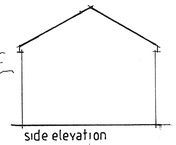
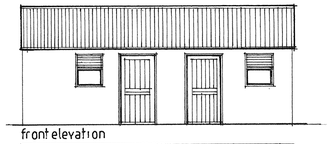
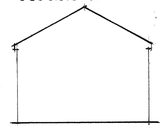
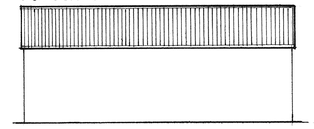
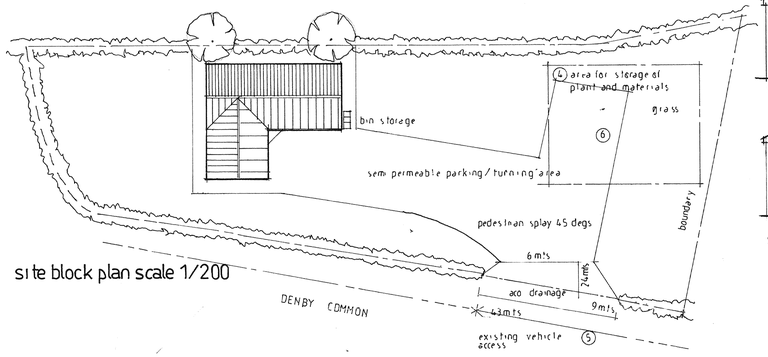
existing elevations scale 1/100



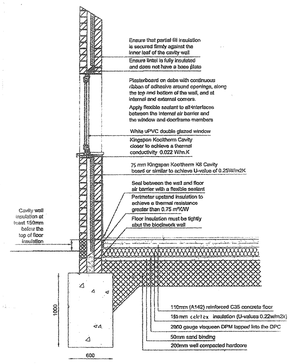




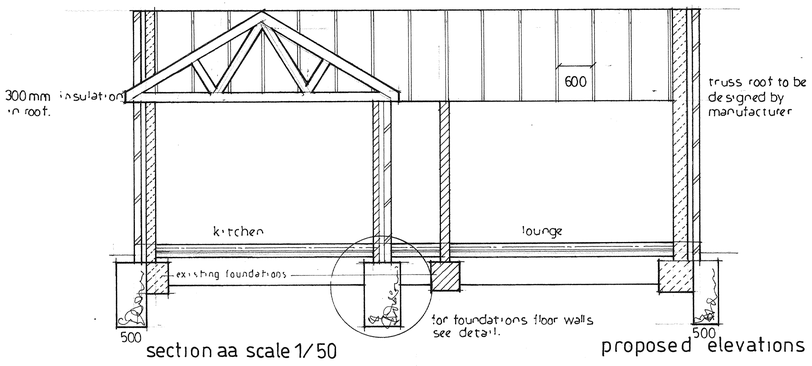




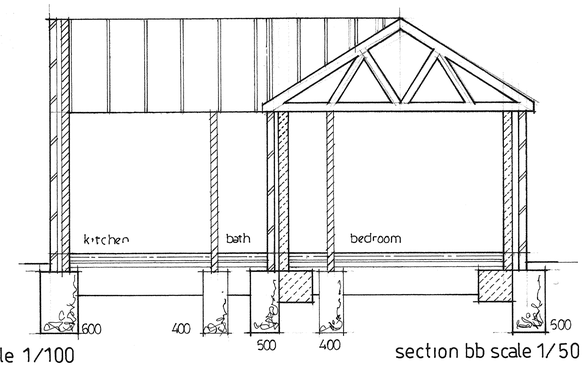
site block plan scale 1/200



Floor, Foundation, Wall and Window Detail Scale 1/20



section aa scale 1/50



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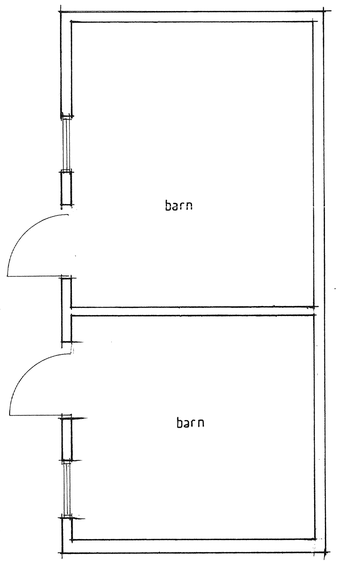
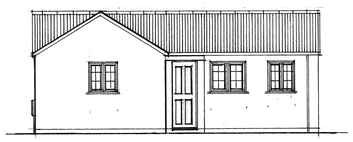
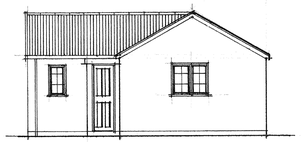


existing ground floor plan scale 1/50.

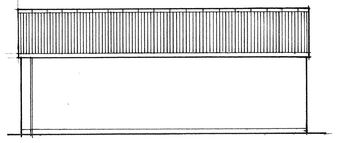
proposed elevations scale 1/100



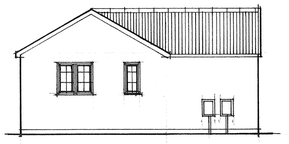
front elevation



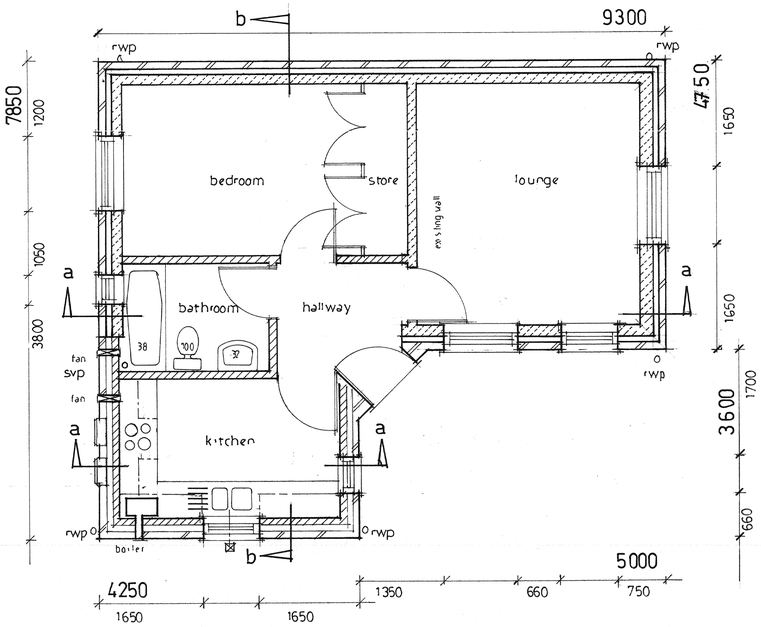
side elevation



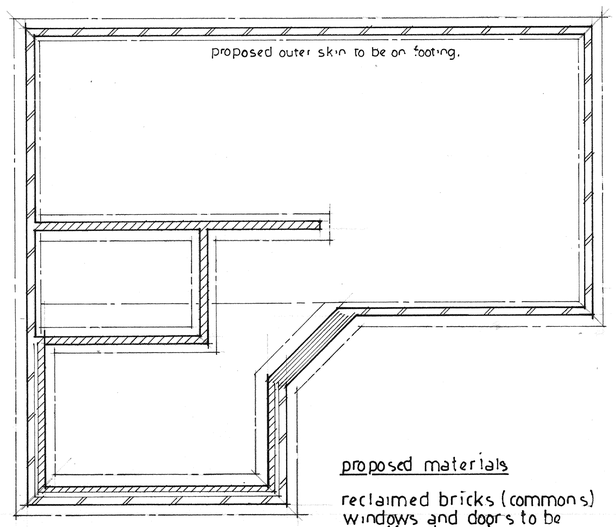
rear elevation



side elevation



proposed ground floor plan scale 1/50



foundation plan scale 1/50

proposed materials

reclaimed bricks (commons)
windows and doors to be upvc (french grey)
roof natural slate.

TRUSS ROOF

- All proposed tiles to be agreed with the local planning department before the commencement of works.
- All tiles to be fixed in accordance with tile manufacturers specifications.
- Tiles to be fixed to have the appropriate lap to suit the designed pitch.
- All proposed roof pitches to be checked on site by contractor before commencement of works.
- 25 x 50 mm tanalised tile battens fixed to the correct gauge to suit both tile and pitch.
- Untearable bitumen bonded roofing felt to BS 747.
- Use Tyvek or similar breathable felt
- The proposed roof is to be constructed using preformed trussed rafters the following specification is to be adhered to.
- All trussed rafters to be TRADA designed and manufactured and set at nominal 600 mm centres unless specified otherwise. Design details to be submitted to the building inspectors before ordering or installation.
- Trussed rafter to be fixed off 100 x 50 mm softwood wall plates mortared and strapped to walls at maximum 1500mm centres unless specified otherwise.
- Trussed rafters to be braced together using 100 x 25 mm softwood bracing fixed across trussed rafters in accordance with BS 5268 pt2.
- The roof ventilation gap should be equivalent to a 25mm continuous air gap at eves running the full length of the eves.
- 150mm min insulation quilt to be installed between and 150mm above ceiling joists to achieve a U value of 0.16w/m²k.
- Ceilings to be finished with 12.5 mm Gyproc Wallboard with 3 mm Thistle plaster skim finish.
- A continuous 5 mm ventilation to be provided at ridge.
- Guttering to be fixed off proprietary rise and fall brackets.
- Galvanised mild steel tie strap to be a minimum length of 900 mm.

GLAZING AND INTERNAL DOORS

All new glazed units to be Pilkington K glass to achieve a U value of 1.60 Wm^2k. Glazing pane to have a 16 mm air gap and a soft low E glazing. All means of escape windows are indicated on drawing. Means of escape windows are to be fitted to all bedrooms – the window should have an unobstructed openable area that is at least 0.33m^2 and at least 750 mm high and 450 wide and between 800mm and 1100mm from floor level.
All door sizes to be read in conjunction with drawing. Gap to base of bathroom door to be a min of 15mm.
Glazing in doors and adjacent to doors should be safety glazing to BS6206 below 1500mm

FIRE PRECAUTIONS

A proprietary smoke and fire detection system to be installed to cover all floors of the dwelling.
All detector heads to be interlinked and wired into a separate fused circuit on the mains distribution board.
All detector heads to have battery back ups and audible alarms.

HEATING

The property to be heated by gas fired central heating powered by a new boiler. The position of the new boiler to be agreed exactly on site generally all boilers to be combination type unless specified otherwise.
All radiators to have thermostatic valve controls. Hot water and central heating to be controlled by electronic controls. All pipes from boiler to be insulated. All gas heating appliances to be installed by a competent engineer and to Corgi rules and regulations.

OPENINGS

External window and door openings to be spanned by proprietary galvanised mild steel insulated lintels minimum 150 mm end bearings,
Internal door openings in masonry walls less than 1200 mm to be spanned by 100 x 65 mm Span lite lintels minimum 100 mm end bearings, openings in the same type of walls between the spans of 1200 mm and 2000 mm to be spanned by 110 x 100 mm Stress line reinforced concrete lintels minimum 100 mm end bearings.
Structural steel openings to be spanned by universal beams as specified on the floor plans.
Steel beams to be encased in two layers of 12.5 mm Gyproc Plasterboard with 3 mm thistle skim to achieve 30 minutes fire protection.

VENTILATION

Rapid ventilation to all proposed habitable rooms to be provided by opening lights in external windows and walls greater than one twentieth of room floor area. Trickle ventilation to the same rooms to be provided by proprietary vents in window and door frames greater than 8m² per room, all vents to have insect grills.
Trickle ventilation minimum 4m² to be provided in en suite. Mechanical extractor fan to outside air to be provided in the following rooms, en suite, and w.c to the rate of 30 litres per second. Kitchen giving an extraction rate of 60 litres per second (30 litres per second when incorporating in a cooker hood or if located near the ceiling and within 300mm of the centre line of the hob and operated by a humidistat control).

INTERNAL WALLS

Internal walls in masonry generally to be constructed using.

- 100 mm thickness light weight concrete block work,
- dry lined with 12.5mm Gyproc Plasterboard with 3 mm Thistle skim finish.

Internal stud walls to be created by either using 75 x 50 mm section carcassing timber off and onto 75 x 50 mm head and sole plates. Stud wall to be formed using 12.5 mm Gyproc Plasterboard covering to either face, with 3 mm Thistle plaster skim finish. Stud cavities to be filled with compressed 100 mm insulation quilt. Where running parallel to floor joists then double joists to be ran directly under stud wall.

GROUND FLOOR AND FOUNDATIONS

Foundation detailed on the proposed sections. Strip or trench-fill foundations to be generally 600 mm wide to 302 mm cavity walls. Trench fill foundations to be nominally 1000 mm minimum depth and constructed off a suitable load bearing strata. The foundation must be inspected and approved by the Local Authority Building Inspector. Suitable concrete block work to be used below ground level with any cavity filled with lean mix concrete

- 25mm insulated up stand to the perimeter of the concrete floor slab.
- Standard concrete floors to be 110mm thickness incorporating a single layer of A142 reinforcing fabric minimum 50mm cover.
- 150mm Celotex insulation – to achieve a U-value of 0.22W/m2k
- 2000 gauge Visqueen damp proof membrane lapped into the damp proof course.
- 50 mm sand blinding
- 200 mm sand blinded well-compacted hard-core.
- Concrete screed floor finish.

Where drainage pipes pass through foundation walls the pipes need to be spanned by 65 x 100 mm reinforced concrete Span light lintels minimum 150 mm bearings, the pipe to have a minimum 50 mm flexible surround.

EXTERNAL WALLS

302mm external walls to be constructed from the following:

- 102mm brickwork to be agreed with the local planning authority prior to commencement.
- 100 mm cavity closed at eves and all openings using insulated vinyl damp proof course and reveal blocks. 75mm Kingspan Kooltherm K8 cavity board or similar to achieve U value of 0.25 w/m2k. Approved stainless steel wall ties at 450 mm vertical centres, 600 mm horizontal centres.
- 75mm Celotex with 25mm airgap insulation to achieve no worse 0.28W/m²K.
- 100 mm thickness Thermalite block work, dry lined with 12.5 mm Gyproc Wallboard with 3 mm Thistle plaster skim finish.

Approved vinyl damp proof course incorporated to all new external walls and situated a minimum 150 mm above ground level. New walls to be tied to existing by toothing every other course into existing or by using stainless steel wall ties raw bolted into existing walls. All new external walls to achieve no worse than 0.30W/m²K

DRAINAGE

Roof water to drain to 100 mm half round guttering fixed to falls to 75 mm diameter rain water pipes.
Rain water pipes to discharge to 100 mm outlet trapped gullies.
All proposed foul water traps to have a minimum 75 mm deep seal traps, all waste sizes are detailed on the proposed floor layouts. Soil and vent pipes to be 100 mm diameter and to terminate a minimum 900 mm above eves and be fitted with a balloon cage tops. All proposed underground drainage pipes to be 100 mm diameter with a minimum 150 mm granular bed and surround, 150 mm concrete bed and surround complete with flexible joints where cover is less than 300 mm or pipes have less than 1000 mm cover in highways. Minimum gradients of 1 to 60 for foul water and 1 to 100 for surface water. Proposed inspection chambers and rod ding eyes to be proprietary concrete, or G.R.P units, either 600 mm diameter, or 600 x 450 mm section to inspection chambers. All chambers to be seated on 200 mm thickness concrete bases and to have sealed medium duty cover and frames, heavy duty in highway.

ELECTRICAL

Reasonable provision shall be made in the design, installation, inspection and testing of electrical installations in order to protect persons from fire or injury. Sufficient information shall be provided so that persons wishing to operate, maintain or alter an electrical installation can do so with reasonable safety. Installation Certification as or similar to the model in BS 7671 and IEE forms to be made out and signed by the competent person who carried out the design, construction, inspection and testing of the electrical work.

GENERAL

All measurements to be checked on site. Do not scale off this drawing without consulting the designer.
All electrical installations to be undertaken by N.A.C.I.E.E qualified electrician, the position of all sockets and lights to be agreed on site.
Insulation quilting to be fitted between floor joists and stud walls to reduce sound travel between rooms.

FINISH

To assist visually impaired people the surface materials and finishes of the walls, floors and ceilings should contrast visually. This aids the identification of access routes and the boundaries of rooms and spaces. A minimum difference.

MIXER VALVE

There should be a mixer/blender valve on all bath taps to ensure that the temperature does not exceed 48 degrees and closes to the final outlet to prevent the colonization of waterborne pathogens.

AIR PERMEABILITY

For Projected air tightness testing air permeability to be set at ten.

LOAD COMPENSATOR

A load compensator needs to be incorporated in the central heating controls.

WATER CALCULATOR

The water efficiency calculator should be provided to demonstrate that 125 liters/head/day are not exceeded and include the manufacturer's details of fitting/appliance. The fitting/appliances must be installed as per the calculator. Any variations will need to be inserted in a revised calculator and submitted to and approved by building control.

HEATING SYSTEM CERTIFICATE

A copy of the heating system certificate e.g. benchmark. Confirming the commissioning of heating and hot water services should be made available on site.

ELECTRICAL CERTIFICATE

A copy of BS 7671 electrical installation certificate should be made available for plot prior to completion.

EPC

A copy of the energy performance certificate shall be given to the owner and displayed in the property and rm or epc given to building control before the property can be finalized for building control compliance.

AIR TIGHTNESS TESTING

In addition to the sap calculations a pressure test will be required to justify the der which should be carried out at dwellings completion and the results forwarded to building control.

Rick Cobham Design Ltd
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Mobile: 0776 504 2005 Tele: 01159 242590
O.S Map Licence Number MEM 00000111

Prior to commencement of work, the contractor and client are to check on-site all exterior dimensions, setting out positions, boundary positions and details to verify and agree upon. Any errors, omissions or design changes should be reported immediately to enable amended plans to be prepared and submitted for approval.

The requirement of the "Party Wall Act 1996" will apply to certain schemes. If the proposed work affects the Party Wall or is within 3 meters and deeper than the foundations of the nearby building the "Building Owner" has a responsibility to inform (in writing) and agree the works with the "Adjoining Owner(s)". If agreement cannot be made then it may be necessary to engage a Party Wall Surveyor. Rick Cobham Design Ltd takes no responsibility for this.

The contractor will be responsible for locating all hidden services that may be affected by the proposal and stopping off or diverting as necessary. Drainage runs shown are assumed and must be checked on site before work commences. Any proposed building works within 3 metres of a public sewer will require a "building over/close to" application to be submitted and approved by the water authority prior to work commencing.

All work to comply with CDM 2015. The principle contractor (for projects with more than one contractor) must take on the legal duties of the client in addition to their own as principle contractor. If the domestic client has not appointed a principle contractor, the client's duties must be carried out by the contractor in control of the construction work.

This drawing is to be read in conjunction with any structural engineers' drawings and details.

CLIENT:	**Mr. Chris Fido**
LOCATION:	**23 Denby Common, Denby Village, Ripley, Derbyshire, DE5 8PW**
PROJECT:	**Convert barn into dwelling, single storey extension to front and add brick skin to original barn**
DRAWING TITLE:	**Existing & proposed elevations, ground floor plan, site block plan, sections aa bb & specification**
DRAWING NUMBER:	**RS/CF/15/12/01**
REVISION:	
SCALE:	**1/50, 1/100, 1/200**
BY: Rick Somersby	**DATE: 15 December 2020**

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