

# **Indicative Specifications for works at Cefn Celfi**

**This provided for the planning and listed Building consent application. It is not detailed for use for tendering purposes.**

## **Generally:**

All work to comply fully with accepted best quality, traditional craft practices, British Standards and building regulations where these are applicable and appropriate for a listed building. The heritage impact/statement of significance is to be utilised with appropriate justification and reference to BS 7631. Any matters that cannot be resolved at this stage to be subject to conditions that can be suitably discharged later.

## **Demolition:**

It will be necessary to demolish a small 1950's built flat roof structure that accommodates building services. This is of no historical or architectural significance whatsoever. The services will then be accommodated within the existing brick and concrete block built lean to which is currently attached to the existing farmhouse. Other than for re-rendering with a wet dash roughcast this will remain exactly as existing following replacement of doors and windows.

## **Roof coverings:**

Ridge tiles: clay, roll-type Staffordshire Blue ridge tiles, bedded in black-coloured cement/lime mortar 1:1: 6 or NHL mortar.

Slates roof coverings and weathering's: Either: second-hand Welsh slates colour matched, including salvaging many of the existing slates and re-fixing or alternatively, Glendene Canadian natural slates 20-inch X 10 inch, in order to closely emulate natural Welsh slates.

## **Roof structure:**

Traditional, cut timber trusses with raised ties that are bolted and half dovetailed. Through purlin mortise and tenoned, common rafters etc., all in accordance with building regulation requirements. Trusses to be formed in seasoned oak where timbers are exposed to view or SC4 or equivalent treated softwood timber where concealed behind ceiling finishes. The trusses are to be designed by Mr Gareth George a respected and experienced locally based chartered engineer of ATEB Consulting. Bolted timber connectors and gusset plates to be utilised as necessary.

## **Thermal insulation within the roof space:**

To be of a warm roof form utilising polyisocyanurate batts above and between rafters as agreed with local authority building control. A vapour barrier is to be fitted beneath the rafters and a breathable roof underlay/Sarking is to be fitted above. Roof and counter battens are all to be preservative treated and meet building standards, recommendations for venting of batten layers, etc.

**Exterior Walls:**

Existing property. These to be grouted as necessary with St Astier grout and repointed using NHL 2 mortar or a an appropriate hot-lime mixed of similar initial strength. This to be as advised by the Ty Mawr lime company of Brecon. Any new sections of walling are to be bedded and pointed and then either lime plastered or limewashed where Rubblestone exists and lime plastered where subsequent brick and concrete block have been inserted to date, internally. Where necessary to consolidate the loose rubble, a weak lime-based Grout is to be gravity-inserted.

The original farmhouse has been limewashed for many years and this is to continue in order to attempt to create a vapour open (breathable) solution.

**Interior partition walls**

Within the original farmhouse, these to be as currently existing. Where partitions need reinstating these to be of lightweight timber stud partitioning and acoustic lined with mineral wool to Building Regulatory Standards.

Partition walls within the proposed modern extension to be either of rendered concrete block or timber stud applications with soundproofing, to suit specific applications.

**Tanking and underpinning:**

In order to accommodate any step down between the proposed new extension and that of the main dwelling, essential to ensure that adequate headroom exists, it will be necessary to tank the interface between the new extension and that of the original farmhouse. The wall interface to be tanked on both faces provide additional measures. A drained and vented system to be utilised but it may be necessary to also had a cementitious coating to the belowground sections. This will not be visible externally. Localised underpinning will be undertaken using traditional sectional methods.

**Stone spiral staircase opening:**

Reinstate missing four-centred arch to the Hall as per the RCAHM(W) Glamorgan Inventory, published drawing details.

**New extension:**

The walls are typically to be of lime mortar pointed rubble Pennant sandstone to the exterior faces of the proposed two-storey extension. A 50 mm clear cavity is to be retained for an appropriate vertical damp-proof membrane. Cavity trays are to be fitted where appropriate. There is to be at least 100 mm of insulation and 100 mm concrete blockwork. This subsequently either plasterboard Drylined or lime plastered within the new entrance hallway section, where close to the original farmhouse.

**Ground floors:**

These to be of in situ concrete with underfloor heating provided to the original sections and the historic hall.

**Energy and heating provision:**

The primary heat source for the refurbished and extended farmhouse is to be via a ground-sourced heat pump with supplementary top-up/emergency provision from a small energy efficient gas condensing LPG boiler where conditions render this necessary. The solid fuel wood-burning stove is to be refitted within with the newly rebuilt rubble stone chimney where this is rising above the roof line and lead flashings, soakers and horizontal lead trays to be installed all in accordance with LSA (Lead Sheet Association) guidance. Two coats of lead patination oil are to be provided to all surfaces. The lead work should be dressed and detailed by competent lead worker's (appropriately time served or trained in traditional lead roofing details).

**Ventilation:**

Heat recovery extract fans or ideally, MHVR systems to be used within the new extension and where these can be routed unseen between the small apex of the trusses within the original dwelling, fitted.

**Rainwater gutters and downpipes:**

The existing white PVC sections to be removed and traditional cast-iron sections (black enamel or paint coat finished). Rainwater services to be sized to suit the roof pitch pictures and roof area. Any hopper heads are to be of Cast-iron and of a type manufactured by J. W. Longbottom, within their traditional foundry in the North-East.

**Drains:**

Foul, soil and waste drainage to be provided via new PVC, above ground and below ground drainage pipework generally discharging onto the existing registered septic tank installation as per the original dwelling. Modifications only if required by building regulation officers/NRW. This would be separately agreed on site and with Cadw/local authority advisers, were it to become a requirement.

All surface and rainwater run-off to be retained within the grounds of the premises. Currently, there is a Goose Pond close to the farmhouse and this will be repositioned slightly, away from the new extension.

Aboveground drainage: PVC waste pipes and fittings in accordance with building regulation requirements. So the vent pipes where concealed in the fabric or ducts internally to be of 110 mm diameter or similar PVC sections. If any soil and vent work is to be exposed externally then cast-iron sections are to be utilised.

**Mains electricity:**

The original farmhouse and the extension are to be wired in accordance with I.E.T./British Standard 18<sup>th</sup> Edition Amendment 3 requirements by an NICEIC Part P approved electrical contractor.

**Internal Joinery:**

Interior doors ledged and boarded Oak interior doors and linings with Suffolk latch cast ironmongery. Oak architraves and skirting boards. The latter only fitted where necessary and to be screwed and pelleted or fixed with secret nails or flooring grads.

New timber staircase: cut string traditionally detailed timber stairs with stop chamfer moulded newel posts, balustrades, etc. All to comply with approved document K of the building regulations.

The existing stone spiral staircase is to be pointed locally and repaired using rubble stone and lime-based mortars where required. Please see earlier comments with regards to reinstating the four-centred Tudor arch at the base of the staircase. This to be undertaken by specialist banker stonemason such as Abbey Masonry of Crosshands, Carmarthenshire.

**Boundary walls around the farmhouse:**

The new dry-stone walls are to be retained and pennant sandstone flags laid on an appropriate hardcourt landing with steps and falls as necessary. These to be lime mortar pointed using a NHL 5 mortar mix with graded aggregate.

**Windows and external doors:**

Bespoke purpose made stained or traditionally coloured, paint coated hardwood doors and windows. These typically as per the associated drawing details sheets that form part of this submission. Dark oak stained finishes to be provided to the exterior doors to the front of the premises. Timber shutters to be stained timber and fitted with stoppages and fixings.

**Fascia / barge boards and soffit boards:**

The modern, existing PVC details are to be removed. New preservative-treated softwood timber sections or hardwood sections are to be utilised, preferably in oak.

**First floor levels:**

The original farmhouse: 20 mm minimum thickness Oak or Elm whiteboards laid on new oak filler joists with moulded details that will be replicated to match the existing decayed filler joists. The oak to be finished with figures water based stain and coated with Nulifire clear Matt finish to satisfy Building control requirements. The existing principal beams are to be sensitively repaired and steel sections are incorporated to provide adequate strength to same and stabilise the walling generally. Upon completion, the primary beam and filler joist floor is to be sensitively repaired and refinished.

Proposed extension: Redwood (minimum, hundred millimetres width) tongue and grooved boards secured with traditional cut-wire floorbrads. These on Posi-joists laid to span between the exterior walls, or concealed structural steel sections with softwood joists running perpendicular.

Floor finishes such as rugs, fitted carpets, vinyl and ceramic finishes to be utilised within the modern extension. These to be as per the applicant/Client requirements.

**Exterior lighting:**

These fed by steel wire armoured cable (SWA). Up-lighters set within the paving or small stub columns not exceeding 1 m in height to be fitted to perimeter paths around the farmhouse. Any existing yard lighting to be retained. All as agreed with planning and conservation officers.

**Bird and bat boxes:**

To be provided in positions agreed with the local authority ecology officer. Please refer to the environmental statement.

**Chimney stack and flues:** rebuilding rubble Pennant sandstone work with roughly square edged coins. Flues to incorporate heavy-duty stainless steel liners appropriate for both wood-burning and coal systems. Fit pennant sandstone flaunchings, traditional clay pots, lead trays, etc. all bedded using NHL grade 5 mortar.

**Sanitary ware:**

These to be as agreed with the client/applicant.

**Kitchen fitments:**

Ditto.