

This drawing is for the sole purpose of obtaining Local Authority Building Regulation approval only. The building contractor shall be responsible for the checking of all dimensions on site. The building contractor shall be responsible for the stability of the new & existing structures during the works.

New foundations to be 700 x 200 mass concrete strip footings tied into existing. All taken off LA approved bearing strata. Foundation to have 450mm min ground cover. Exact depth of foundation to be established on site.

New walls to single storey extension to be 325mm cavity construction & shall comprise:

Below dpc - 100mm thk dense concrete blockwork inner leaf, 100mm thk dense concrete blockwork outer leaf with lean mix cavity fill. Fill shall not be within 225mm of the dpc. Allow for hy-load dpc bedded in cement mortar. Dpc shall be 150mm min above external ground level. Above dpc - Walls to achieve 0.18W/M2-K U-value. 100mm thk blockwork inner leaf (7N/mm<sup>2</sup>), 75mm thk kingspan K108 wall insulation or similar approved, 50mm cavity and 100mm thk solid concrete blockwork outer leaf. Sandstone outer leaf to front elevation to match existing dwelling. Insulation to extend to lower level of floor insulation. Cavity to extend 225mm min below level of dpc.

Allow for 250mm long vertical twist type ss wall ties at 450mm vertical & 750mm horizontal crs staggered. Allow for wall ties to every course around openings. Insulation to be secured with wall tie clips. Minimum returns to be 385mm. Provide expamet reinforcement between bed joints at returns. Ensure cavity face of inner leaf is clean & free from mortar prior to fixing of insulation. Ensure cavity is kept clean at all times. Provide movement joints note 'MJ' in kitchen wall.

Form new openings as indicated. Exact sizes shall be determined prior to works commencing & adjusted accordingly. Sill heights to window openings to be 800mm min above f.f.l.

Allow for PC concrete thresholds to door openings. Allow for catnic lintols over openings. Type & size determined on site to opening width & loadings. Allow for dpc over all lintols with stop ends at each end. Close cavity around all openings with thermalite or similar insulated cavity closer & thermal boarding as necessary with combined dpc. Allow for all required vertical & horizontal dpc treatment to openings. Cavities to be closed at eaves with a suitable calcium silicate board. Roof & wall insulation should abut the cavity barrier at eaves level to prevent cold bridging.

All new walls to be fully keyed into existing. Provide vertical dpc as necessary.

All existing external walls within hay loft area to be lined with timber studs & 75mm thk kingspan K108 wall insulation or similar approved. Allow for plasterboards with skim finish. Provide vapour barrier as necessary. All installed to satisfaction of LA.

New ground floors to be 125mm thk concrete with a steel float finish on, 1200g visqueen dpm on, 100mm celotex XR4000 or similar insulation on, 50mm thk sand blinding, on 150mm well compacted type 1. Overall floor to provide U-value of 0.18W/m2K.

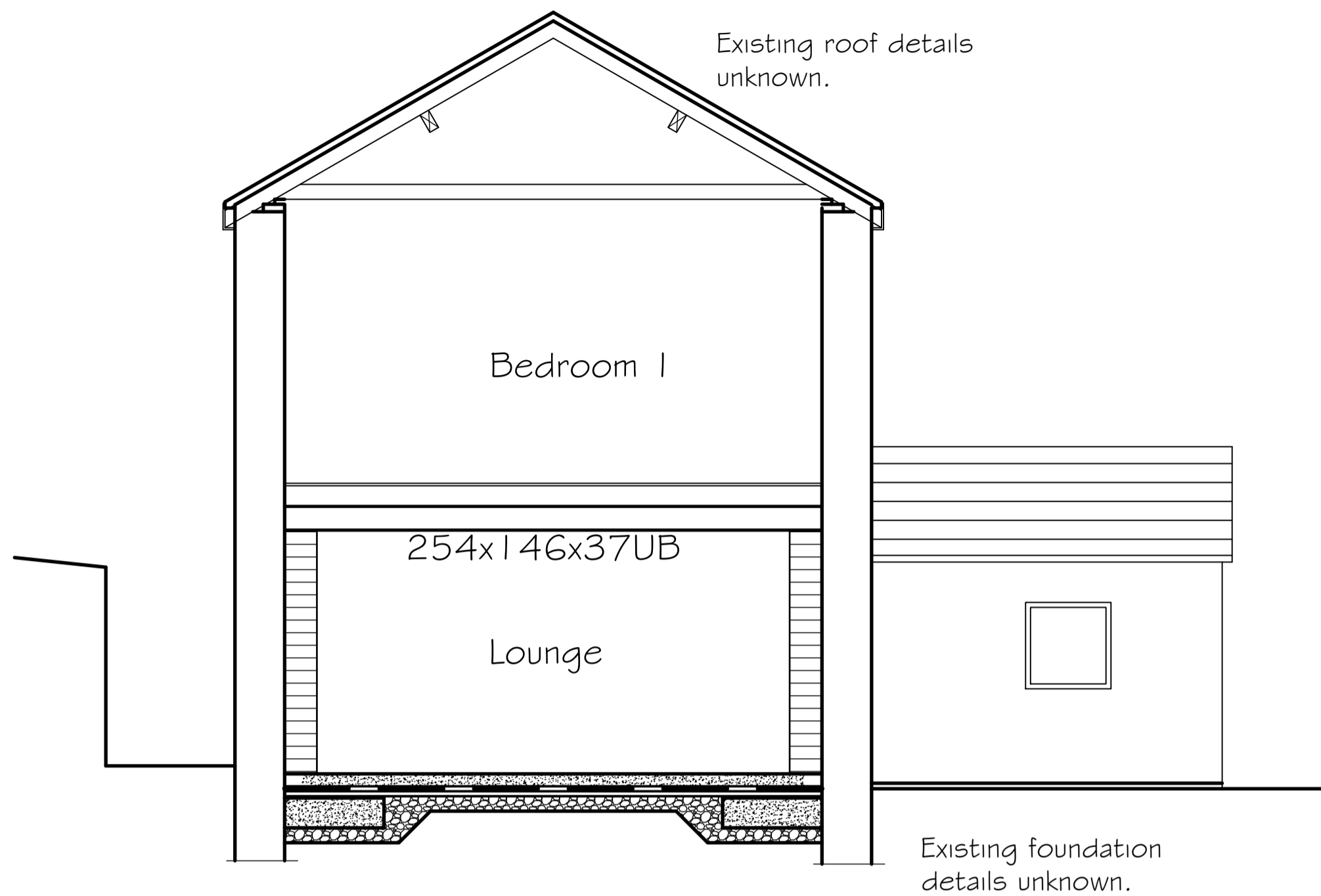
New first floor to be 19mm thk Weyrock boarding on metal web joists located at 400mm crs supplied by Messrs Jacksons timber. Design calculations & layout to be provided to LA for approval prior to construction commencing. Ceiling to be 12.5mm thk plasterboard & skim finish. Provide sound insulation between joists.

New steelwork to be grade S355 JR. Steelwork to have 250mm min end bearing onto 440 x 300 x 215 gr50 N/mm<sup>2</sup> concrete padstones at each end. Steelwork to have fire board surround to provide 60mm fire protection. All bolts connecting steelwork beams together to be grade 8.8. All connections to be 4/M20 bolts (min). All welds to be 6FW. See drg No 8 for details.

Window opening lights to have opening areas equal to 1/20th of the floor area it serves. Trickle vents to be provided to each room, min vent area 10000mm<sup>2</sup>. Windows & doors to provide U-value of 1.4W/m2K and to be double glazed with a 16mm air gap & a soft low E coating. Windows & door frames to be sealed into masonry openings with mastic.

Glazing below 800mm to be safety glass to BS6206: 1981, also to include glazing in doors below 1.5m. All doors to have threshold to comply to DDA requirements.

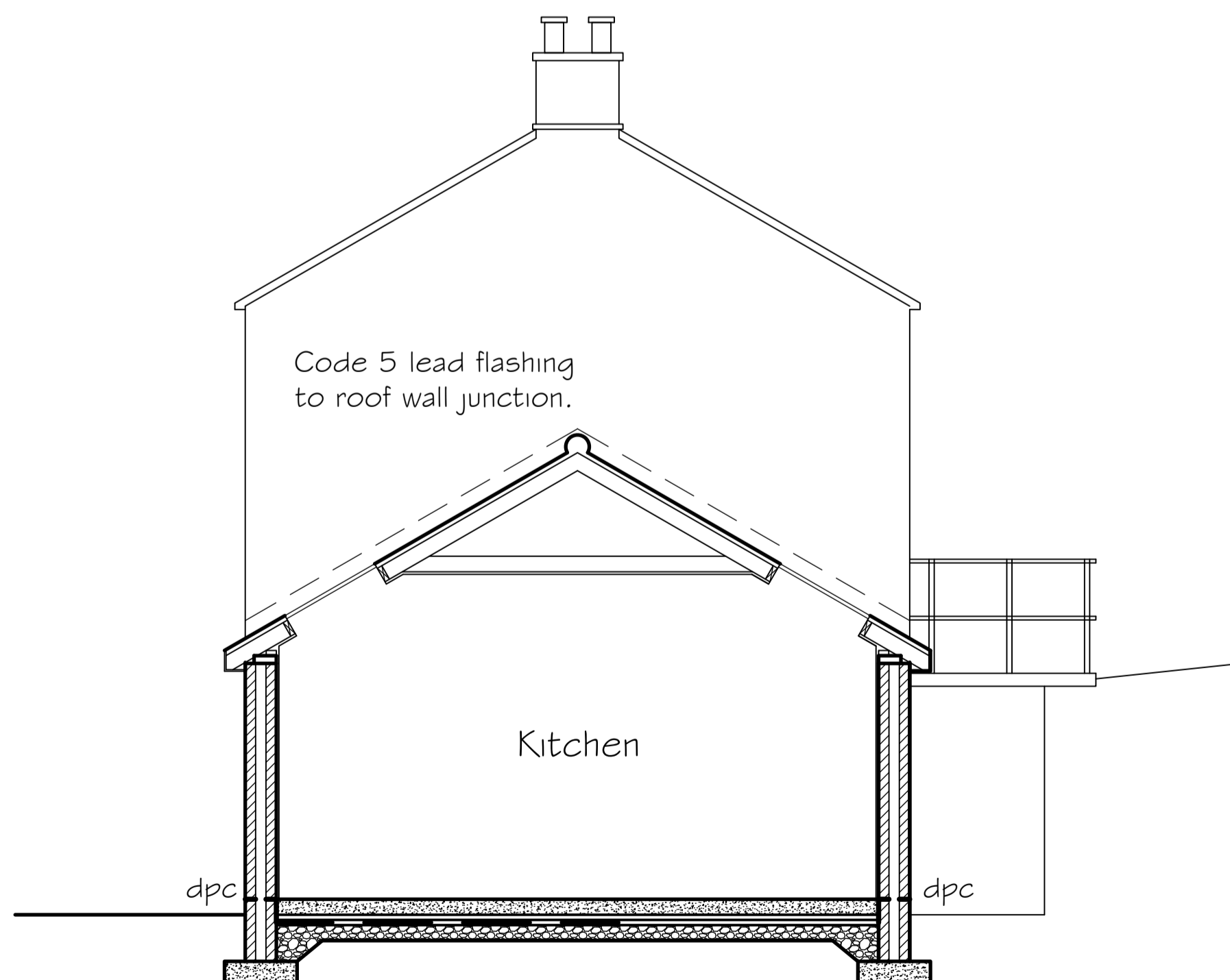
Means of escape windows to be provided to first floor habitable rooms with a minimum openable area of 450 x 450mm or 0.33m<sup>2</sup> with a sill height being no more than 1100mm high.



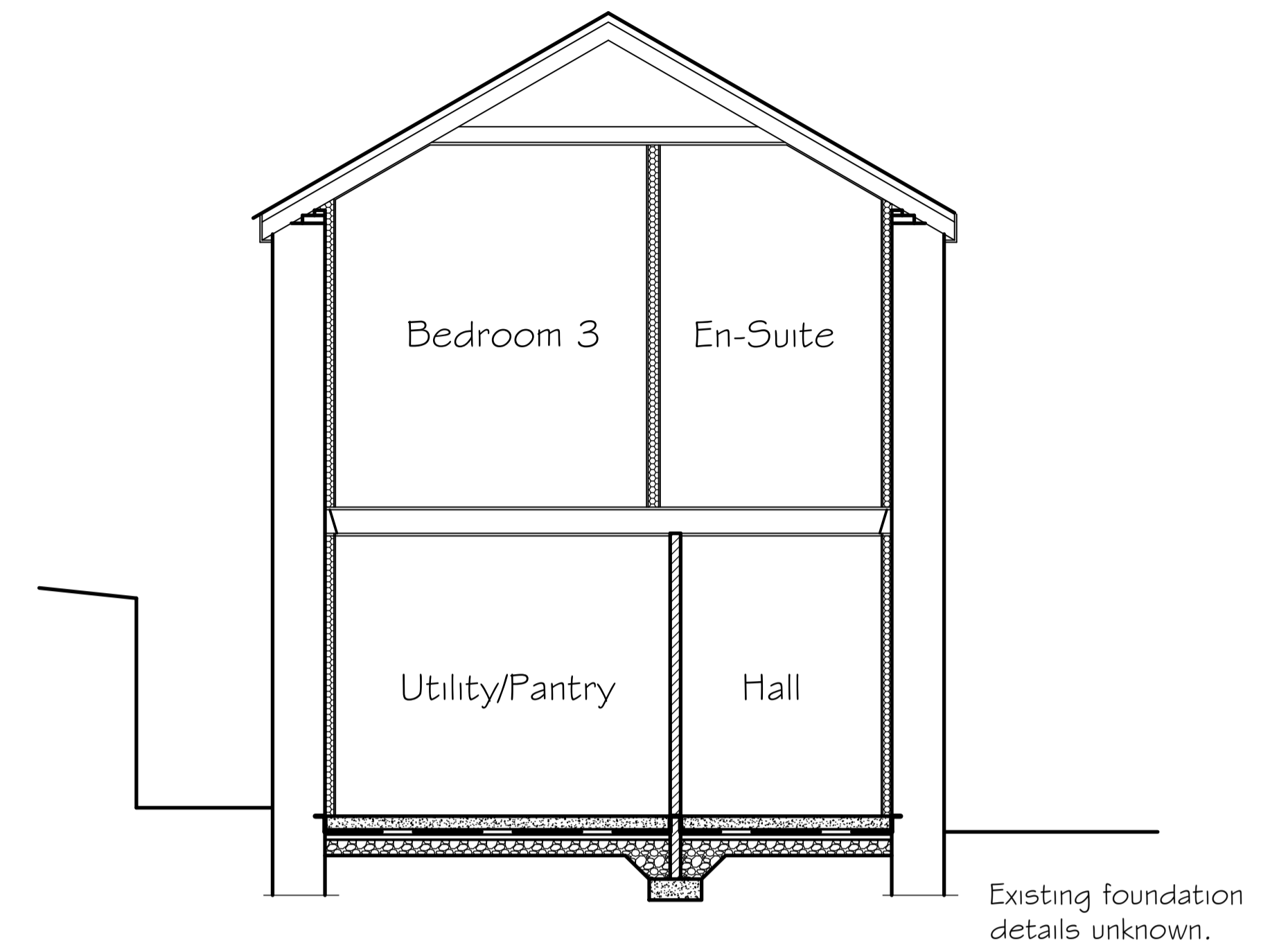
SECTION THRO' PROPOSED LOUNGE / BEDROOM 1

Scale 1:50 @ A1

Scale 1:100 @ A3



SECTION THRO' PROPOSED KITCHEN



SECTION THRO' PROPOSED UTILITY / BEDROOM 3

New timber stud partitions to be formed using 100 x 50 C16 timbers at 400mm max crs. Noggins & 600mm vertical crs. Provide 10kg/m<sup>2</sup> plasterboard each side with 25mm mineral wool min between studs.

New roofs over existing hay loft area & single storey extension be concrete tiles to match existing dwelling on 50x25mm sw timber battens on sarking felt (felt to be carried into gutters & secured using clout nails) on pre-formed attic roof trusses at 400mm crs to BS5268 Pt3 & shall include all diagonal bracing and trimming details. Lateral restraint strapping to be provided to gables at 2m max crs. Design calculations & drawings to be submitted to LA for approval 21 days prior to installation. All secured to 100x50mm sw timber wall plate. Wall plate secured to top of wall using at 1200mm max crs. using m/s BAT M305 straps. Ensure 25mm continuous air gap with vermin proof screen at eaves & continuous 5mm ridge vent. Allow for 300mm thk quilt insulation laid between trusses. Allow for 100mm thk celotex XR4000 or similar insulation between trusses with a further 50mm air gap below to achieve U-value of 0.15W/m2K.

New timber staircase & steps into single storey extension to be formed with 195mm max risers & 250mm min goings. Handrail to be provided 900mm above pitch line of the stairs. 2000mm clear headroom to be provided above the pitch line. Spindles to be max 95mm max spacings to prevent 100mm dia ball passing through gap.

Bathroom, En-suite, cloakroom & kitchen areas to have mechanical ventilation with a capacity of 60lt/sec & suitable air admittance valves fitted. New bathroom & en-suite to be provided with 15 min overrun facility mechanical extract fan. All mechanical extracts to be ducted to external air.

All electrical work is to be designed, installed, inspected and tested in accordance with BS 7671:2001 or equivalent standards. These installation works are to undertaken by a person registered with an electrical self certification certificate scheme, or alternatively by a suitably qualified person, with a certificate of compliance produced by that person to building control on completion of the works.

Exact layout of all sockets & switches to be determined by client. All new internal light fittings shall have lamps with a luminous efficiency of 75 light source lumens/circuit watt.

PROPOSED INTERNAL ALTERATIONS & SINGLE STOREY EXTENSION TO GILL HOUSE FARM, EGREMONT, CUMBRIA, CA22 2UB FOR SAMANTHA CLARKE  
DRG No 9