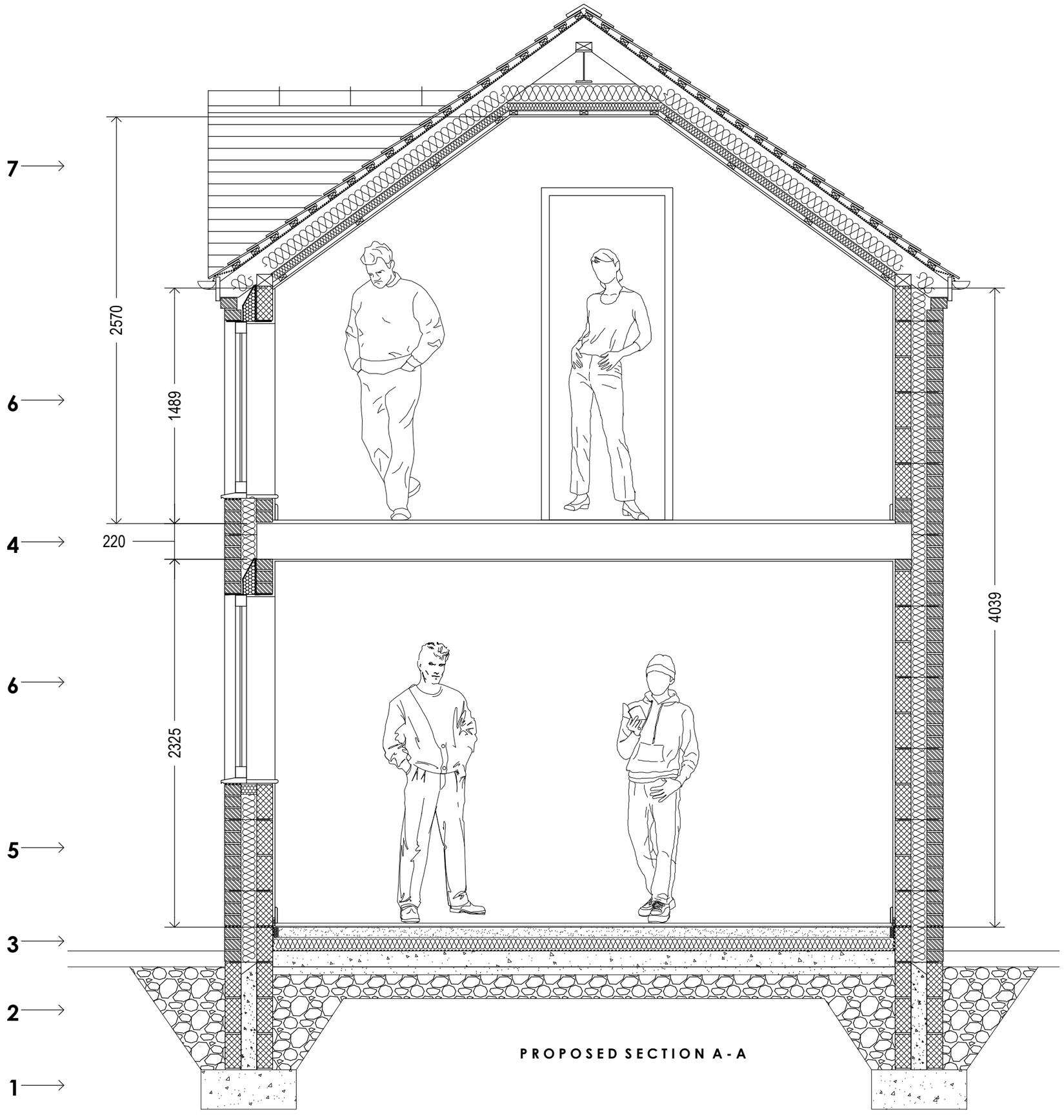
Client: Mr Steve Horton — Drawing No: 16/PP/08

Job: Barn conversion at 'Building B' Kerry Hill Farm, Eaves Lane, Bucknall ST2 8NA — Date: December 2016

Title: Section A-A as Proposed — Scale: 1:25

CONSTRUCTION NOTES:

1. FOUNDATIONS: To size, depth & stratum to suit ground conditions and to the satisfaction of the Local Authority Building Control Officer. Unless otherwise stated on the drawing strip foundations to be in C30 Grade concrete of min. section 600 wide x 200 deep.
2. SUBSTRUCTURE: Common brickwork below DPC at min. 150 above finished ground level. Cavity filled with weak mix concrete splayed to ground level with weep holes at 675 c/c to outer leaf. Continuous roll bitumen polymer dpc at 150mm above finished ground level.
3. GROUND FLOOR: 65mm C30 concrete screed on 500g polythene separating layer on 90mm Celotex GA4000 with 20mm vertical perimeter insulation (A = 110m²; P = 64m; P/A = 0.58; U-value 0.18 W/m²K) on 100mm C25 concrete slab on 1200g Visqueen DPM lapped with DPC on sand blinding on min. 150mm well compacted MOT Type 1 hardcore base.
4. FIRST FLOOR: 47 X 220 C16 joists @ 400c/c, with 22mm T&G flooring and with 12.5mm plasterboard & skim to soffit. Provide full depth noggin at midpoint of span.
5. EXTERNAL WALLS: 302 overall with 102 facing brick outer leaf; 100mm cavity with 97mm Celotex CF5000 insulation and lightweight concrete block inner leaf with 9.5mm plasterboard on dabs and skim finish internally. Stainless steel wall ties at 750 horizontal and 450 vertical centres. Vertical and horizontal insulated DPC & cavity closers around external openings. Stepped cavity tray to junction between external wall and low level roof over kitchen. U-value 0.18 W/m²K.
6. WINDOWS/DOORS: Unless otherwise stated on drawings to be timber double glazed with 24mm argon filled cavity to provide a max. U-value of 1.1 W/m²K. Glazing to doors and to adjacent screens/panels within 300mm of the door and less than 1500mm from floor level to be glazed with toughened safety glass to Class B of BS 6206. Habitable rooms to have opening window 1/20 floor area and with permanent background ventilation 8000mm². Other rooms to have background ventilation 4000mm².
7. ROOF CONSTRUCTION: Roof construction generally to be plain clay tiles on 25 x 50 tanalised battens on Tyvek Supro breathable membrane on 45 X 150 C16 rafters @ 450c/c fixed to 75 x 100 treated wall plate anchored to masonry with 5 x 30 x 1000 galv. ms straps @ 1800c/c. Structural calculations and details of bearings of ridge beam to be provided by Structural Engineer and submitted to Building Control prior to installation. 120mm Celotex FR5000 insulation between joists, 25mm services void and 50mm Celotex FR5000 below rafters, with 12.5mm foil backed plasterboard & skim to soffit.
U-value 0.13 W/m²K.
Provide all necessary flashings, soakers, aprons, valleys etc. in Code 5 lead sheet. Provide stepped cavity tray to junction between external wall and low level roof over kitchen.
8. DRAINAGE: Below ground drainage to be 110mm uPVC laid at 1:40 gradient; Inspection chambers uPVC with medium duty frame & covers. Storm drainage soakaway to be designed in accordance with BRE guidelines and to the approval of SCC planning department.
9. ELECTRICAL INSTALLATION: All new electrical works to be designed, installed, inspected and tested in accordance with BS 7671 (IEE Wiring Regulations 17th Edition) The works are to be undertaken by an installer registered under a suitable electrical self certification scheme, ie. NICEIC or ECA. Min. 30% of new light fittings to be low energy type.
10. VENTILATION: Habitable rooms to have opening windows min. 1/20th floor area with permanent background ventilation min. 8000mm².



PROPOSED SECTION A-A