

ART. IX. – *A Survey of Walls Castle, Ravenglass, Cumbria.*

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IN May 1983 a detailed survey was undertaken of the Roman bath-house known as Walls Castle at Ravenglass, Cumbria. The work was carried out by the Cumbria and Lancashire Archaeological Unit of the University of Lancaster, on behalf of the Department of the Environment, in advance of the consolidation of the monument, which is now in guardianship. The author is most grateful to Dr R. H. Leech and to Dr S. Johnson for their assistance in organising the project and for subsequent advice. No attempt has been made here to reinterpret the monument in its wider context and the purpose of this note is to provide a summary record of the detailed survey undertaken. The project records remain with the Unit at the University. A complete copy will be deposited in the National Monuments Record.

Previous work

A survey of the bath-house was first published by Knowles and Jackson in 1878.¹ Comparison of the plan then made with the survey carried out in 1983 shows that there has been little subsequent erosion. In 1882 Jackson provided a second report on the results of excavations carried out in 1881.² This report on the 1983 survey is intended to supplement these earlier publications. Any full reassessment of the structure and plan of the bath-house is perhaps best deferred, as further excavations will probably be carried out as part of the scheme for the enhancement of the monument.

The Survey

The initial part of the survey was drawing a ground plan of the bath-house. A survey grid was set out around the structure with the use of a theodolite and the ground plan drawn by triangulation from grid pegs. The bulk of the survey was the drawing of elevations of all the surviving wall faces – this was done with the aid of a gridded drawing frame positioned in front of the wall being drawn, each position of the frame related to temporary horizontal datum lines marked on the wall faces with the aid of a theodolite. All the field drawings were done at 1:20 scale. The final part of the survey was the recording of all dimensions, colour coding of masonry and mortars and description of the various features of the surviving structure.

Constructional details

1. *Method of construction* – the fabric of the Roman bath-house at Ravenglass is of red sandstone bonded together with a lime mortar. The facing masonry of the walls consists of roughly rectangular blocks crudely faced off, the tallest surviving walls having facing masonry up to 3.5 m high. The core of the walls is made up of irregular pieces of red sandstone laid with mortar in courses approximately 0.1 m–0.2 m thick, visible in places

due to variations in the mix of the mortar (i.e. the amount of stones and/or slight colour difference) between courses. The masonry of the walls is still rendered over in places, on both internal and external wall faces, with mortar rendering. This seems to be original Roman rendering and may originally have covered all the red sandstone masonry, both inside and out.

2. *Mortars* – as mentioned above, the masonry is bonded together with a very strong and obviously durable lime mortar, rather coarse with a high percentage of small pebbles, gravel and occasional sea-shells (perhaps taken from Ravenglass beach). The mortar rendering on the walls is of two colours – white and pink. The white mortar is of much finer texture than that bonding the masonry and in places is ‘pebble-dashed’ with gravel set into its surface. The pink mortar, mostly found on the lower part of some of the wall faces derives its pink colouration from the addition of fragments of red tile with extra red tile fragments pressed into the surface in places (the best example of the rendering remains on wall face 5 – see Fig. 1).

3. *Varying wall thicknesses* – the ground plan shows that there are three grades of wall thickness in the remains of the structure. The thickest are walls 1.0 m-1.1 m in width,

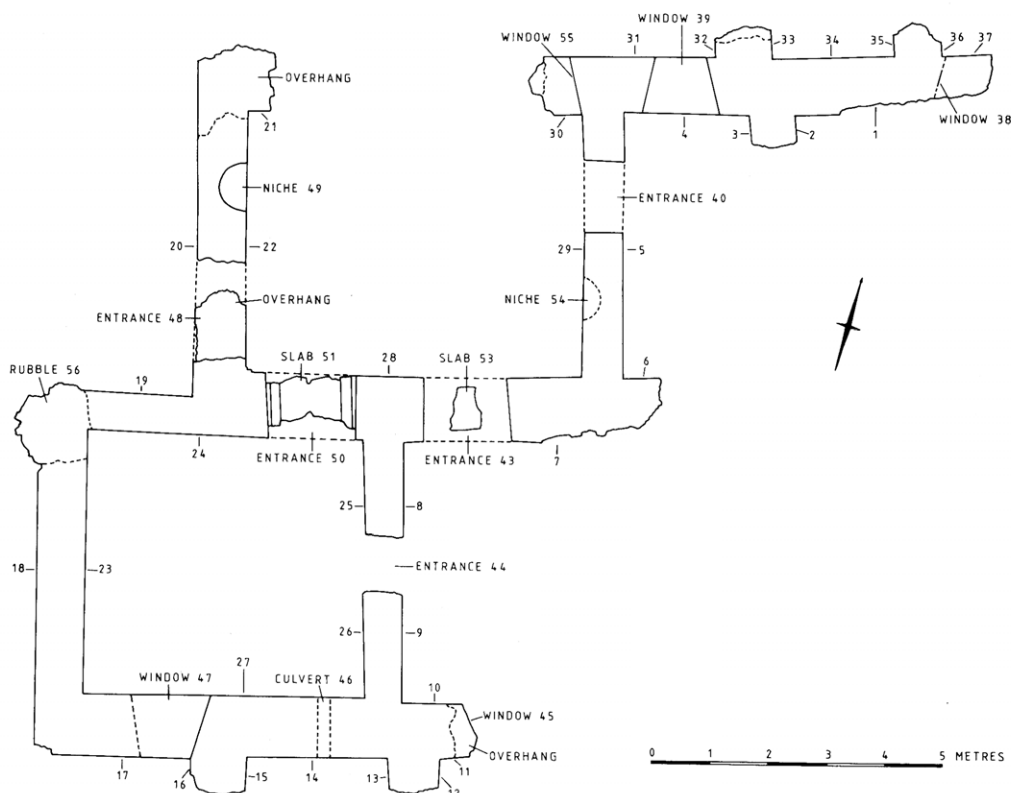


FIG. 1. – Ground Plan (Wall Faces, Entrances, Windows, etc. labelled with survey context numbers).

probably the main load bearing walls of the structure bearing the weight of the roof. Next are walls 0.85 m-0.95 m thick forming additional external facing walls and buttresses; and then there are the thin internal partition walls 0.65 m-0.70 m in width (see ground plan, Fig. 1).

4. *Evidence for possible wall plate* – at the south-eastern corner of the room into which the two niches face (corner of wall faces 28 and 29), the facing masonry stands approximately 3.5 m above present ground level, perhaps the full original height. At this height there is a roughly even ledge approximately 0.2 m deep set into the wall which may possibly be a wall plate to take roof/ceiling timbers.

5. *Evidence for scaffolding* – there are putlog holes remaining in most of the sizeable wall faces of the structure. These holes, left as a result of scaffolding timbers being built around during the construction of the walls, run right through the walls. From the impression left in the mortar around the inside of some of the putlog holes, the scaffolding timbers used seem to have been roughly rectangular (approx. 0.1 m-0.15 m) in section. Some walls (especially wall face 34) clearly show the regular spacing of these scaffolding timbers – approximately 1.3 m apart – both vertically and horizontally. The putlog holes were blocked off after the scaffolding was removed, the ends being plugged with small pieces of red sandstone and then covered over with the mortar wall rendering (examples of this seen on wall face 22).

6. *Entrances* – five entrances are still remaining in the bath-house. Four seem to be of the same rectangular type and the other is the remains of a smaller archway. Entrance 50 (see Fig. 2) is the best surviving of the rectangular type entrances – 1.44 m wide and 2.05 m high. Above the entrance is a relieving arch and the remnant of a red sandstone lintel (the only one left in the structure). There also survives an eroded threshold slab. A tooled step in the lintel and two channels, approximately 0.05 m deep, cut into the threshold slab at the sides of the entrance suggests that these entrances may originally have taken a timber doorframe. The smaller entrance is altogether different (entrance 44, Fig. 2). It is only 0.96 m wide and the remaining sides curve inwards slightly towards the top, suggesting that they originally met to form an archway. Remnants of pink mortar rendering on both sides of the entrance indicate that this entrance did not originally have a doorframe, unlike the others in the structure.

7. *Windows* – there are the remains of five window openings in the surviving structure. Only one of these has both sides left (window 39, Fig. 2) but from what is left of the others they all seem to have been of the same type. The best surviving one (window 39) shows them to be inward splaying windows with the light or exterior opening 0.95 m wide, relatively high off the ground (1.7 m) thus affording a great degree of privacy to those inside. The opening splays wider and deeper towards the inside, the interior width being c. 1.4 m and the base c. 1.4 m off the ground. The sides of some of the window splays are still faced in places with white mortar rendering and the central downward splay of window 39 still has a small patch of pink rendering remaining.

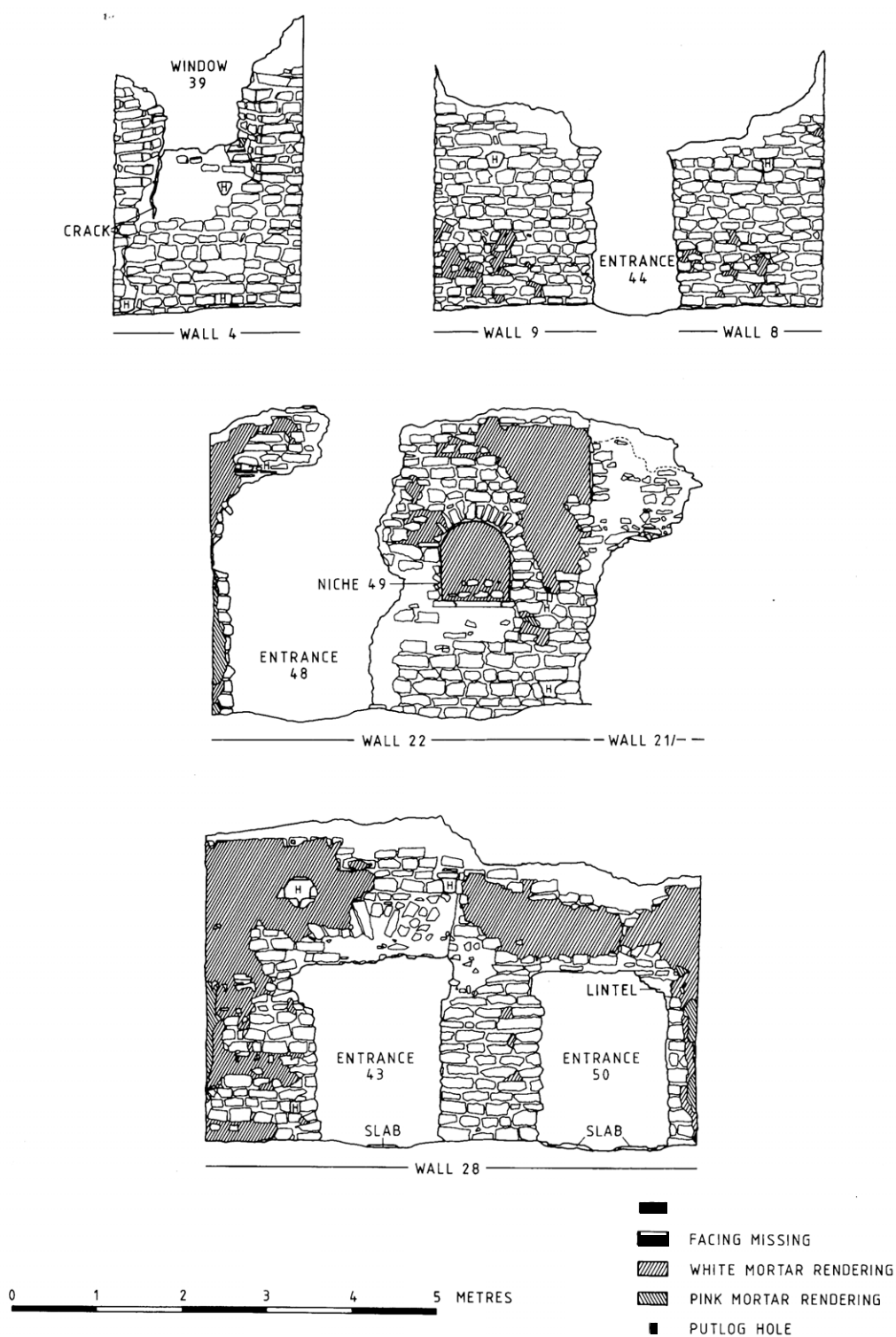


FIG. 2. - Window openings and entrances.

8. *Niches* – there are the remains of two semi-circular backed niches facing into one room of the bath-house. The west facing one is only evident due to a small curved patch of pink facing mortar set approximately 0.4 m into the wall (wall face 29). The eastern facing niche, however, survives in much better condition. It is 0.81 m wide, 0.93 m high and 0.48 m deep at its maximum. The inside of the niche is rendered in white facing mortar with the edge delimited by an arch of red sandstone masonry. The base was formed by a red sandstone slab, but this has now been broken/eroded so that it roughly follows the contour of the back of the niche into the wall (see wall face 22, Fig. 2). One possibility is that these niches may originally have contained icons and that they faced into the entrance hall of the bath-house.

9. *Culvert* – at the base of one wall (27/14) there is a culvert constructed of red tile mortared together and forming an arch. It is now much damaged and half buried, but seems to have had an original diameter of approximately 0.15 m-0.2 m. Its use may have been the ducting of hot air under a hypocaust or possibly for water or drainage.

References

- ¹ Rev. Canon Knowles and W. Jackson, 'Walls Castle, Ravenglass', CW1, iii, 23-6.
- ² W. Jackson, 'An Account of some Excavations made at Walls Castle in 1881', CW1, vi, 216-24.

