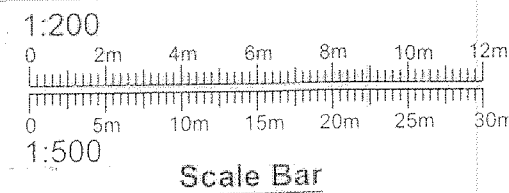


EXISTING SITE AND ROOF PLAN

SCALE 1:200

PROPOSED SITE AND ROOF PLAN

SCALE 1:200



PROJECT
PROPOSED SINGLE STOREY
REAR EXTENSION.

DRAWING TITLE,
PROPOSED SECTION,
EXISTING AND PROPOSED
ROOF AND SITE PLAN.

CLIENT

MR. J. KELLY.

ADDRESS

13, EVESHAM CLOSE,
ALKRINGTON,
MIDDLETON. M24 1PU.

SCALE DATE
SCALE 1:50@A1 MAY 2024.

SCALE 1:200@A1.

DRAWING No

CL 05245893/5.