

Ground Floor 1:50

FOUNDATIONS
 Contractor to excavate and inspect existing foundations to ensure they are standard strip founds, if not structural engineer to be consulted prior to commencing main work. Contractor to excavate for founds and ensure they are down to a good bearing ground, and not to be formed on any made up ground. **Any concerns regarding ground conditions to be referred to structural engineers prior to continuing with works.** Ensure all vegetable matter and topsoil is removed from site prior to digging foundations and laying hardcore. Building Control to inspect excavations prior to pouring concrete. Foundations to be in concrete strip foundations designated mix RC35 grade concrete (600mm x 200mm for cavity wall), taken down to a minimum 600mm below finished ground level or down to level of existing foundation or down to good bearing ground (whichever is the greater). Foundations are to be stepped below any drains which pass below proposed extension (unless drainage is to be re-routed, see drainage notes) to allow minimum 150mm pea gravel haunching all round drainage pipes. Fit A393 mesh fabric reinforcement (with 50mm bottom cover) in all foundations. Ensure mesh fabric has an overlap of two pitches between adjacent sheets. Ensure a minimum overlap on mesh fabric of 300mm at each step.

UNDERBUILDING
 All underbuilding to be built in dense 7kn concrete block suitable for underground conditions, to be 1 leaf of 100mm thick blockwork with 50mm cavity and 1 leaf 150mm blockwork. Cavity to be filled up to ground level with lean mix concrete. Any visible external leaf to be of facing brick (to match existing). Sub floor solum vents and liners @ 1500mm maximum centres built into cavity walls. Built in anchor straps for timber frame kit to underbuilding, see anchor strap notes for specification. Fit DPC to all walls 150mm minimum above finished ground level. Fit 145x45mm treated timber wallplates on DPC for seat on new timber frame kit. Any drains passing through underbuilding to be lintelled over and haunched in 150mm pea gravel all round. Underbuilding to be secured tied to existing with suitable wall starters (Expamet, catnic or similar). Wall ties: Outer leaf to be tied to inner leaf with stainless steel all ties @ 450mm vertical and 600mm horizontal centres.

ANCHOR STRAPS
 All ground floor anchor straps are to be built into brick/block underbuilding and taken minimum 600mm up timber frame wall panels, all to be @ 1200mm centres, all to be minimum 1200mm long, 30mm wide x 5mm thick, also to be fitted at each corner and adjacent to each door and window. All anchor straps to be in stainless steel.

SOLUM
 Ensure all vegetable matter and topsoil is removed from site prior to digging foundations and laying hardcore. Solum to be 50mm sand/cement screed on visqueen DPM (1200 gauge) on sand banking on 150mm well consolidated and compacted hardcore, ensure DPM is dressed up wall at edges. Solum level to run through with finished ground level. Ensure there is minimum 150mm vented airspace from the top of the solum to the underside of the floor joists. Underfloor ventilation: Fit fresh air inlets to vent solum in location shown, ensure fresh air inlets are fitted with insect barriers. Fit fire/day liners to FAls. Form vents through to existing solum. Sub-floor ventilators 220 x 65 mm must be installed in the perimeter wall at not more than 1500mm centres.

DPCs
 A dpc membrane shall be provided in the foundation walls, at a height of not less than 150mm above highest ground level. The new dpc to be tied into the level of dpc on existing house. DPM from below solum to be dressed up wall taken under DPC at inner leaf. Ensure wallplates to take kit are fitted on DPC. Fit DPC between firestops and outer leaf. A dpc shall also be provided at all window jambs, external doors and sills.

LINTELS
 New lintels over new external doors and window openings to be Catnic CTF5 on outer leaf each provided with a minimum rest of 150mm at each end and bedded in mortar. Internal lintels to be 2 no. 200x50mm timber lintels secured to each other with 3.1x75mm galvanized screws or 3.1x75mm galvanized ringshank nails at 300mm centres, staggered mid distance between edge and centerline, with no screw closer than 60mm to end of lintel. Internal lintels supported on 3no 100x50mm cripple studs spiked together with min 150mm rest either side.

Existing lintels remain undisturbed.
 Existing wall below to be carefully demolished and debris removed from site. All finishes to be made good on completion.

INTERNAL FINISHES
 Internal finishes, finishes etc - Type of skirting's, facings, doors, ironmongery, no of lightings/power points etc, to be agreed with the client prior to ordering or completing tender.

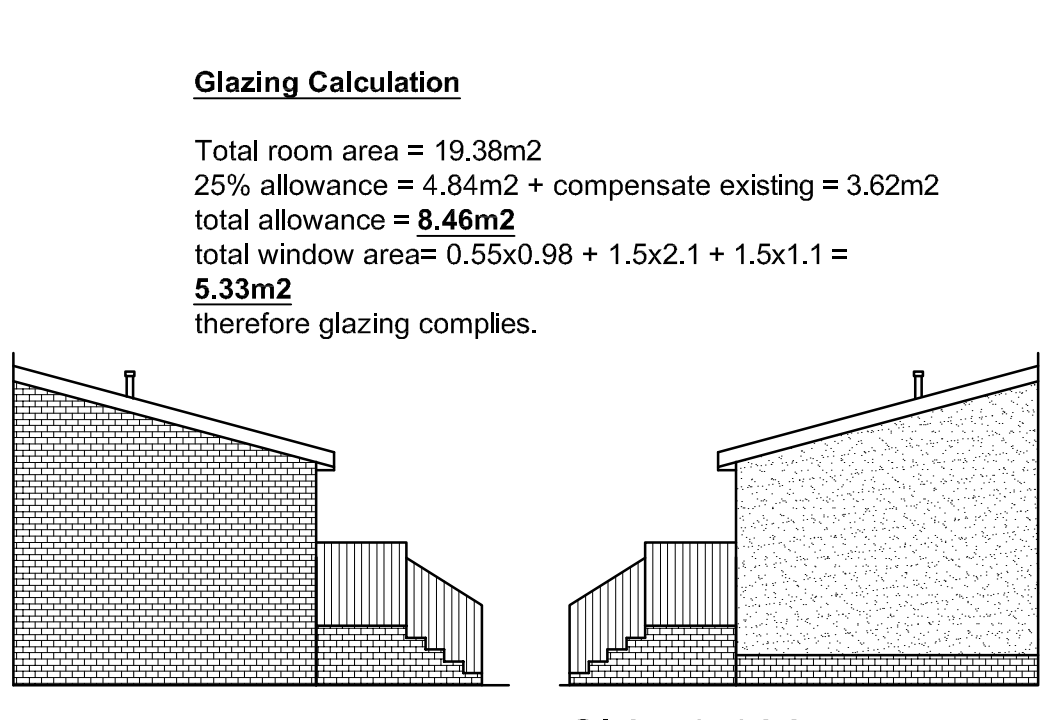
INTERNAL PARTITION CONSTRUCTION
 75x50mm SC3 timber frames @ 600mm centres with 12.5mm plasterboard (110g/m2) sheeting finish to both sides, with all joints taped and filled. 75mm rockwool rwa45 acoustic quilts to be packed between studs. Existing walls to be stripped and lined with 12.5mm plasterboard with all joints taped and filled.

CEILING
 1 layer of 12.5mm plasterboard on 1 layer 1000 Gauge Visqueen polythene vapour barrier (joints taped) overlaid with 1 layer of 100mm rockwool rollbatt insulation between trusses and 1 layer of 250mm rockwool rollbatt insulation cross laid over trusses.

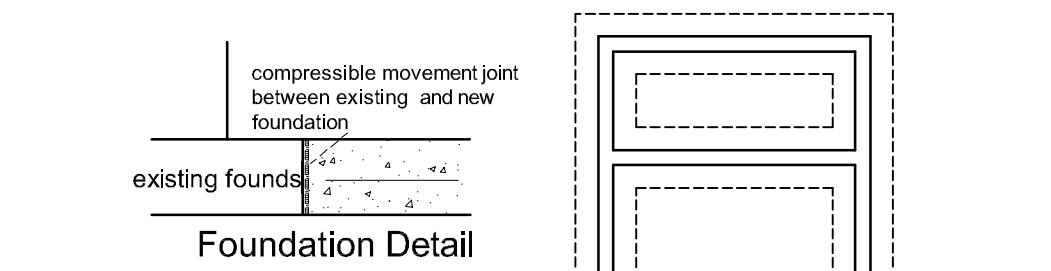
Velux Shaft
 Insulated with 1 layer 90mm celotex qa4000 insulation between 100x50mm timber framing and 1 layer 70mm celotex qa4000 insulation with vapour barrier and 1 layer 12.5mm plasterboard to inner face.



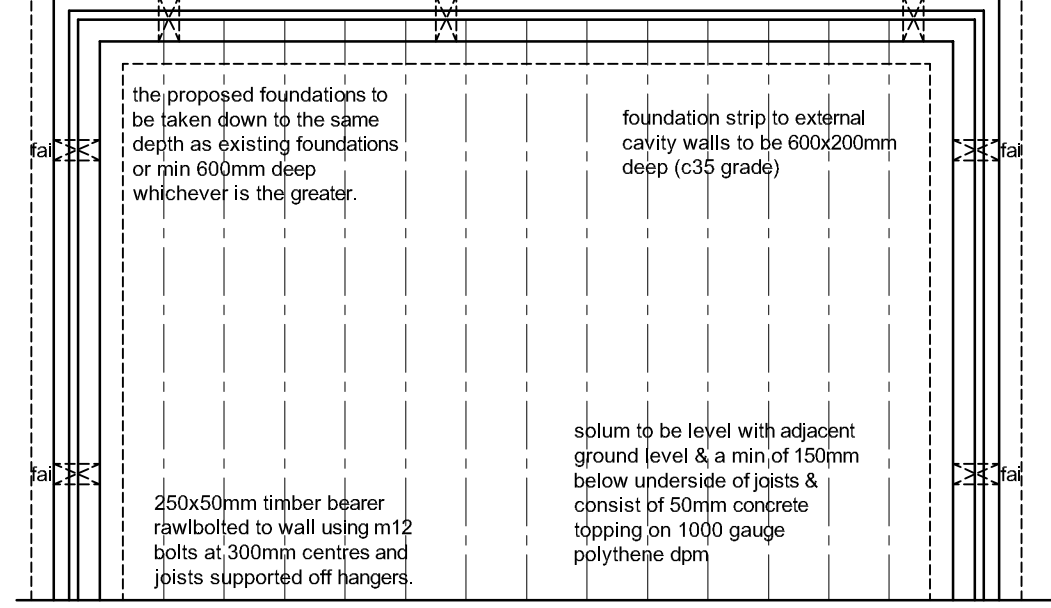
Rear 1:100



Side 1:100



Foundation Detail



Roof Plan 1:50

WINDOWS & DOORS

All new windows and doors to be Double Glazed uPVC with 20mm air gap and integral sill. Sizes as indicated on drawings. Style to be agreed with client. Draught Stripping: Ensure doors and windows are fitted with draught strips all round. All full height glazing (including glazing in all external and internal doors) is to be either safety glass or toughened glass that complies with Clause 7.5 of B.S. 6262: Part 4 : 2018. Ensure that all windows which are capable of being opened over external paths, ramps, etc, are fitted with suitable restraining catches to prevent any danger of collision with the windows when open. Windows finished to jambs and soffits in low modulus silicone sealant, all to match existing. All inner rooms, to have an escape window. Escape windows should be large enough to escape through and should be situated in an external wall or roof. The windows should have an unobstructed operable area that is at least 0.33m2 and at least 750mm high and 450mm wide. The route through the window may be at an angle rather than straight through and the bottom of the operable area should be not more than 1100mm above the floor. One leaf of french doors to be bolted. New glazing to be capable of achieving a 'U' value that does not exceed 1.4 W/m2K. Installation of 'no Velux' type roof windows, or similar as indicated. All works to be carried as per manufacturer's installation instructions. Windows are to be designed in a way as to deter forced entry, this would mean all glazing is internally beaded, locks on windows except where it is an escape window where the glass should be laminated. Windows must be securely fixed in accordance with the manufacturer's specifications. Laminated safety glazing (6.4mm minimum) in glass below 800mm (from floor level) or 1500mm if within 100mm of a doorframe. With effect from January 1st 2011 all laminated glass must be certificated to BS EN 356 2000 rating P2A. Windows should be to BS 7412: 2007, for PVCu units; A doorset should include a single-point locking device to BS 3621: 2007 (for keyed egress) or to BS 8621: 2007 (for keyless egress) or a multipoint locking system. A deadlocking facility should be provided. Any lock cylinder should be in accordance with BS EN 1303; 2005, grade 5 key security and grade 2 attack resistance as a minimum. To ensure a robust installation, fixing of a doorset or window should be in accordance with the recommendations given in section 6 of BS 8213-4: 2007, or manufacturer's written instructions where these meet or exceed the recommendation within this British Standard. **The doors and windows should be designed and tested to archive compliance for security with BS PAS 24:2022 for doors or BS 7950:1997.**

GLAZING CALCULATION
 Total room area = 19.38m2
 25% allowance = 4.84m2 + compensate existing = 3.62m2
 total allowance = **8.46m2**
 total window area = 0.55x0.98 + 1.5x2.1 + 1.5x1.1 = **5.33m2**
 therefore glazing complies.

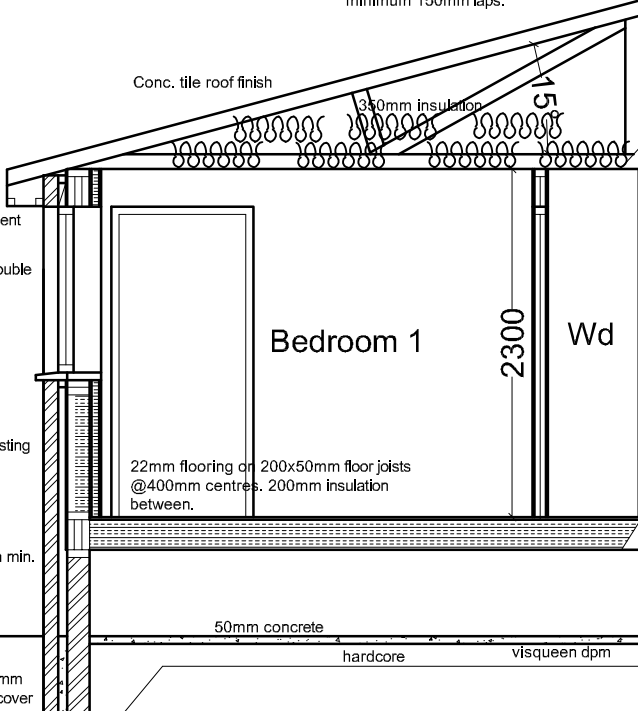
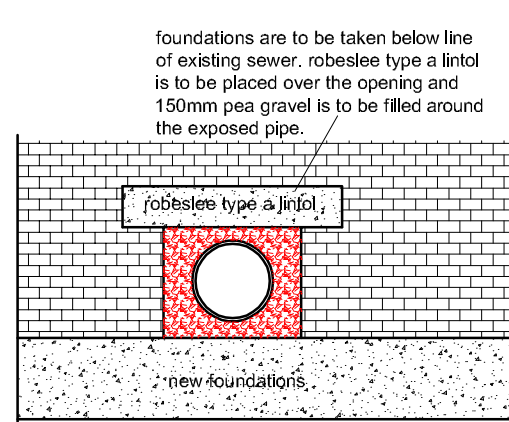
EXTERNAL WALL CONSTRUCTION
 Outer leaf to comprise 100mm thick blockwork with 20mm roughcast (Rendering to external wall to be match existing) with 50mm clear cavity. Inner leaf to comprise 1 layer 12.5mm plasterboard on 1 layer 500 Gauge Visqueen polythene vapour barrier (joints taped) on 1 layer 50mm Eurothane GP insulation on 145x45mm C16 treated timber framing @ 600mm centres, with 145x45mm head and sole plates. Fit additional 145x45mm dwangs as required for fixing partitions. Fit 145x45mm headbinder round of all panels. Fit 90mm Eurothane GP insulation between studs, 9.5mm, Exterior Quality Plywood sheathing to external face of studs. 1 Layer tyvec Breather Membrane stapled to face of plywood. 1 layer 15mm gypsum fireline board affixed with gypsum screws to the studs. All to be fitted to inner face of timber kit prior to insulation to inner being fitted.

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drainage protection



Section 1:50

SMOKE ALARMS

Optical smoke alarms should conform to BS EN 14604: 2005. Heat alarms conforming to BS 5446: Part 2: 2003 have fixed-temperature elements. Smoke alarms should be located in circulation spaces: not more than 7m from the door to a living room or kitchen not more than 3m from every bedroom door, and in circulation spaces more than 7.5m long, no point within the circulation space should be more than 7.5m from the nearest smoke alarm. A smoke alarm located in an access room (which could include a stair and landing), serving an inner room should be not more than 3m from the door of the inner room. A smoke alarm in the principal habitable room should be sited such that no point in the room is more than 7.5m from the nearest smoke alarm. In the case of a heat alarm, no point in the kitchen should be more than 5.3m from the nearest heat detector. Therefore, smoke alarms should be ceiling mounted and positioned away from any wall or light fitting. In order to reduce unwanted false alarms, smoke alarms should not be sited directly above heaters, air conditioning ventilators or other ventilators that might draw dust and fine particles into the smoke alarm. Smoke alarms and heat alarms should be ceiling mounted and located such that their sensitive elements are: in the case of a smoke alarm, between 25mm and 600mm below the ceiling, and at least 300mm away from any wall or light fittings, and in the case of a heat alarm, between 25mm and 150mm below the ceiling. All interconnected and fitted on non-maintained circuit with battery backup, all to be installed as per manufacturers instructions to comply with BS 5839: part 6:2019. Carbon monoxide detector (to be BS EN 50291-1:2010) to be fitted as indicated. Detector to be fitted no closer than 1m and no further than 3m from appliance.

HEATING SYSTEM

Existing boiler to be checked to be suitable to allow for expansion of the system. Central Heating to Gas Safe Regs, designed in accordance with CIBSE Guide. Radiators fitted with thermostatic control valves. Hot and cold water pipes are to be fully insulated to BS 5422:2009.

AIR INFILTRATION

The contractor is to seal all dry lining junctions between the walls, ceilings, floors, etc., and at all window, door and roofline openings, vapour control membranes also to be sealed and all the service penetrations into the fabric of the building also to be sealed. Provide draught stripping at all doors, windows and rooflights. Ensure that the infiltration of any air into the building is limited in full accordance with the provisions of the B.R.E. Report B.R. 262: 2002.

COLD BRIDGING:

Ensure cold bridging is eliminated i.e. Floor insulation is taken to perimeter walls aligning with wall insulation taken down to floor level. Ensure loft insulation is draped over head binder and wall insulation taken to head runner. Insulated plasterboard returned into jamb avoiding spots at jamb.

ROOF

Concrete tiles to new lower rear roof to be 'MARLEY WESSK' type or equal with 100mm headlap suitable to min 15deg pitch on 50x25mm battens and counterbattens on untrearable felt on 15mm plywood on prefabricate roof trusses 95x45mm @ 600mm centres (Design Certificate for trusses to be submitted to Building Control prior to works commencing on site). Proprietary truss clips used to fix truss to wall plates. Fix in accordance with manufacturers instructions. Roofspace to be ventilated via a continuous 25mm air gap at eaves protected by a vermin proof grille and at ridge via 'GLIDEVALE MR50 MONORIDGE VENTILATION SYSTEM' Fit timber or uPVC fascia and at eaves, fit deep flow uPVC gutters and deep flow uPVC RWP's.

LEADWORK

All leadwork to be in Code 5 lead, laid on a suitable underlay, ensure all leadwork is installed as per standard good practice recommended by The Lead Sheet Association. Minimum upstand of lead flashing where extension roof abuts existing wall to be 150mm. As the finish to the existing wall is drydash render, Building Control do not insist that cavity trays are fitted, however contractor to liaise with client to determine client's requirements in this respect as it is recommended that cavity trays are installed.

Electrical Key

⊕	13A double switched socket
⊕	Light switch
⊕	Light fitting
⊕	Smoke alarm/heat detector
⊕	Excess fan

note any electrics on boundary wall are to be surface mounted or framed out to accommodate metal back boxes and cables.

GENERAL

The Relevant Person is responsible for ensuring all works are carried out in accordance with The Building (Scotland) Act 2003, as amended, and The Building (Scotland) Regulations 2004, as amended, The Construction (Design and Management) Regulations 2007 are intended to protect people working in construction and others who may be affected by their activities. The regulations require the systematic management of projects from concept to completion and throughout the life cycle of the structure, including eventual demolition. Clients have a duty to ensure that competent people are employed to do the work, that sufficient time is allocated for the work to be undertaken and that the various members of the design and construction teams co-operate and exchange information. **It is the client's duty to appoint an appropriately qualified health and safety adviser to oversee the project as required.** **DO NOT SCALE FROM PLANS. ALL SIZES TO BE CHECKED ON SITE PRIOR TO THE ORDERING OR MANUFACTURING OF ANY MATERIALS.**

THIS RELATES TO ROOF TRUSSES IN PARTICULAR, IT IS THE CONTRACTORS RESPONSIBILITY TO CHECK SIZES ON SITE PRIOR TO ORDERING MATERIALS. All dimensions shown are in millimetres.

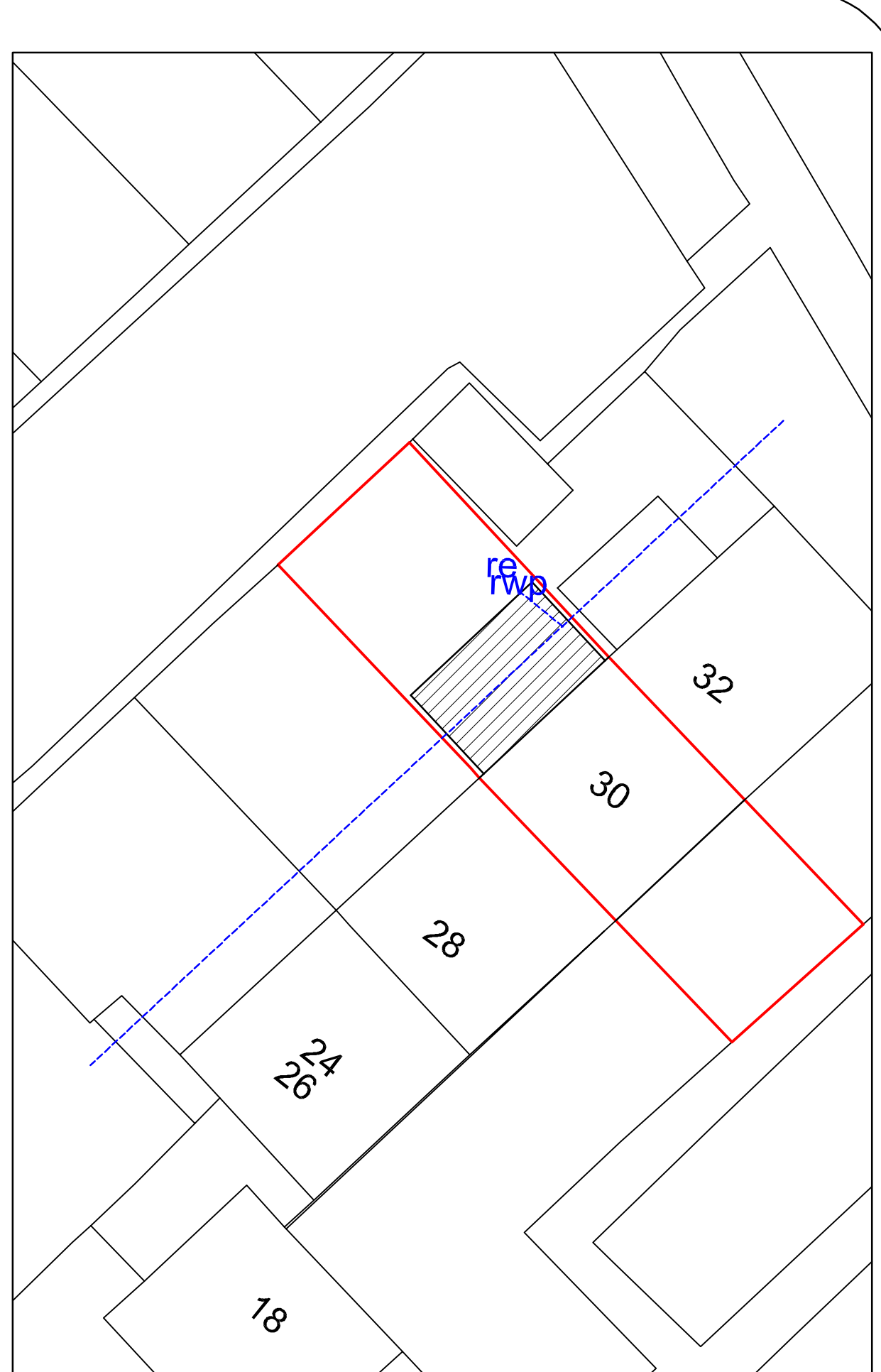
No works must begin without ensuring that the stamped approved drawing has been issued, contractor should consult with client or architect to ensure they are working from the approved plan. **It is to be noted that insulation u values are carefully calculated and should the contractor change to a suitable alternative it will be their responsibility to prove by calculation that it complies.** Contractors are to liaise with clients for details of all finishes, location and no of power points lights fans etc, finished, this drawing is produced solely for the purposes of obtaining planning consent and building warrant approval. Any variation from any builders quotation/contract should be discussed with contractor by client (no of power points, light fittings, window styles etc). No deviation to specification, structural or otherwise without confirmation from Architect/Structural Engineer. No liability will be accepted for any omission on this drawing should the drawing be used for construction purposes. All material to be fitted as per manufacturers recommendations. Prior to any works commencing the contractor is to familiarise himself with the location of all underground or overground services within the site, i.e. gas, electricity, telephone, water, drainage, sewers etc., take full responsibility and liability for same and arrange for any alterations or relocation of services as required. Include for fixing with utility companies as required prior to commencing works. Contractor to visit site, including all sub-contractors and to liaise with client as required to fully gauge all client requirements prior to commencing works or completing tender. The contractor shall be responsible for all the necessary temporary works to ensure the safety of the existing structure. All temporary works should take cognisance of the age and condition of the existing structure and the effects of the works to be undertaken. **The client/contractor shall be responsible for contacting building control/planning to arrange site inspections and following through to completion.** No part of the works shall encroach upon any boundary. **Building standards to be given the opportunity to inspect the following areas of work prior to covering up, foundation trenches, drainage connections and insulation details to external walls and ground floor.**

Where carbon dioxide monitors/detectors are within the scope of either or both: European Directive 2014/35/EU - Low Voltage Directive (LVD), and/or European Directive 2014/53/EU - Radio Equipment that should be constructed to fully comply with all applicable safety aspects of the Directives) as implemented through UK regulations. A carbon dioxide detector head requires a flow of air over it to operate correctly, therefore, it should not be located in an area that is likely to restrict the free movement of air. Unless otherwise indicated by the manufacturer, a carbon dioxide detector head should not be sited:

- if ceiling mounted, within 300 mm of any wall
- if wall mounted, within 150 mm of the ceiling or a junction with another wall
- where it can be obstructed (for example by curtains, blinds or furniture)
- next to a door or window, or
- next to an air vent or similar ventilation opening.

Unless otherwise indicated by the manufacturer, a carbon dioxide monitor, with or without an integral detector, should be mounted between 1.4 m and 1.6 m above floor level. Carbon dioxide detector head (or monitor if integrated) should not be sited within 1 m of the expected location of a bed-head. Where a separate detector head and monitor is installed, the monitor may be located other than in the room containing the detector head, for example, the hallway. This may be desirable if more than one detector head is installed.

U - VALUES
 Walls - 0.17 W/m2K
 Floors - 0.15 W/m2K
 Roof - 0.12 W/m2K
 Windows and doors - 1.4 W/m2K
 comb - 0.13 W/m2K.



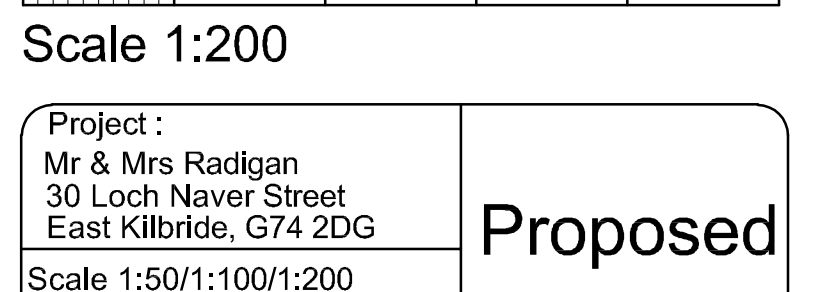
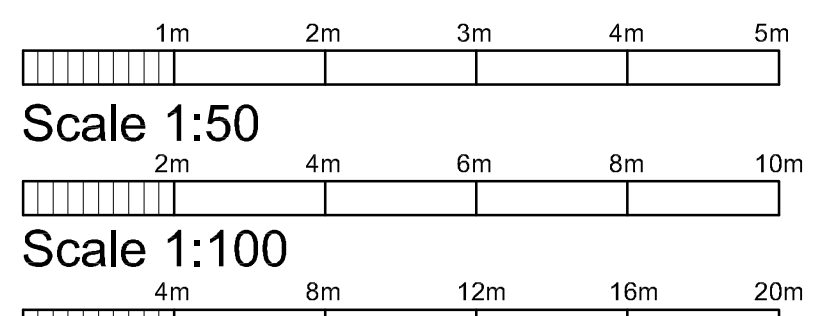
Block Plan 1:200

CO2 monitoring equipment
 A CO2 monitor should be provided in the apartment expected to be the main bedroom in a dwelling. The installed monitoring equipment for CO2 should be mains operated and may take the form of a self-contained monitor/detector or a separate monitor and detector head. The monitor should have an easily understood visual indicator and be capable of logging data to allow the occupant to gain information on CO2 levels for at least the preceding 24 hour. If the detector/monitor has an audible alarm this should be capable of being permanently deactivated. CO2 monitoring equipment should be capable of recording and displaying readings within a range of at least 0 - 5,000 parts per million. The equipment should also be capable of logging data at no more than 15 minute intervals, over a 24 hour period.

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Project :
 Mr & Mrs Radigan
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 Scale 1:50/1:100/1:200
 Date: 12/04/24 Rev loc/02

Proposed