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# TIR GOFAL MANAGEMENT PLAN: HERITAGE MANAGEMENT INFORMATION (Call Out)

Prepared for: Crug y Deri

Tir Gofal Reference No: W/13/4830

**Holding No: 4830** 

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### INTRODUCTION AND OBJECTIVES

#### Call Out Visit

A farm visit was undertaken at the request of the Countryside Council for Wales to address specific management issues on this farm. The aim of this report is to make an assessment of these issues in order to provide management recommendations to be incorporated into the Tir Gofal Management Plan. This report is not intended to assess the structural condition or stability of any given site.

The Call Out Report responds to management concerns regarding specific sites, it does not provide management advice for all known sites on the farm. For these recommendations please refer to the Historic Environment Report 1 (HE1).

## Aims and Objectives

The owners are keen to restore a derelict barn, which occupies a prominent position within the farmstead at Crug Y Deri. The building occupies space that the owners need to use, and so if restoration proves economically un-viable, they wish to replace the building with a new one. This would entail demolishing the remains of the traditional barn, and should be a last resort.

The owners want to know whether it would be possible to rebuild the barn, and roughly what the cost would be. They also want to know whether there are any sources of funding for this sort of work (they have used their capital works budget within Tir Gofal).

### Introduction

The outbuilding that the owners wish to restore lies at the southern end of Crug Y Deri farmstead. Crug Y Deri is marked and named on the Old Series Ordnance Survey of 1819, and the owners are aware of records dating back to the early 17<sup>th</sup> century (1604). The house itself has some very interesting architectural features both externally and internally, including a small room off the kitchen, which the owners understand to have been a malting room.

The first and second edition Ordnance Survey maps provide detail of the layout of the farmstead. Both these maps show a building, marked in the same position as, and of a similar size to the now derelict barn. This shows that the barn was extant by the late 19<sup>th</sup> century, and suggests that it was still in use during the early 20<sup>th</sup> century.

The physical remains of the barn show that it was constructed from a combination of stone and 'clom' (the term used in Wales for earth walling). 'Clom' was a cheap and versatile building material, and can be very durable when maintained under the right conditions. Clom was often used where stone was in short supply, but the construction process is labour intensive. The clay had to be mixed with straw and small stones (frequently done by cattle trampling the earth and straw together in a pen). The mixture was then built up in layers on top of a stone plinth, and each layer had to be allowed to dry before adding the next. This meant that even small buildings could take months to construct. After construction the earth walls were usually protected with a coat of limewash or plaster, and sheltered by broad eaves of a thatch or slate roof.

Maintenance of this coating, and also a sound roof is crucial in protecting earth buildings such as these. Deterioration can be swift when water begins to penetrate the protective render, and more serious erosion of the remaining earth sub-structure follows.

#### Description

The barn is c. 14m long by 5.5m wide, and is orientated east – west. The clom used is light orangey brown friable clay, with inclusions of c. 15% small angular stones, and is likely to have been sourced locally. Any protective coating on the clom walls has disappeared, leaving bare earth walls in an advanced state of deterioration.



View of the barn, looking south-east, showing north elevation and east gable-end.

The walls, both stone and clom, are very overgrown with ivy, and have quite mature saplings growing out of them in various places.

The roof of the barn has collapsed and there was no sign of any roofing material, such as fallen slates, although there may be slate buried in the low berm, which runs up to the base of the walls. What remains of the barn is currently being used to store palettes and other timber. Although no roof timbers survive in-situ, material piled inside the walls may include former structural timbers. At the time of the callout visit this material made it impossible to establish the internal arrangement of the barn, apart from one internal dividing wall made of clom, which was just visible. Neither was it possible to establish the type and condition of flooring.

The walls on the north and south sides do not stand to their original height. Structural evidence suggests however, that both eastern and western gable ends are close to their original height. The western gable end is built of dressed, slightly squared stone. It is un-rendered, and pointed with lime mortar. The pointing to the upper courses has been washed out, (the location of this deterioration suggests that it has occurred since the collapse of the roof). A doorway in the southern side of this elevation (c. 80cm wide) has been blocked off with stone infill.



Western stone-built gable end

The eastern gable end is constructed entirely of clom. Both the external and internal faces of this wall have suffered heavy erosion, but despite this the gable end has survived to a considerable height. This is due in part to its having been supported by a dense and mature growth of ivy, which has served to bind the earth and therefore delay collapse. However, this gable end has become very fragile and will collapse soon.



Eastern clom-built gable end

A pigsty with adjoining pen is built up against the external face of the east gable end. It appears originally to have been entirely constructed of stone, but is now roofed with corrugated tin, and the southern part is also protected with corrugated tin. The structure is currently being used to house chickens. The southern stone wall of the pen has collapsed, but the northern wall survives. The northern elevation of the pen has a low former entranceway, with wooden supporting lintel. This entrance has been blocked with stone infill.



Two views of the pigsty on the eastern gable end, looking south-west (above) and looking north-west (right).



The remains of the northern elevation are constructed of rubble-stone, to a height of c. 1.2m, and above this is evidence of earth construction of which little survives. At the base of the wall is a grassed over berm, which is likely to represent material from the wall itself. The stonework on this elevation is rougher than the stonework on the western gable end, and would probably have been coated with clom. The remainder of one stone-built door pillar survives at the eastern end of this northern elevation. This pillar may have supported one door of the two pairs of wooden doors that are currently leaning against the internal face of the eastern gable end. The four doors form the elements of two pointed arches.

### Interpretation

It was difficult to ascertain the original appearance of the barn. The angle and height of the gable ends suggest that the barn was single storey. It seems likely that the pointed wooden doors leaning against the internal face of the eastern gable end belong to this building. If they do, their height, and the size of opening they represent strongly suggest that this was a threshing barn. The four doors suggest there were two, probably opposing openings, whose locations appear to have been on the northern and southern elevations at the eastern end of the barn. However, only a small proportion of these elevations survive. Both were largely built of clom, which would have deteriorated rapidly after the roof collapsed.

The clay for the walls would probably have been dug locally. This would have been mixed with straw to help with binding, and other aggregate material such as small stones and stone dust. This mixture was then built up in layers, which had to be allowed to dry for several days before the next one could be added.

It is not known what roofing material was used, as no fallen slates or roof timbers were noted in the vicinity of the building. It is possible that the roofing material for the barn was originally thatch. Both thatch and clom were materials that would have

been easy to obtain locally, making construction cheaper, and consequently very reflective of the regional style.

### Management Recommendations

Earth walled buildings are very susceptible to damage from water penetration. The elements of the barn at Crug Y Deri that are made of clom have deteriorated more rapidly than the parts built of stone, and are beyond repair. If restoration were undertaken, the clom elements would need to be taken down and completely re-built.

Rebuilding to the original design will be problematic, because of a lack of evidence for structural elements associated with the roof, and the small proportion of the northern and southern elevations that survive. However, evidence from other similar traditional buildings would allow an approximation of what the barn would have originally looked like.

One course of action would be to re-build using the original footprint of the barn, retaining as much of the original fabric as possible, and attempting to replicate as far as is possible from the available evidence, the original appearance of the building. The overall cost would be dependent on how much work the owners were prepared to undertake themselves.

Cambria Archaeology is unable to undertake costing for rebuilding the barn. Reconstruction of buildings such as this has been undertaken by the Museum of Welsh Life, St. Fagans (Cardiff CF5 6XB, tel. 029 2057 3500). They may be able to advise on the practicalities of rebuilding, and the likely cost.

There are very few sources of funding for building restoration by private individuals. The only possible sources known for this type of project are Farming Connect, who offer a farm improvement grant (Farming Connect, National Assembly for Wales, Cardiff Bay, CF99 1NA, tel. 029 20 825111), and the Wales Tourist Board – Investment Support Scheme (the Board is willing to be a funder of last resort for projects that help develop tourism in Wales, which can under appropriate circumstances include enhancing the appreciation of the country's built heritage).

If after consideration there are no alternatives but to remove the existing building and re-build from new, the presence of an archaeologist is recommended on site during the process of clearance, in order that any further structural remains such as flooring and timbers can be recorded.

#### References

Maps

Ordnance Survey (6" to 1 mile) Sheet SN12SW, 1965 Ordnance Survey 1st. Ed. Pembrokeshire (25" to 1 mile) Sheet XXIV.10; 1890. Ordnance Survey 2nd. Ed. Pembrokeshire (25" to 1 mile) Sheet XXIV.10; 1907. Tithe Map Llandissilio West Parish, Pembrokeshire; 1840(?).