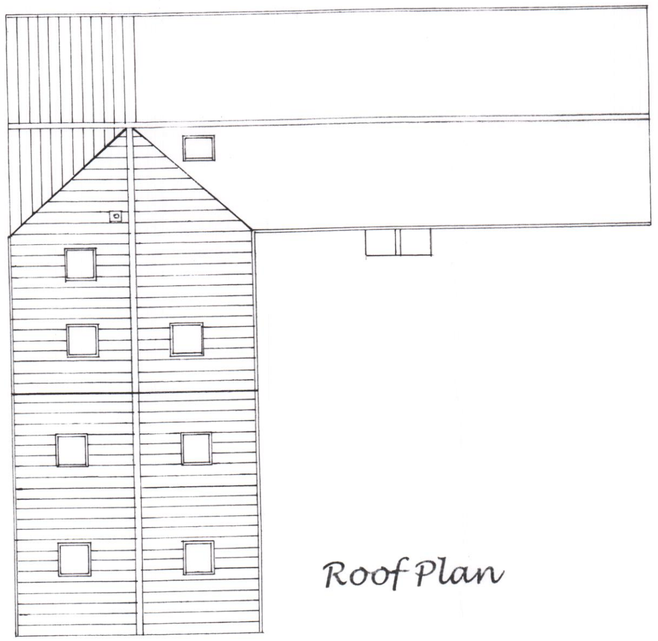
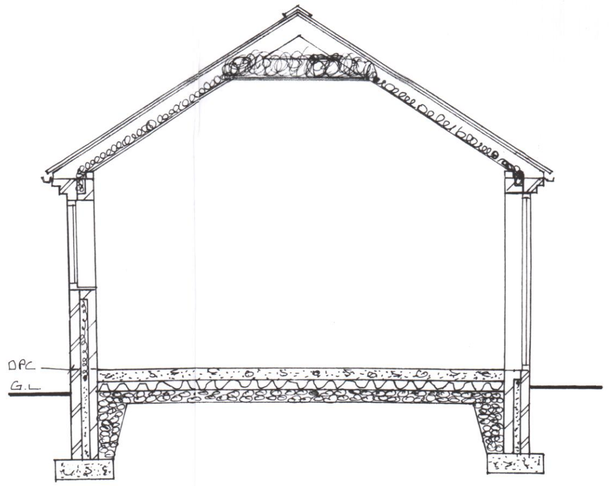
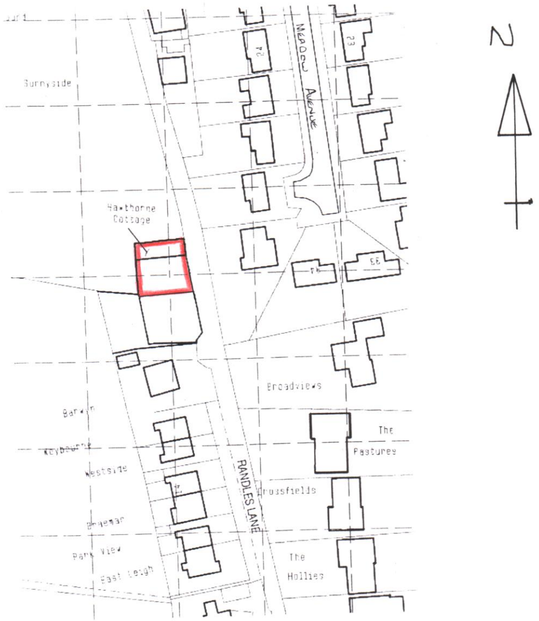


Roof Plan

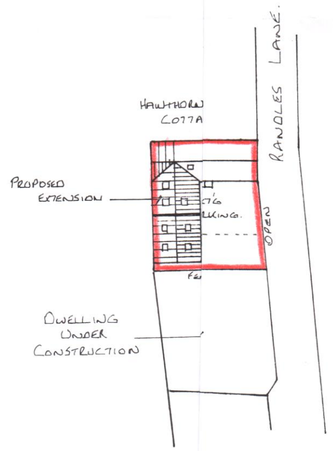


ection 'B-B'



Location Plan
1:1250

N



Se Plan
:500

North

2 Storey Construction Notes.

Staffordshire blue tiles on 38mm x 25mm thk tanalized battens on 1 layer tyvek or similar breathable membrane installed in accordance to manufacturers recommendations on 150 x 47mm C16 rafters at 32.5° pitch at 400mm centres with rafters birdsmouthed to 100 x 75mm wallplate and wallplate on steel ridge beam. Breatheable felt to have 300mm lap with joints to be taped using manufacturers propriety tape. Second layer of felt to be at half bond.
(Roof above demolished utility to be 150 x 44mm rafters at 35° pitch at 400mm centres, 170 x 38mm ceiling joists at 400mm crs with 1 layer of tyvek beathable felt all other notes as detailed)
Wallplate strapped down at 2 metre crs with 30 x 2.5mm galvanised steel straps. Each rafter strapped to brickwork using 30 x 5mm galvanised steel straps and turned over walls.
Lateral support to AD Part 1 para 1C37.
300mm thk rockwool rollbatts in 1 layer of 150mm laid between ceiling joists and 1 layer of 150mm at 90° to each other. Visqueen sheets between plasterboard and joists. 13mm thk foil backed plasterboard and skim.
Sloping ceiling to have 125mm thk celotex insulation between rafters with a further 25mm insulated plasterboard and skim below. Visqueen sheets between plasterboard and joists.
Fit 4no 980 x 780mm Velux roof windows or similar to provide natural lighting positioned between doubled up rafters. box around opening using 75 x 50 timber incorporating 75mm celotex and finished with 25mm insulated plasterboard and skim. Roof windows to be fitted with permanent trickle vent to provide 10000mm sq background ventilation. Provide vent tile to top and bottom of window.
125mm thk celotex insulation between rafters with a further 25mm insulated plasterboard and skim below. Visqueen sheets between plasterboard and joists.
"U" value of roof =0.16w/m²k.
Brickwork:- 100mm thk Southdown brickwork, 90mm cavity totally filled with rockwool cavity batts to start 150mm below dpc and to be linked to roof insulation and to continue to full height of gable walls, 100 thk celcon solar blocks or similar with 12.5mm plasterboard dry lining and skim.
"U" value of external walls = 0. 28w/m²k.
Corbled brickwork at eaves level with 2no sailor course on gable end.
1st floor construction :- 22mm thk weyroc sheets on 220 x 63mm floor joists at 400 crs on restraint type galvanised steel joist hangers. Joists to have 100mm mineral wool between for sound insulation. Floor joists tied to blockwork using 30 x 5mm galvanised steel straps at 2 metre centres spanning 3 joists and turned over walls.
Floor:- superior floor finish on 50mm sand/cement screed on 100thk conc with 1 layer B503 mesh, 500 gauge vapour barrier above 100mm thk kingspan floor grade insulation board with 25mm kingspan upstand at perimeters of ground floor slab on 1200gauge visqueen damp proof membrane linked to inner leaf dpc on 50mm thk sand on 150mm layer of sulphate free hardcore. Dpm to continue across wall cavity with a cavity tray over for basic radon protection.
Fine conc fill to within 150mm of dpc.
Foundation :- 600 x 230mm thk concrete strip foundation minimum 1 metre below ground level.

Single Storey Construction Notes.

Staffordshire blue tiles to match existing dwelling on 50mm x 38mm thk tanalized battens on 1 layer tyvek breathable felt installed to manufacturers instructions on prefabricated trusses to suit vaulted ceiling at 32.5° pitch to BS5268 at 600 crs on 100 x 75mm wallplate fixed to brickwork using 30mm x 5mm x 1metre long wallplate straps at 2 metre crs. Roof bracing :- 100 x 25 diagonals at 45° to roof slope & 100 x 25mm longitudinal bracing to be fixed to gable walls & each gable end. Bracings must be nailed to each truss member.
Last truss to be fixed to wall in each case. Lateral restraint ties at 2000 centres maximum at verge and ceiling level to each gable. Lateral support to AD Part 1 para 1C37.
All other notes as 2 story extension.

General Notes

1. Drains laid to falls & to the satisfaction of the building inspector. Where drains pass close to foundations the foundation should be taken down to the lowest level of the existing adjacent drains or the drains should be encased in conc. to the underside of the foundation concrete.
2. U value of extension to achieve a max of 0.28w/m²k for external walls, 0.16w/m²k for roof.
3. Cross ventilation to roof in accordance to reg F2, diagram 6.
4. Electrical work to IEE standards with the design, installation, inspection and testing of the electrical installation to be carried out in accordance with BS7671:2001 and the certification to prove this.
5. Walls & ceiling finishes to reg B2.
6. Structural timber to be of C16 grade except where stated otherwise.
7. Wall ties to be stainless steel to DD Type 4, AD Part A and to be spaced at 750mm horizontally and 450mm vertically.
8. Kitchen to have mechanical extract ventilation of at least 60 litres/sec (30 litres/sec if in cooker hood)
9. Bathroom and utility to have mechanical extract ventilation of at least 30 litres/ sec.
10. Wc to have light/fan combination of 30 litres/sec with 15 minutes over run.
11. Water supply to kitchen and bathroom to comply with regs G1 and G3.
12. First floor internal walls to be 75 x 50mm timber studding with 12.5mm plasterboard and skim both sides with 100mm mineral wool in between for sound insulation. Double floor joists below studding.
13. Habitable rooms to have background ventilation of at least 10000mm by trickle ventilators to windows or through the wall ventilation.
14. Non habitable rooms to have background ventilation of at least 5000mm.
15. External lintels to be filled with fibre glass insulation
16. Glass in critical locations to comply with BSEN12150
17. All new external frames to be pointed in mastic internally and externally.
18. All new double glazed windows to comprise 2no 4mm panes with a 20mm air space incorporating Low E glass to achieve a U value of 1.6w/m²k. windows to be "A" rated.
19. Rapid ventilation should be at least ⅛th of the floor area of all habitable rooms.
20. Closures to all windows and doors should be via propriety insulated reveals achieving a U value of 0.45w/m²k.
21. All new radiators to be fitted with thermostatic valves.
22. Provide energy efficient lighting to para 1.54 Approved Document L1
23. Provide interlinked smoke detection system to BS5839-6:2004 Grade D Category LD3 to be mains operated with a battery back up in hall and landing.
24. Escape windows to have min opening of 450 x 750mm, 1100mm max from floor level to window bottom.

Section And Roof Plan For Extension At Hawthorne Cottage, Randles Lane, Wetley Rocks, Staffs Moorlands For Mr. D. Houlton.

Drg No 125/174/2

Date :- July 15th 2016.

Scale :- Section 1:50, Roof Plan 1:100.