ROOF BRACING NOTES
50x3 mild steel diagonal cross-strapping, coach bolt to every timber member.
new rafters to be 50mm x 125mm C24 at 400mm centres.
[Stroud Associates drawing no. SU587 101E]

STAIRCASE - note staircase changed to a W4W4 format

Finished Ground Floor to Finished First Floor (approx.)		2730.0mm
13no. Risers at		210.0mm
Going		235.0mm
min.		
Width between Handrails		800.0mm min.
Handrail Height	above flights	900.0mm
	above landings	1000.0mm
Min. Headroom		2000.0mm clear

Timber construction : No opening in construction large enough to allow a 100mm diameter sphere to pass through, balustrading constructed so that it cannot be easily climbed. All clad on underside with 12.5mm plasterboard & skim coat plaster.

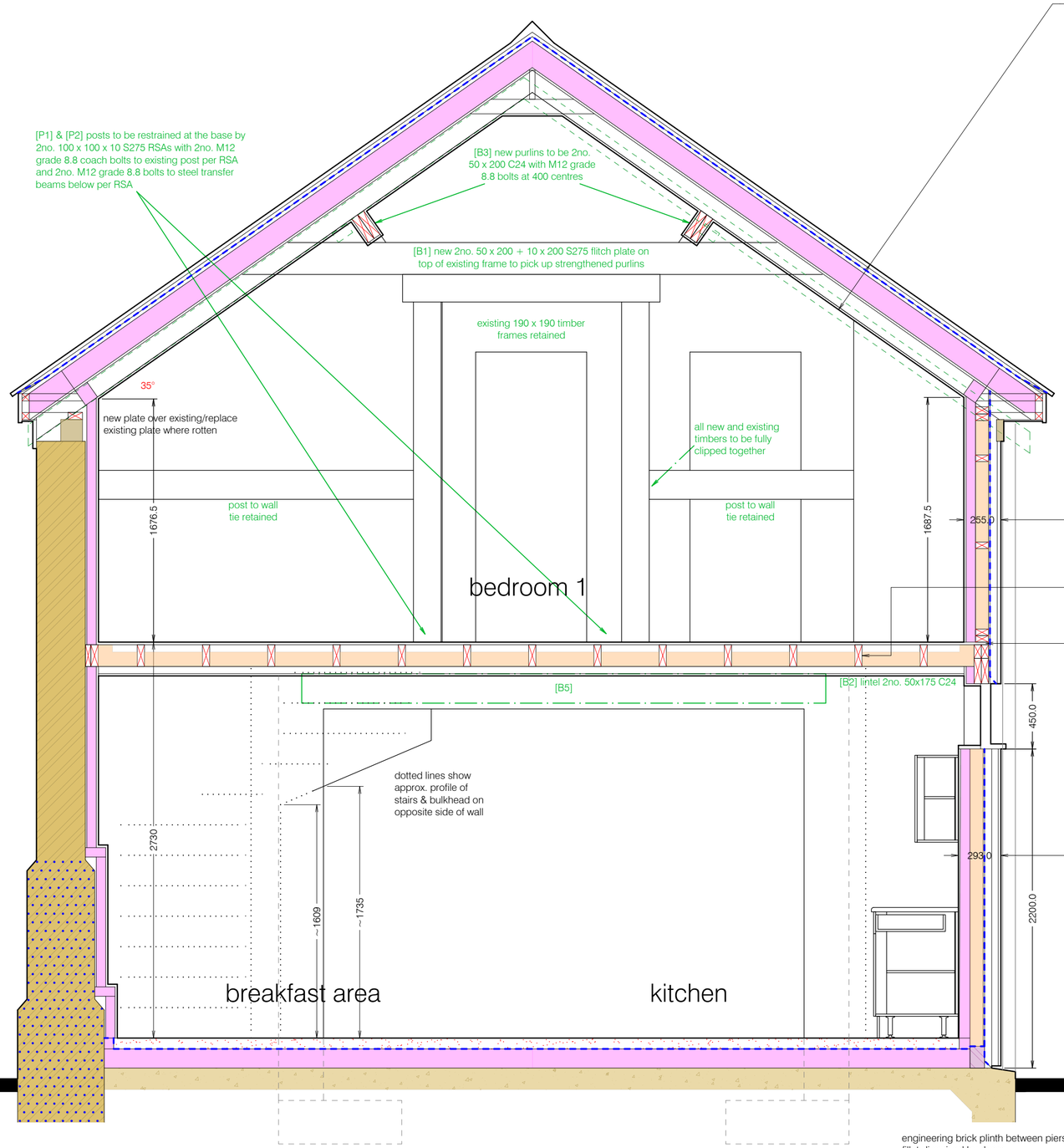
INTERNAL OPENINGS
If any internal doors are to be glazed these are to be fitted with toughened safety glass as well as any glazing within 300mm of doors and window panels with an internal sill height less than 800mm above finished floor level. Opening sizes are nominal and should be adjusted to suit selected product & installation method. Handing of units to be determined from plans. All ironmongery to be approved by Client, provided and installed by Contractor.

FIRST FLOOR SHEATHING NOTES
Double stud against wall resin anchored 300mm vertical c/c, 100mm embedment. sheathing to both sides of stud wall to be 9.5mm WBP ply of 9.0mm type F2 OSB, 3x50mm wire nails at 150mm c/c around perimeter, 300mm internally.

INTERNAL PARTITIONS : FIRST FLOOR
100mm x 50mm treated softwood studs at 400mm centres with noggins at 600mm centres off 100mm x 50mm treated softwood top & bottom plates clad both sides with 15mm plasterboard with skim finish. Provide min. 25mm thick min. 10kg/m³ density mineral wool batts well packed between studs to ensure acoustic insulation. Double joists & noggins under partitions.
Double stud on vertical dpm at junction with external walls.
Where indicated on floor plan by engineer partitiions to be upgraded as detailed above to provide bracing to existing brickwork.

EXTERNAL BRICKWORK WALLS
Existing brickwork to be repaired & repointed with lime mortar to match.
New injected dpc to be installed and certified by approved specialist.
Provide Celotex PL4065 laminated 12.5mm plasterboard/65mm insulation on dabs with additional mechanical fixing (nom. 10mm dabs) with skim finish.

INTERNAL PARTITIONS : GROUND FLOOR
100mm medium density block work off floor slab with render & skim finish both sides. DPC 75mm or 150mm above slab to be bonded to ground floor dpm.



ROOF
Approved roof slates (Cupa Pizarras) on 38mm x 25mm treated battens at gauge to suit pitch & tiles (as existing and/or see manufacturer's instructions) on Tyvek SUPRO PLUS reinforced untearable breather type roofing felt (installed in accordance with manufacturer's instructions) on 38mm x 25mm treated counter battens coincident with studs on 150mm Celotex XR4150 with taped joints as VCL on simple rafters installed all as per Structural Engineer's design (see note, left), off 100mm x 50mm levelled wall plate on top of existing on brick wall/new stud wall and tied down at max. 2m centres with 30mm x 5mm galvanised mild steel straps.
At gables provide packing spanning min. 3no. joists and 30mm x 5mm galvanised straps at max. 2m centres (at rafter and floor/ceiling joist level).
Clad on underside with 12.5mm plasterboard with skim finish.

EXTERNAL STUDWORK WALLS (FIRST FLOOR)
Existing infill studwork to be replaced.
New infill walls in pre-fabricated or site erected 90mm deep panel structure comprising 90mm x 45mm regularised (or 100mm x 50mm) treated softwood (C24) studs at max. 400mm centres and 90mm x 45mm regularised (or 100mm x 50mm) treated softwood (C24) noggins at max. 600mm centres all off 90mm x 45mm regularised (or 140mm x 50mm) treated softwood (C24) sole plate with matching head plate.
Finish externally with approved treated softwood weatherboarding to match existing on 50mm x 50mm treated softwood battens coincident with studs on Tyvek Housewrap or similar breathable vertical vapour barrier installed strictly in accordance with manufacturer's instructions on 10mm WBP sheathing ply well fixed to stud frame.
Stud frame to be lagged with 90mm Frametherm mineral wool batts (or suitable alternative) between studs with 500g polythene dpm internally.
Finish internally with mechanically fixed Celotex PL4065 laminated 12.5mm plasterboard/65mm insulation and skim.
All loadbearing elements of structure including walls, lintels & beams to be clad with min. 12.5mm plasterboard with taped joints & skim finish to achieve min. 30 minutes fire resistance.

FIRST FLOOR
Selected floor finish on 22mm moisture resistant Type II/III V313 flooring grade chipboard (with mass per unit area of 15kg/m², all joints glued, boards fixed with ring shank nails in accordance with NHBC and manufacturer's instructions) on 150 x 50 C24 joists at max. 450mm centres with treated softwood perimeter noggin to support floor edges and bracing/strutting in accordance with manufacturer's/supplier's instructions.
Provide min. 100mm min. 10kg/m³ density mineral wool between joists.

Continue deck under sole plate of timber stud wall.

Underfloor heating installed in accordance with manufacturer's instructions. (consider using spacing battens to top or underside (as shown) of joists to allow pipes to pass between joist pairs without need to penetrate joists and thereby simplify installation)

Clad on underside with 12.5mm plasterboard & skim.

EXTERNAL STUDWORK WALLS (GROUND FLOOR)
Existing doors to be re-used as external cladding (recommend removal of existing OSB board lining as this may form a moisture trap reducing lifespan of doors).
New infill walls in pre-fabricated or site erected 90mm deep panel structure comprising 90mm x 45mm regularised (or 100mm x 50mm) treated softwood (C24) studs at max. 400mm centres and 90mm x 45mm regularised (or 100mm x 50mm) treated softwood (C24) noggins at max. 600mm centres all off 90mm x 45mm regularised (or 100mm x 50mm) treated softwood (C24) sole plate with matching head plate. Sole plate levelled & bedded in mortar on engineering brickwork upstand & tied down at max. 2m centres with 30 x 5 galvanised steel straps. Finish externally with existing doors modified to suit opening on 50mm x 50mm treated softwood battens coincident with studs on Tyvek Housewrap or similar breathable vertical vapour barrier installed strictly in accordance with manufacturer's instructions on 10mm WBP sheathing ply well fixed to stud frame. Stud frame to be lagged with 90mm Frametherm mineral wool batts (or suitable alternative) between studs with 500g polythene dpm internally.. Finish internally with mechanically fixed Celotex PL4065 laminated 12.5mm plasterboard/65mm insulation and skim.
All loadbearing elements of structure including walls, lintels & beams to be clad with min. 12.5mm plasterboard with taped joints & skim finish to achieve min. 30 minutes fire resistance.

engineering brick plinth between piers with cement fillet disguised by doors
(min. 10mm air gap with insect/vermin mesh)

new 850 x 850 mass concrete pad foundations;
all new foundations to be poured up against the face of existing edge footings;
all new concrete footings to be taken down to existing foundation level and cast against existing footing. New footings must not undercut existing footings.
[Stroud Associates drawing no. SU587 100D]

225mm wide x 425mm long piers to be rebuilt using min. 20N/mm² brickwork or 10N/mm² blockwork and M4 mortar
[Stroud Associates drawing no. SU587 101E]

GROUND FLOOR
Retain existing concrete slab.
Install new floor comprising min. 75mm cement & sand screed (either fibre reinforced or reinforced in lower half with chicken wire) with min. 25mm resilient perimeter insulation on 500g polythene vapour barrier on min. 120mm flooring grade Celotex or similar insulation on 1200g polythene dpm lapped 300mm at edges and taken up around perimeter & bonded to dpc zone around perimeter on existing slab levelled with compacted sand or sand & cement or similar approved levelling screed. Underfloor heating installed in accordance with manufacturer's instructions.

section
1:25.

Conversion of barn to dwelling
Granary Barn, Rockylls Hall
Shelland Green, Shelland
Stowmarket, Suffolk IP14 3JF
for Mr Joe Cunningham

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January 2021

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