

SHEARER & MORRIS CHARTERED SURVEYS 13 Shortbridge St, Newtown, Powys SY16 1AA Tel: 01856 625762 Fax: 01856 624997 Also at 18 Maeswynn St, Machynlleth, Powys SY20 8DT Tel: 01554 702472 Fax: 01554 702289 Maeswynn, High St, Tŷwyn, Gwynedd, LL26 9AD Tel: 01554 710388 Fax: 01554 711822 23 Terrace Rd, Aberystwyth, SY23 1NP Tel: 01970 625020 Fax: 01970 611447	Project Conversion of chapel into dwelling Site Bwlch-y-Ffridd Chapel, Bwlch-y-Ffridd, Newtown SY16 3HX Client Mrs Jane Knill	17-06-2011 revision incorporating new owner's personal requirements and details added for Building Regulations 28-07-11 Show & Plan moved, 2 roadside velux over kitchen & velux over bed 3 omitted, sliding sash style windows retained
	Working drawing 0912-2 Working drawing Scale 1:50, 1:100 28-07-2011 Issue Drawn by Mike Woosnam	This drawing is the copyright of Shearer & Morris and no unauthorised reproduction is permitted. Figured dimensions take preference to scaled sizes and if discrepancies are found notify designer. Underground work is provisional and subject to ground conditions.

NOTES

The external appearance of the building is to remain generally as existing, apart from the addition of roof windows, solar panels, flue & drainage vent stack. Although windows are to be retained in wood with double glazing, the wall openings are as existing and tracery patterns will be retained and incorporated into new windows. The stained glass circular window in south west wall will remain intact. Other works necessary to upgrade elements to improve the thermal performance of the building will be effected from within - eg insulated wall linings.

BAT MITIGATION SPECIFICATIONS (As set out in ecologist's report page 10)
 Suitable gaps for bat access will be left under eaves & at the gable ends, with a 20mm/100mm gap behind soffits/bareboards approximately every 3m. The gaps at the apex of all gables will be made at 20mm under bargeboards etc.
 Provide 4 bat boxes suitable for crevice-dwelling bats, preferably built into walls.
 Provide 2 raised ridge tiles on the ridge giving access under ridge tiles, with cavity left under them and the attic void with holes made in felt.
 As traditional bitumastic roofing felt is presently under the roof tiles this already provides a niche for bats. Any re-roofing or repairs should use the same felt.
 External lighting will be on a relatively short timer, directed away from the bat roost access points and flight paths and motion sensitive to only large objects.

CONSTRUCTION INFORMATION

GENERAL

This information is NOT intended to be a complete specification for estimating purposes. The notes give construction specifications to show compliance with current Building Regulations. Other options may be acceptable, but any variations which are contemplated should receive approval prior to work being carried out.

GROUND FLOOR U Value 0.2

Excavate to remove existing floors and consolidate ground below. Lay min 150mm consolidated hardcore with sand blinding, 1200 gauge polythene & 100mm concrete thickened under load bearing studding to 225. Overlay with 100mm Celotex, underfloor heating pipes & 75mm screed. As polythene serves as radon barrier tape all joints, junctions with service pipe entries.

LINING TO PERIMETER WALLS

30x90s studding @ 400cs with multiple studs under beam and lintel bearings. Cut 100mm celotex to fit right between studs line inside with 50mm thermal plasterboard & skim. Over openings fit doubled 200 deep timbers

UPPER FLOORS

22mm 1/8 chipboard on Posistrut joists @ 400cs. 100mm acoustic mineral wool to voids with underlating of 12.5mm plasterboard & skim. See detail of floor behind front windows

PARTITIONS

30x90 c/s timber studding @ 400cs clad with plasterboard & voids filled with Rockwool mineral wool.

STAIRS

900 wide with 15 No risers @ approx 199, treads 225 Handrail & guarding 900 high with spindle balusters set so that gaps are less than 100mm. Underline stairs with 12.5 plasterboard & skim

ROOF

Insulate roof voids with 2No cross-layers of 150mm Fibreglass. Note there are sufficient vents/air gaps to ventilate roof

WINDOWS/VENTILATION/GLAZING

Purpose made timber with 24mm double glazing comprising 4-16-4 glazing units with warm edge spacer giving C rating with UV of 1.3

Single and opening casements as shown. Background ventilation by means of trickle head vents as follows: 8000mm² to all windows of habitable rooms. 4000mm² to all others To permit air transfer between rooms leave 20mm gap under doors.

Safety glass in window areas within 800mm of floors, in all doors & door side panels. Velux roof windows are centre pivot opening & fitted with trickle vents

MEANS OF ESCAPE FROM BEDROOMS & OTHER INNER ROOMS

Landing and Hall constructed as Protected Enclosure with half hour fire resistance
 MECHANICAL VENTILATION
 Provide mechanical vents discharging direct to external air with flow rates as follows: Kitchen-60 litres/sec; Utility 30 l/sec; Bathrooms 15 l/sec; Toilet 6 l/sec

WATER SUPPLY AND DRAINAGE

Mains water supply with direct feed to all appliances. Foul drainage to main sewer via existing connection. Sanitary and other waste fittings to discharge either through integral traps or 75mm deep anti-siphon traps into soil & vent pipe, waste stack or inspection chamber as shown. Wastes 32mm, 30mm & 10mm appropriate to appliance outlet. 110mm s/wp taken up to open air minimum 900 above any openable window head and fitted with wire balloon. Underground drains in 110mm plastic pipes laid to line and level shown and bedded to top of pipe in pea gravel. Pipelines under building & drive encased in 150 concrete. New inspection chamber 500W polypropylene with ductile iron cover. Stormwater as existing

HOT WATER SUPPLY & HEATING

Oil fired balanced flue class A condensing external boiler sited as shown. Domestic hot water supplemented by solar panels. Megaflo vented factory insulated cylinder. Fully automatic control system with 7 day programmer which will control each heating zone & domestic hot water separately. Temperature control effected by room stat, thermostatic radiator valves & water vessel thermostats. Insulate all pipes in unheated areas. Hot water service to bath to have device to limit temperature to 48°
 3900 litre bunded oil tank sited minimum 750 from boundary.
 Secondary heating by log burner stove to Lounge connected prefabricated double walled insulated chimney. Stove set on non-combustible raised hearth of size as specified by stove maker. Provide 100mm under floor air duct terminating near stove

FIRE ALARMS

Smoke/heat detector alarms positioned as shown with units interconnected and operated off separately fused mains circuit with battery backup.

ELECTRICAL INSTALLATION

All electrical work required to meet the requirements of Part P (Electrical Safety) designed, installed, inspected & tested in accordance with BS 7671 by a person competent to do so. Notify Building Control prior to covering any electrical cables or fittings so that an inspection may be made while they are still visible. In addition inform BC or give the opportunity to witness BS7671 inspection and testing of the fixed electrical installation work. Prior to completion of building, provide BC with Electrical Installation Certificate (complete with a schedule of inspections & a schedule of test results as required by Part 7 BS7671) signed by competent qualified electrician. Provide sufficient information to building owner on completion so that persons wishing to operate, maintain or alter the installation in the future can do so reasonably safely. Failure to comply with any of the above will result in the BC completion certificate being withheld and/or enforcement action requiring all the above to be implemented retrospectively.

ADDITIONAL INFORMATION

- Prior to construction or as otherwise requested by Building Control Officer the following are to be provided.
- 1 Design Energy ratings/SAP calculations and upon completion of construction As built ratings.
 - 2 Commissioning certificate for central heating boiler
 - 3 Commissioning certificate for electrical installation
 - 4 Schedule of potential wholesome water consumption

NOTE: CALCULATIONS FOR FLOOR BEAMS CURRENTLY BEING PREPARED

