

Structures and Stratigraphy

Introduction

This chapter details the types of structures present at the site and explores their development in antiquity, supplemented with the findings of a standing building survey conducted in Spring 2004. The information here is primarily concerned with the fabric of the buildings, particularly the main wheelhouse, using the remains as they stand to define the structural developments which are discussed further in the following chapter on site phasing.

A visitor to Bagh nam Feadag today would instantly realise that there is far more to the site than a solitary wheelhouse built in the lee of a hill. The excavator in the course of his work exposed the majority of the remains, revealing at least five separate phases of construction. As commented earlier, the state of preservation is excellent, as, although stone has been reused from earlier structures within the mound in subsequent phases, very little stone, if any, has been completely removed from the area, resulting in remains to at least foundation level for all the building phases and most with standing walls.

It is true that in recent years the debates regarding wheelhouses, and to a greater extent brochs, have been focused upon tight morphological schemes, classifying these structures in minute detail (e.g. MacKie 1987; Crawford 2001). It is also too easy to be critical of such an approach when anomalies to the morphological norm are highlighted. This author would suggest that some common ground should be found whereby such minute details do not degrade a structure to a 'semi-broch' (MacKie 1987) as opposed to a 'true broch' or a 'true wheelhouse' to an 'aisled roundhouse'. The multiple and fragmented classification schemes, thrashed out for brochs and wheelhouses by Mackie (1965, 1987), Armit (1990, 1992), and Crawford (2001), can be viewed as contributing to a situation where discourse on the people who built these constructions is being hindered (e.g. Carruthers 2002, 78-79).

It is intended here to advance both approaches as it is this author's view that structural details exposed during a morphological analysis can invoke questions such as 'Why is this wheelhouse larger than many others? What is significant about the arrangement of the space within this structure and why was this location selected for construction?' In the modern world such decisions are made on a regular basis, with self-built or customised homes being created and developed to meet specific requirements or conform to a budget. Architectural

trends can not only tell us about a society as a whole but can also expose individual choices, both of which are of interest to the archaeologist. In view of the above, the structural details from Bagh nam Feadag will be presented with the usual aspects of architectural deviation highlighted. It is then desirable to discuss the implications for such deviations in the light of comparable evidence.

The Structures

Throughout this thesis the structures at Bagh Nam Feadag shall be referred to as listed overleaf, corresponding with the plan below (Figure 17).

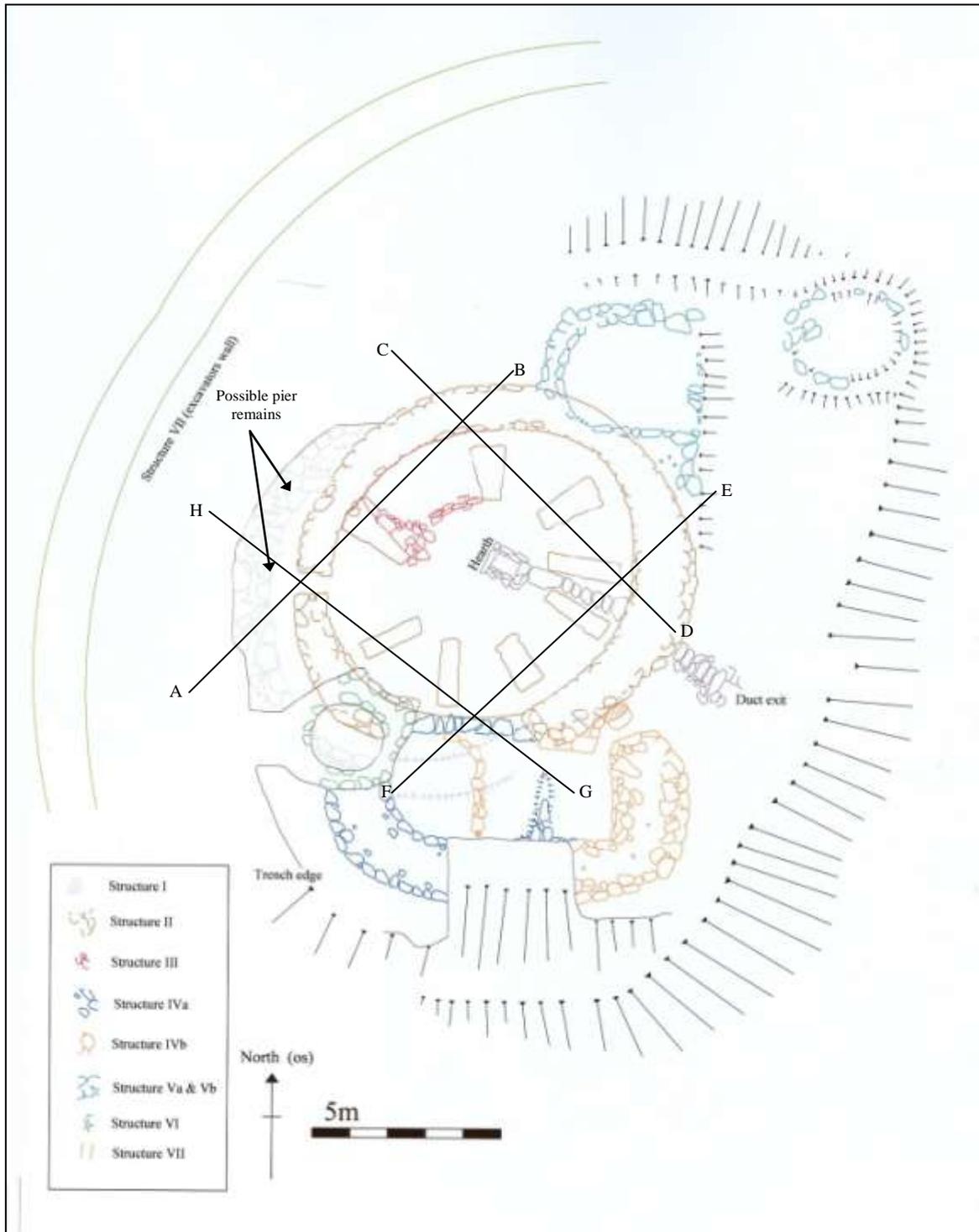


Figure 17: Plan of the structures excavated at Bagh nam Feadag (after Wood 1998, 8).

Structure I

The curving stone wall that underlies structure II.

Structure II (NF 86660 57352)

The main wheelhouse.

Structure III

The building inserted into the western portion of the main wheelhouse, modifying some internal features.

Structure IVa (NF 86659 57348)

The western half of the rectilinear structure found cutting through structure II on its southern arc.

Structure IVb (NF 86659 57348)

The eastern half of the rectilinear structure found cutting through structure II on its southern arc.

Structure V(a)

The pennanular structure revetted into the northern arc of structure II.

Structure V(b)

The circle of stones a few metres east of structure Va.

Structure VI: The Shieling (NF 86655 57350)

The circular structure overlying structures I,II and IVa.

Structure VII

The dry stone wall to the west of the wheelhouse site.

The unexcavated structures to the north and south of the wheelhouse are referred to as NS1 and NS2.

Structure I



Plate 16: The line of structure I walling underlying the wheelhouse (©Hothersall).

Structure I (Plate 16) has only been revealed along its western portion where it appears from under the wheelhouse which had been constructed above it (Structure II). The excavator has exposed the inner edge of the walling until it continues under the structure II wall on the north and underneath structures IVa and VI on the south west. The survey carried out in October 1998 (Wood 1999, 13) noted that a slight mound could be seen continuing into structure IVa but is now no longer visible (Plate 17).



Plate 17: Photograph from 1998 showing a raised mound where structure I runs underneath structure IVa (©Hothersall).

The construction of structures IVa and IVb appear to have removed all traces at this level but structure I presumably continues on under the wheelhouse (II). The wheelhouse (II) appears to have superseded this earlier structure, but the possibility remains that traces of structure I could be found under the current ground level and beneath the wheelhouse.

The survey in 1999 referred to structure I as a ‘proto’ wheelhouse, a definition not supported by this author given the nature of the remains. The term proto wheelhouse in the context of wheelhouse research implies a link between traditional Atlantic roundhouses and the apparent sudden appearance of radially partitioned roundhouses (wheelhouses or aisled houses). Currently, there is no evidence that structure I is anything other than a roundhouse, although the hint of two projecting piers in the form of two clusters of stones which can be seen along the inner face of structure I would require testing by excavation before they could be interpreted as piers (Plate 16 above).

The 1999 survey also suggested that only the inner wall of structure I had been revealed, however, the two large stones directly opposite the entrance of structure II could make up an outer face making the wall similar in thickness to structure II. Again, this would require testing by excavation as the excavation that took place did not progress any further

westwards, perhaps due to the constraints of the dry stone wall that had been erected in this area (Plate 18).



Plate 18: View looking east with the excavators wall in the foreground.

What can be said with some certainty about structure I is that it would have been a similar size to structure II with an estimated diameter of 8.3m (internal). Structure I is sited approximately one metre west of the wheelhouse with no indication of an entrance on the exposed arc, the entrance would then presumably face either, north, south or east (Figure 18). This aspect alone would be an argument against structure I being a wheelhouse as those sited on moorland exclusively face westwards. It is notable also that west facing moorland wheelhouses contrast with wheelhouses located on the machair which generally, but not exclusively, face eastwards (M^cKenzie 2003, 34-35: fig3.8).

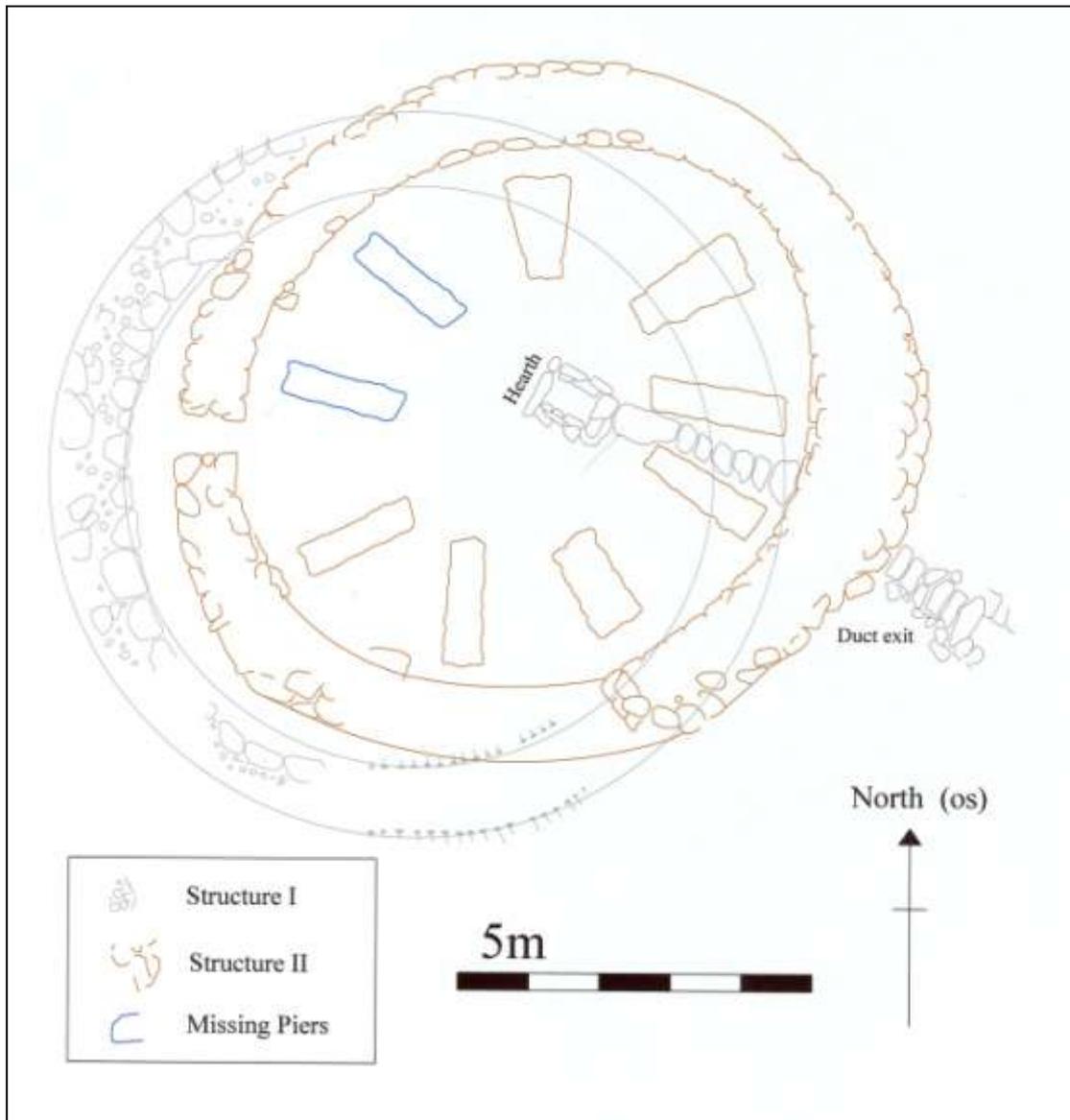


Figure 18: The relationship between structures I and II (after Wood 1998, 8).

Should this structure (I) have faced westwards, by projecting its curve into the later wheelhouse (II), it is possible that bay five containing the duct formed part of the entrance. The only other known wheelhouses that contain ducts of a similar style are at Allasdale, Cletraval and Buaille Risary, all of which passed from the central area out under the entrance. As discussed further below, the retention of this duct feature may have been part of the reason for the movement of the focus of occupation a short distance to the east, with the desire to incorporate features of the previous structure into the new. However, without testing by excavation this interpretation shall remain speculative.

Also, the occurrence of a wheelhouse directly underneath a later wheelhouse is unusual as often wheelhouses are found either side by side (e.g. Foshigarry, the Udal) or

replaced by subsequent constructions nearby (e.g. Sollas A/B, Cnip). The erection of a wheelhouse, or any habitable building on top of an existing habitation would inevitably mean that the inhabitants would have to reside elsewhere during the destruction of one and the construction of the replacement. It is for this reason that this author looks towards the unexcavated North Sites (NS1 and NS2) as possible locations for additional settlement, intensifying further the phases of occupation at Bagh nam Feadag.

Structure II

This section covering the most significant construction at the site includes descriptions of each bay and each pier as well as a general description of the phase. The wheelhouse (II) appears to have been constructed by clearing out and remodelling an already abandoned and reduced stone building (I). Alternatively, this earlier building may never have been finished, with excavation required to test such hypotheses. The remains of structure I can be found at an elevation slightly lower than the excavator penetrated within the wheelhouse, suggesting that structure I was not removed completely, leaving behind at least one course of walling.

Structure II is entered today from the west after passing through the gap left in the excavators wall (structure VII) (see Plate 20 below). No entrance passage can be seen here which, although is a common feature amongst wheelhouses, is not present in every example. The presence of an entrance passage and particularly the later addition or the extension of one, has been explained elsewhere as a desire to define a boundary more effectively by the creation of a transitional zone, whereby a visitor travels from one space to another (Armit 1996, 144). Although some wheelhouses, such as Sollas B (Campbell 1991, 134,138), Udal (Hothersall & Tye 2000, 21) and A'Chéardach Bheag (Fairhurst 1971, 77,105) exhibit multi-phase, substantial entrance systems involving 'guard cells', (small cells immediately outside the entrance), it is clear that this is not an original feature and nor was it deemed necessary at each wheelhouse site. Cletraval, in a similar manner to that of Grimsay, is simply entered through a gap in the outer wall into the first bay. It should also be noted that the location of Grimsay, in the lee of a hummock, would have hindered a long entrance structure also the enclosing nature of the hummock and the wheelhouse mound itself would have produced a natural entrance system, or small vale, giving a sense of spatial change to a visitor approaching from the south or the north.

The structure II outer walls flanking the wheelhouse entrance are conspicuous in comparison with the rest of the outer walling, giving the impression that they may have been re-built. Although the survey revealed that a varying amount of the upper courses throughout the site had been consolidated by the excavator, the entrance area looks to have had the greatest modification. Very little packing material can be seen between the stones and the general impression is that the upper stone work is not in situ (Plate 20 & Figure 19).



Plate 20: Interior of wheelhouse entrance with substantial stones at the bottom and possible re-building on upper levels.

During the recording of the internal elevations of the wheelhouse the extent to which rebuilding had taken place was examined. The upper course of stones around the interior of the wheelhouse often contain no packing material at all and is taken as evidence that these stones may not have been in situ. However, it should be noted that by the time of this elevation survey the remains had been exposed to the elements for up to ten years and the action of wind and rain may have caused removal of this packing material over that time.

The use of packing material between stone courses has also been noted at both wheelhouse 1 and 2 at Cnip, Lewis (Armit 1990, 84-5). Here Armit noted that the use of packing material was more evident at the upper courses of stonework. This feature was presumably to provide a degree of insulation and water proofing where the subterranean structure protruded above the ground surface. Although the extent to which the piers and

walls continue below the current ground level at Bagh nam Feadag is unknown, it would appear that packing material has been used at all levels. The use of midden material in this manner not only highlights the problems encountered in sealing an above ground moorland wheelhouse from the wind and rain, but also may be informative of the relationship between the construction of a new settlement and the incorporation of midden material, as packing presumably derived from an earlier settlement. The suggestion that midden material was used as opposed to natural soil because of its close proximity the settlement is valid, however, evidence from some other broadly contemporary settlements (e.g. Dun Vulcan) would suggest that this practice is common and in some cases having used midden material brought from some distance away (see Parker Pearson *et al* 2004, 108).

The extent to which packing material remains and was visible is detailed in all elevation drawings. Given the slight change in building styles above the line of packing material it is this authors view that anything above is not in situ and should be viewed as rebuild by the excavator with the presumed intention to make the site visually more impressive.

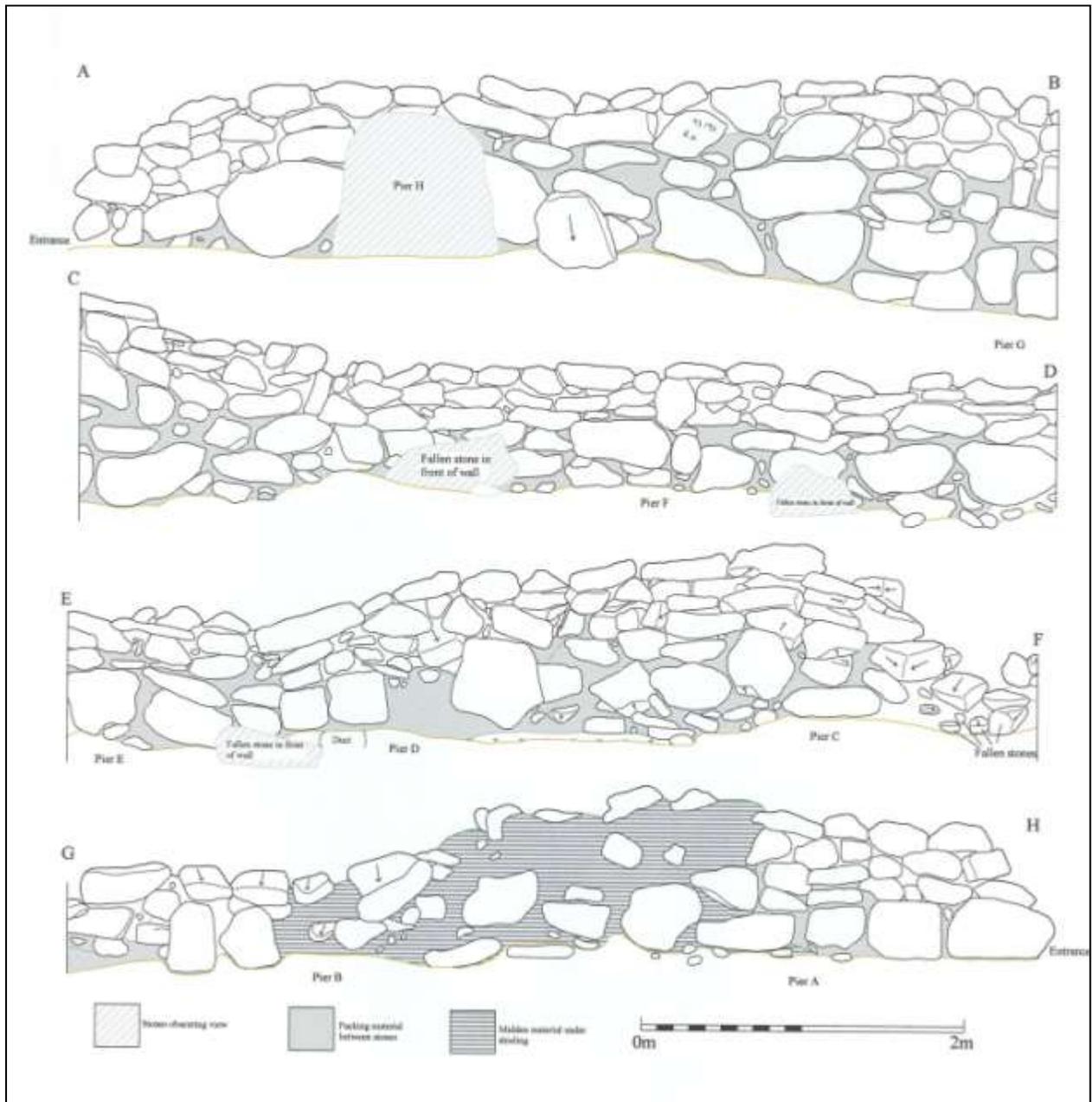


Figure 19: Elevations of wheelhouse inner wall divided into four sections (located in figure 17).

The Entrance

It is unlikely that the entrance has been created by the excavator and may be an indication of how the wheelhouse entrance was modified in later phases of occupation. Phase three at Bagh nam Feadag saw bays one and two reworked into a smaller shelter and it could be that the existing wheelhouse entrance was exploited, causing that stonework to stand out against the remainder. A similar situation occurred at Cletraval (Scott 1948, 48 - 50) where

the first bay of the wheelhouse was incorporated with the adjacent northern bay and part of the central area to create Scott's secondary structure. The entrance at Clettraval was subsequently blocked (*ibid* 48). Therefore, this author would suggest that alterations may have been made to the entrance of structure II and was likely to have been used in association with phase three.

Bay One

Bay one contains the wheelhouse entrance which faces almost due west (265°). The entrance is 0.56m wide at ground level where there is a flat stone acting as a threshold, although this is unlikely to be the original wheelhouse threshold and probably relates to an internal feature from structure I. There is no indication of door jambs, as can be seen at numerous other wheelhouse sites. The current floor level of bay one is higher than the original wheelhouse floor, indicated by the presence of small stones and rubble still covering the surface, particularly in the area below pier H on its southern side.

The 1998 survey states that there is a 0.30m gap between pier H and the outer wheelhouse wall (Wood 1998, 9). As can be seen in Plate 21 this is an error as pier H butts with the outer wall, although is not bonded into it.



Plate 21: The point where pier H abuts the outer wheelhouse wall.

Pier H is also interpreted by the ACFA survey as ‘original, with peaty soil fill between stones’ (Wood 1998, 9). It is supported here that this wall is original and in situ; however, it is also argued here that it does not relate to the wheelhouse, (structure II), but instead relates to a habitation inserted into bay two after the wheelhouse had passed out of its primary period of occupation. Pier H stands out from all the others in the wheelhouse, being in a better condition and made up of a different selection of stones. When viewed from above it is also shown that the pier changes from a two stone thickness to one as it travels inwards, creating a triangular shape (Plate 32 below).

Bay Two

As bay two and pier H possibly relate to the modification detailed above it shall be discussed below and named structure III. It is evident that there are few remains of structure III left to examine as the new construction that was built within bay two has been cleared away in pursuit of the structure II wheelhouse.

Bay Three

Bay three, flanked by pier G on the west and pier F on the east, contains a stack of substantial stones near the outer wall in its north east corner (see Wood 1998, 8). The 1998 survey pondered whether this substantial feature was another pier, commenting that in such a small space it would seem unlikely. Examination of the stones at a lower level would suggest that they were installed there deliberately and are cushioned with packing material in a similar way to most of the other stonework. It is possible that this was not a pier as such, but rather another type of support, perhaps a later addition. At Cletraval it was shown by Scott that bay VIII contained an 'intermediate orthostatic pillar' (Scott 1948, 52) which functioned in the same manner as a pier and necessary as the corbel required additional support over such a large span. It may be that the stack of stones in bay three at Bagh nam Feadag serves a similar function, perhaps supporting a weak point. However, without adequate excavation of this feature it shall always remain likely that this is in fact tumble from upper courses of the piers or corbelling which had fallen or been dislodged after the wheelhouse had passed its primary use. The collection of midden material around these stones could be attributed to phase three or later.

The question of rebuilding is a recurrent theme throughout all the structures at Bagh nam Feadag and it can be seen in the aerial photograph that stones had been removed (and are now replaced) where the excavator used the outer wall behind bay three as a route back and forth to the spoil heaps (Figure 20).

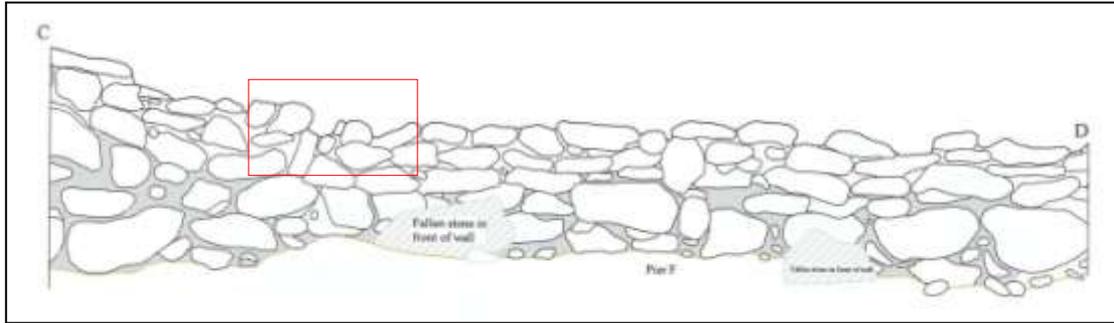


Figure 20: Elevation of walling between piers G and F with area of modification indicated in red.

The piers flanking this bay both have aisles between them and the outer wall, with G having 0.4m and F, a 0.45m gap. There is a collection of loose stones at the entrance to the bay which may form part of a kerb. The wheelhouse wall behind this bay has been altered by the revetment of the pennanular structure (Va). The walling of structure Va cuts 0.3m into the wheelhouse wall core.

Pier G is well preserved and appears to be original, standing to a height of 1.2m. This pier does however appear more triangular when compared to piers A, B, D and E which tend to be more rectangular. Piers F and C share the characteristic of pier G being slightly wider than the others.

Bay Four

This bay, flanked by piers F and E also contains large stones on the ground. The outer wall in this area consists of substantial base stones with smaller stones above, but there is an indication of rebuild by the excavator at the uppermost course. Pier F stands to 0.9m and is made up of fairly large angular blocks.

Bay Five

The fifth bay of the wheelhouse is situated roughly opposite the wheelhouse entrance. As can be seen from the plan view, the piers flanking this bay have been placed to accommodate the lintel covered duct. This is the smallest bay in the wheelhouse, comprising no more than half the area of the adjacent bays four and six. No kerbing is found at the entrance of this bay as a large stone covering the duct protrudes, preventing the setting of

smaller stones into the floor. The outer wall behind this bay stands to a height of 1m with evidence of re-building of the upper courses. There is also evidence that this section of walling has partially collapsed, bulging both inwards and outwards. Pier E stands to 1.1m at the outer edge, the upper course blocks from the inner end are not in position and so is lower. Pier D is made up of large, fairly flat blocks, graded on the inner face to increase in width, little packing material can be seen between the courses, although some thin stones have been lodged to assist its stability.

The inner face of this wall contains some substantial stones, one of which has fallen into the bay and is resting on top of the lintel covered duct (Plate 22).



Plate 22: View into bay five which contains the stone lined and covered duct leading from the hearth.

Access into this bay via the aisle is restricted, with evidence of the piers being partly bonded into the outer wall. Also, behind pier D, a large stone forming part of the outer wall protrudes 0.4m (Plate 23 & Figure 16). When the line of structure I is projected it is possible that features in this area have been modified and incorporated into the wheelhouse II build, however, there is no clear evidence of a blocked entrance. The possibility that the presence of the duct and arrangement of piers in this area were part of an earlier structure would be significant if further examination were to prove that structure I contained piers flanking its entrance.



Plate 23: View from bay six of the aisle behind pier D with bonded and protruding stonework.

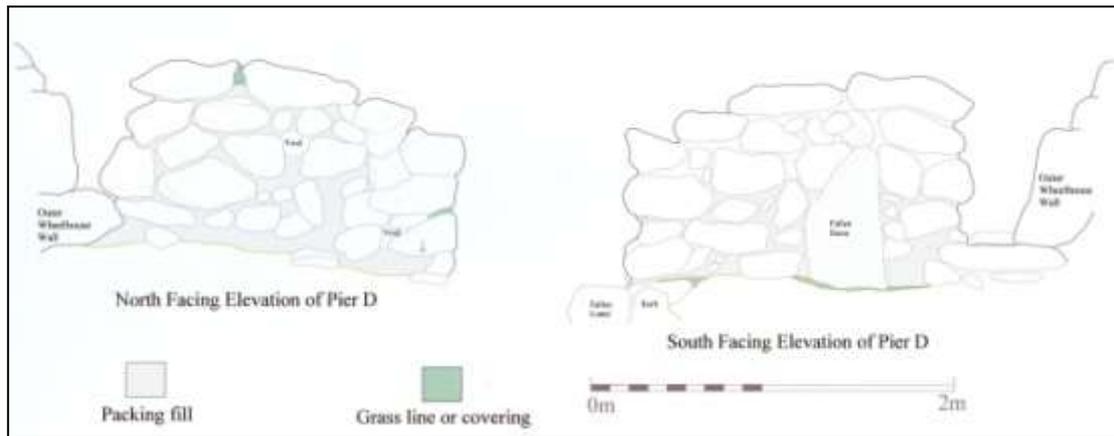


Figure 21: Elevations of Pier D.

As can be seen in the photograph and drawings (Plate 23 & Figure 21), this large wall stone rests upon a flat stone which underlies pier D and extends significantly into the aisle. A similar feature can be seen between pier E and the outer wall. The blocking of aisles in this way is unprecedented, although there are examples elsewhere for various ways of blocking aisles. Other location variations include the deliberate bonding of piers to the outer wall, later insertion of stones to fill the gap or in the case of Alt Chriasal (Plate 24), evidence remained showing a build up of midden material, effectively blocking the passage (Branigan & Foster 2002, 82).

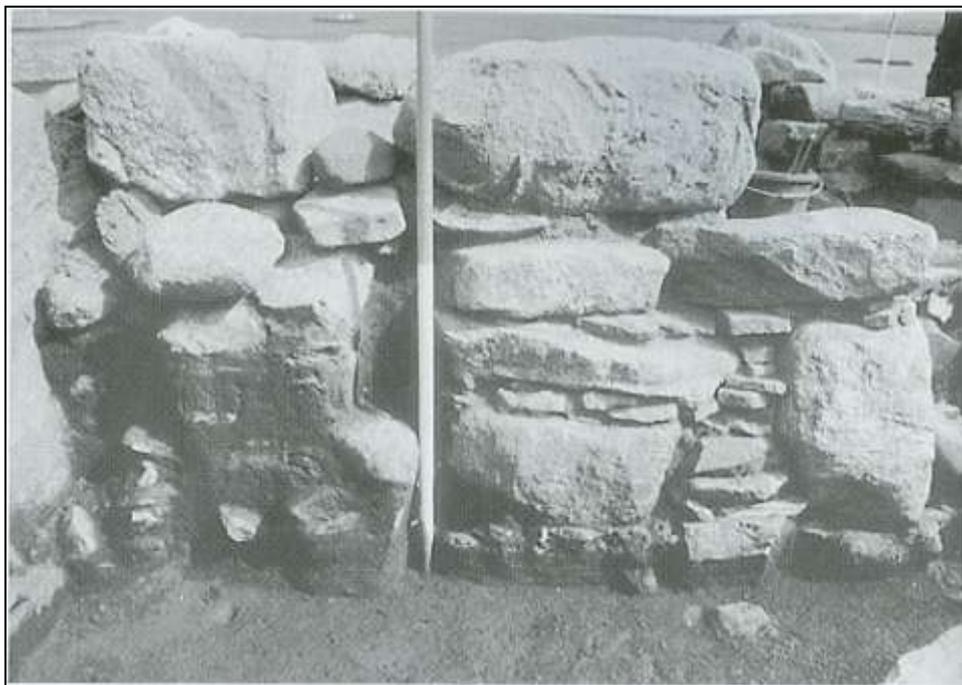


Plate 24: Blocked aisle at Alt Chriasal where stones have been inserted on top of accumulated midden deposits (from Branigan & Foster 2002, 82).

As piers D and E have not been built into the outer wall it would seem logical that at the time of the initial construction it was desirable to have an aisle. However, this is contradicted by an attempt to block the aisle at a lower level. It is possible that blocking continued vertically with loose stones which have been removed during the excavation, interpreted as tumble from the corbelled bays. Although, regardless of how this area was excavated, it is intriguing as to why such a feature appears to exist here.

Bay Six

The sixth bay in structure II is the largest other than bays one and two which this author considers are as a result of a later building phase. The floor of bay six has been cleared of any fallen stones and is slightly lower than the floor of the central space. The aerial photograph shows that the excavator went down somewhat lower in this bay than the others, perhaps due to the pursuit and recovery of a concentration of artefacts. Pier C, which stands to 1m high, forming the south western flank of this bay, exhibits the best example of splaying stonework, tapering from 0.35m wide at the bottom to 0.5m over a height of 0.95m. It can be seen here that multiple stones were used to increase the width (Figure 22) whereas at other sites such as Sollas B and A' Cheardach Bheag and Cnip single stones sufficed (Plate 25). When pier C is compared with adjacent pier D, the differing use of single and double stones to achieve the increasing taper is a striking contrast suggesting that visual uniformity throughout the building was not necessarily important. This variation can also be attributed in some way to the availability and quality of the local stone.

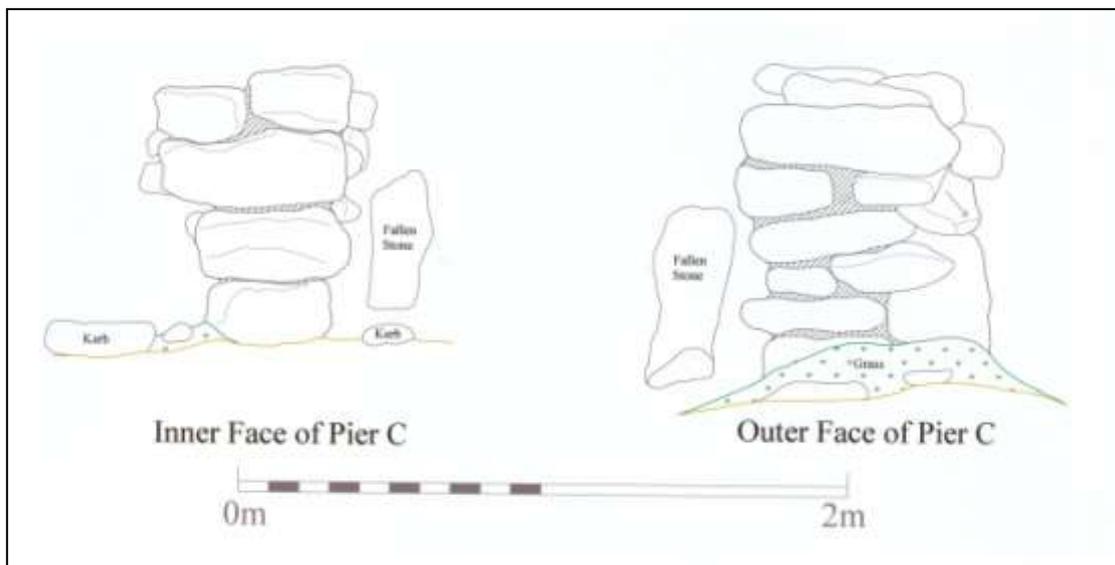


Figure 22: West and east facing elevation of pier C.



Plate 25: Remains of a pier at Cnip built from gradually wider stone blocks (from Armit 2003, 139).

The aisle behind pier C contains a small area of paving. Initially it was anticipated that this was fallen rubble, with the primary floor underneath. However, examination during the survey suggests that this has been installed deliberately, and given the slope of the ground towards the east, it is possible that the bays in the eastern curve of the wheelhouse were excavated to their primary floors. The strip of paving is 1.9m in length (Plate 26).



Plate 26: Strip of paving found behind pier C (©Hothersall)

Bay Seven

The entrance to bay seven contains a collection of packed stones (Plate 27). The floor surface is slightly higher than that of the central space indicating that the primary floor has not been reached. The surface of this bay is largely clear except for three large stones leaning against the adjacent piers. The wheelhouse wall at the rear of this bay had been removed with the construction of structure IVa. It is noted in the 1998 survey that the aisle face of pier B almost touches the outer wheelhouse wall (Wood 1998, 11). This author would argue that

this is not the case and that this confusion is a result of projecting the line of the later structure IVa and not the curve of the wheelhouse II wall.



Plate 27: Collection of stones found at the entrance of bay seven.

As can be seen in the plan of the structure (Figure 23) if the natural curve of the structure II wall is projected, the aisle gap would have been approximately 0.4m.

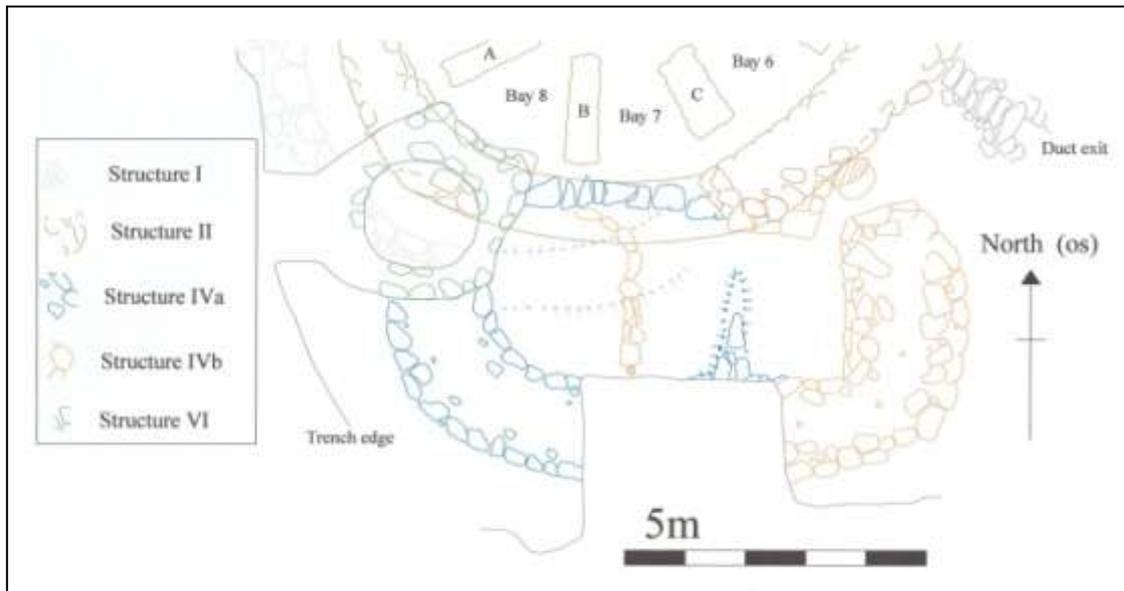


Figure 23: Detail plan of where the aisle behind pier B has been cut by structures IVa and IVb (after Wood 1998, 8).

Pier B is only in situ at its lowest course of stones as the upper courses are not cushioned with packing material and do not sit comfortably on top. These upper stones have possibly been repositioned from the adjacent bays. Two large stone blocks remain in the vicinity, presumably too large to be moved by the excavator.

Bay Eight

The current floor level of bay eight is 0.3m above that of the central space, with kerbing at the threshold. The excavator here has only penetrated to the top level of the kerb on the interior and thus the primary floor remains some depth below. The floor is clear other than a large stone resting against pier B and another beside pier A. Again, the wheelhouse wall behind this bay has been removed, on this occasion by the shieling that had been inserted onto the mound (Plate 28).

Pier A only remains as one course of stones with fairly small stones embedded in dark soil. The stones above this lower course are not in situ and have been placed on top. The 1998 survey commented that there is possible remains of a kerb between pier A and H. This is unlikely as wheelhouses tend to not have any kerb at the entrance and the original floor level is lower. This author considers rubble from the collapse may have been mistaken for a kerb.



Plate 28: Bay eight with wheelhouse wall behind removed and shieling inserted on top.

Due to the amount of stone that has been removed relating to the shieling (structure VI) in this area it is difficult to say whether any adaptations were made at an earlier point in time in conjunction with the construction of structures IVa and IVb.

Piers

With the exclusion of pier H which is significantly different to all the others two styles of pier building can be seen. Although in each case the uppermost course has possibly been repositioned by the excavator, generally they are either thin and rectangular (A, B, D and E) or thick and triangular (C, F and G). There is no correlation or trend between the spacing of the piers although there is a trend in the way the piers are set out. Circularity, although possibly difficult to execute when building a wheelhouse, is desirable to maintain the integrity of the corbelled roofing over the bays and there is a sense of attempted circularity with the original construction of wheelhouse II. However, there is very much a sense, when standing at the centre of the wheelhouse, that cell space has not been divided up equally. Even with the exclusion of bay two and the later development of structure III, every other bay

varies in size from the narrowest in bay five to the larger bays one and six. Of course there is the possibility that the allotment of space within this wheelhouse has some embedded meaning for its function with the bays being built to serve a specific purpose. On the other hand it may simply be a case of poorer workmanship and/or the unimportance of how the space was divided, or appears.

The Central Space

The central wheelhouse space is elliptical, measuring 4.5 metres at its widest by 3.6 metres giving an approximate area of 13 m². The bays surrounding the central space are flanked by a form of kerb on all occasions with the exception of bay one which contains the entrance as detailed above. The area of the central space is very similar to Clettraval where the bays consume a significant portion of the inner space, resulting in a smaller central area. A variation of this allocation of space can be seen at Sollas B (see illus 5 in Campbell 1991, 121) where although the bays are by no means small, the central space is very large. Such arrangements of space may be indicative of the status of the inhabitants and the function of the structure and is discussed further in chapter five with reference to other examples.

Beside the hearth sits a large flat stone referred to in two publications as a bench seat (Wood 1998, 11; Hothersall & Tye 2000, 22). This may be the case or it could be a fallen lintel from one of the corbelled bays which has been moved for another function. During the 2004 survey many of the hammer stones detailed in chapter four were found on top of this large stone, either placed there by the excavator or visitors to the site.

The most striking feature within the central space of the wheelhouse (II) is the rectangular hearth with a stone lined duct running from it out under the outer wall (see Figure 19 & Plate 29a). The hearth, which shows signs of heat cracking to the some of the stones, produced an abundance of orange peat ash during excavation (MacVicar pers. comm.). It is clear that the hearth has been modified on at least one occasion, transforming it from a small rectangle measuring c. 72cm by 33cm to a larger rectangle of c. 72 by 68cm (Figure 24). The widening of the hearth at this later date may have also raised it above the functional level of the duct, if encouraging air circulation was its purpose.

Stratigraphically, during the earlier phase (see Figure 24) the duct would have functioned with this smaller rectangular box. However, after the expansion of the hearth and resulting build up of material the duct would have been blocked unless it was routinely cleared out, and although this evidence does not exist, those who witnessed the site being

excavated testified that the hearth was full of ash to the limits of the later configuration therefore at some point at least in the site's use the hearth was allowed to expand.

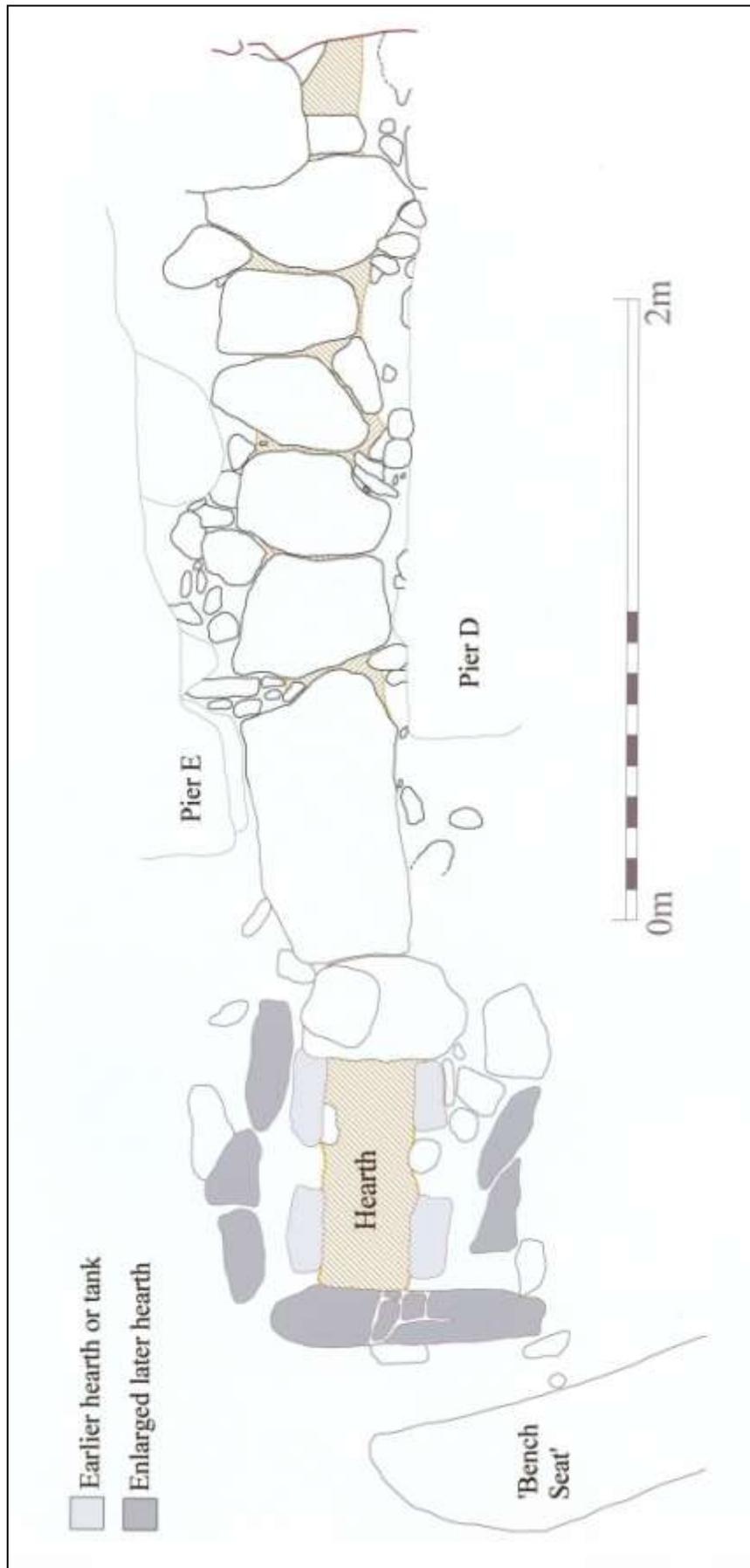


Figure 24: Plan of the hearth and duct in the centre of the wheelhouse (II).



Plate 29: Views of the hearth in the central space and duct running through bay five and under the outer wall.

I have doubts as to whether either of these hearths were original to the primary wheelhouse occupation, however, the presence of the duct running under the wheelhouse (II) wall and arrangement of piers D and E which flank it might imply that the duct is original.

Typically, wheelhouse hearths, as with those found in many other forms of roundhouse, are curvilinear. No other wheelhouses in the Western Isles exhibit a rectangular hearth during its primary phase, although it is also the case that only 17 out of 30 excavated wheelhouses appear to contain a hearth at all (Crawford 2002, 120; M^cKenzie 2003, 36). However, on this occasion it would seem likely that the excavator did not reach the primary floor levels of the wheelhouse (II) and it remains possible that another hearth exists below.



Plate 30: Plan view of the central space.

The hearth is not located in the middle of the central space, however, this is not unusual and its location towards piers D and E means that access through the wheelhouse entrance was not hindered by it. The hearth and duct leading from it is the most striking feature within the wheelhouse interior and the presentation of the site during the excavation is such that it seems to be part of the original wheelhouse layout. However, it is more likely that the feature was initially a stone tank or drain associated with an earlier settlement (structure I) or a similar feature in the wheelhouse (II), given that piers D and E are positioned specifically to accommodate the stone lined duct.

Two crucibles and a piece of vitreous slag were recovered from the wheelhouse entrance and structure III respectively, although the stratigraphical relationship with these structures is unknown. The hearth produced a large quantity of peat ash (landowners pers.

comm.) and three shallow layers can be seen in the floor section that was left intact within structure III (see Plate 36 & Figure 27 below). At the Alt Chrisal wheelhouse, excavation has shown that the hearth had gradually increased in size until it consumed much of the central floor space inevitably making movement around the interior difficult (Branigan & Foster 2002, 79-82). Such an enlargement at Bagh nam Feadag may simply relate to a greater requirement for heating or could be associated with the use of the space as a workshop in a later phase, with the presence of metalworking debris, such as moulds, crucibles and slag indicative of such a practice.

Had the duct been a secondary component to the wheelhouse, there would be indications that the wheelhouse wall had been modified to permit this under floor passage. This is not the case, and so it remains possible that this duct was originally intended as a drain comparable to that found at Cletraval and Bac Mhic Connain, both of which emerged from the wheelhouse via the entrance. It is therefore the writer's opinion that the duct existed before the wheelhouse II was built and was incorporated into the structure (II). Therefore it is suggested here that an earlier structure which contained a drain into its entrance existed before structure II was built, where it was then integrated.

At Bagh nam Feadag, drainage is a problem, particularly in front of the wheelhouse (II) entrance where there is a small plateau. If the purpose of the duct was to remove water, then it is in an ideal position to divert fluids downwards from the eastern side of the structure where the slope drops significantly. A parallel to this can be seen at Cletraval in that the drain exits on the western side of the wheelhouse where the land drops away significantly, as opposed to the other side which is relatively flat (Figure 25).

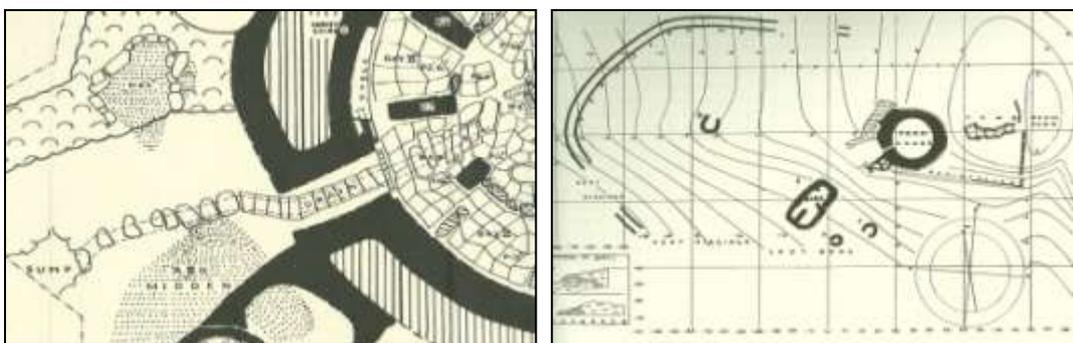


Figure 25: The drain exiting the Cletraval wheelhouse (left) and the topography of the site location (right) (from Scot 1948, 47 & opp. 56).

Although the field evidence is no longer visible, an account by Beveridge of the Buaile Risary wheelhouse hearth (1911, 210), located a short distance from the Cletraval wheelhouse, bears some resemblance to that seen at Bagh nam Feadag:

Near the middle of this chamber was found an oblong hearth measuring 25 by 21 inches, edged at its back and sides by small stones 2 or 3 inches above the floor level and containing reddish ashes to the depth of nearly a foot. Within a yard from the east side (or front) of this hearth may still be seen in inlet of a built drain (filled with small rubble and capped by thin slabs) which, for half of its course to the south-west, runs below the passage floor, afterwards penetrating several cross walls and finally emerging at the exterior a yard to the west of the main doorway (*ibid* 210).

The covering stones over the duct in structure II are in a precarious situation now that they are exposed to livestock and visitors. Through the gaps and under those stones that are loose, numerous sherds of pottery can be seen, consistent with that seen in the assemblage recovered from the site. Small amounts of animal bone are also present. It would seem logical that this material has been washed down from the hearth or trampled through from the bay above. The duct was not excavated other than to expose the capping slabs. Stones lining its edges are visible although it is unclear if the bottom is also stone lined as it is obscured by sediment and vegetation.

Structure III

Structure III has had a considerable effect on structure II with the remodelling of at least three of the original piers. All previous citations of the Bagh nam Feadag wheelhouse (Wood 1998, Hothersall & Tye 2000, Crawford 2002) have interpreted all the piers as of original build. Ian Crawford, for example, has cited pier H in structure II as evidence for a bonded entrance pier, a feature that he uses in conjunction with others to infer structural deviations within the wheelhouse building tradition (Crawford 2002, 118-119, 230). Although considerations of re-building by the excavator have been advanced by two citations other than this in thesis, little consideration has been given to modification of the building fabric in antiquity, particularly with regard to the interior of the wheelhouse. It is argued here that the interior of the wheelhouse has seen at least one phase of alteration (Phase III), and it would seem likely that others would have occurred given the trend elsewhere in the Western Isles for such practices.

As can be seen in plates 31 and 32, pier H is not only built in a different style to the others, but projects from the outer wheelhouse wall at an angle that would upset the internal ring of stone which helped form a corbelled roof over the bays.



Plate 31: Plan view of the wheelhouse interior, with bay two at bottom centre and pier H at the bottom right.



Plate 32: View of pier H from the outer wheelhouse wall where it meets the pier inner face.

Having a pier at the entrance which meets with the outer wall, whether abutted or bonded, is not uncommon in wheelhouses, which makes it unsurprising that pier H has not been questioned before.

Another anomaly with bay two which is flanked by piers H and G is the large gap between these terminals (2.4 metres). This is too great a distance to span with a lintel and there are no other examples of wheelhouses with bays of this size (Plate 33). Therefore, it is argued here that pier H is a later insertion into structure II.



Plate 33: View from central wheelhouse space of bay two with piers H (left) and G (right) some 3.6metres apart.

It is suggested that the existing wheelhouse (II) entrance was exploited, with possibly some modification to provide a passage into a sub-rectangular structure manufactured from the existing outer wheelhouse wall along with the adaptation, and/or removal, of piers in this area. In order for structure II to have had a more even distribution of piers, two or three would have been required in place of pier H, thus increasing the total number of piers in the wheelhouse from eight to nine or ten. It should be noted that wheelhouses of a similar internal diameter to structure II commonly exhibit nine to eleven piers (e.g. Kilpheder – 11 piers, Usinish – 10). Cletraval, which is a similar size to structure II, contained eight piers, although a additional pier-like post was required to support the corbelled roof, effectively making up a ninth pier (Scott 1948, 52-54, plate IV opp. 56).

Pier G does not appear out of place alongside the other piers and is built in a similar style. The inner face of pier G meets with the orthostatic stones in front of bay two, suggesting that the kerb stones were designed to abut pier G. The clearing of bays one and two to the limit of pier G would be required for the insertion of the rectangular building

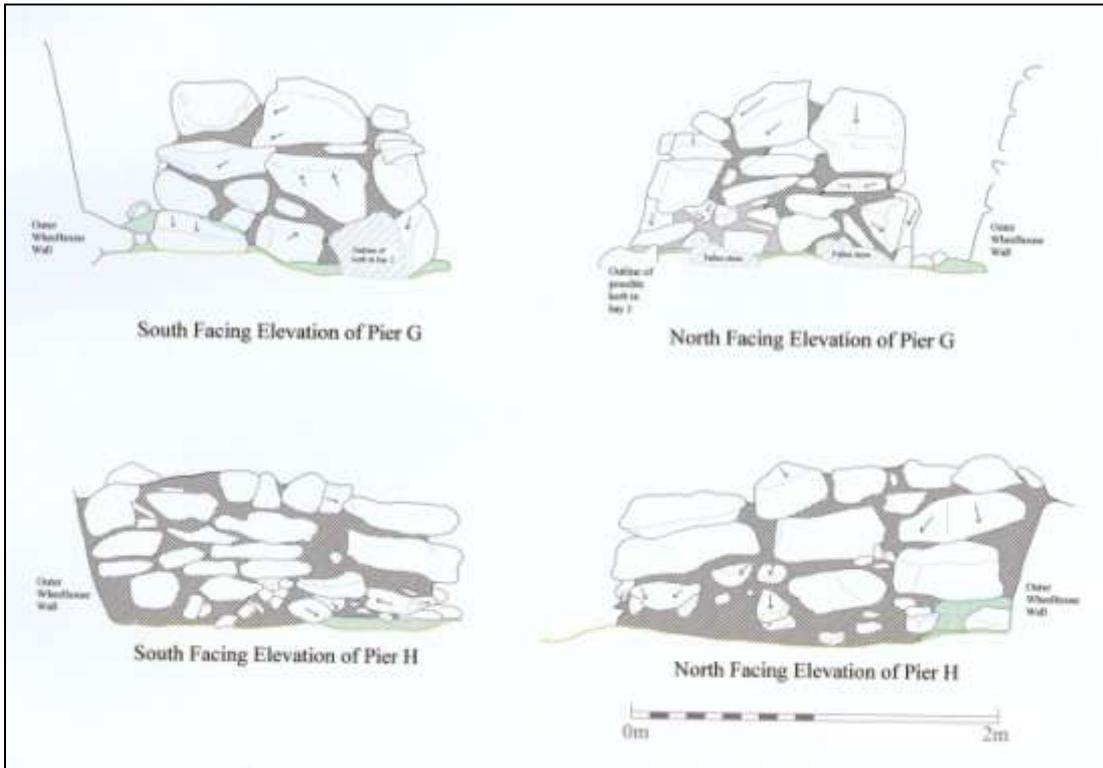
(structure III). Also when viewed in plan, pier G appears in the expected position with two being missing from where structure III has been inserted (See Figure 18 above).

A further indication of a secondary building inserted into this area is given by the excavators records on the artefacts recovered from this part of the site. Ashworth often referred to this as a 'square hut', suggesting that it was clear to him that some separate structure existed here. Also, the artefacts recovered from this area themselves, particularly the pottery, tend to be later than that from elsewhere within structure II (see Chapter 4)

Pier H incorporates a stone bench, or platform at a low level on its northern face (Plate 34 & Figure 26).



Plate 34: Pier H viewed from within bay two showing protruding 'bench' stones.



Figure

26: Elevations of piers G and H.

This has occurred by the lower stones being at a different angle to the upper courses, resulting in a ledge, 0.8m long and 0.3m deep. It is possible that this ledge is a remnant of an earlier internal feature which has been exploited during the construction of pier H in phase III.

The interior of bay two gives some subtle indications of internal features. These indications take the form of a trace of small stones (Plate 35 & Figure 27), arcing along the side of pier H and running around to the entrance of the bay, before breaking and then meeting with the orthostatic stones continuing along to pier G.

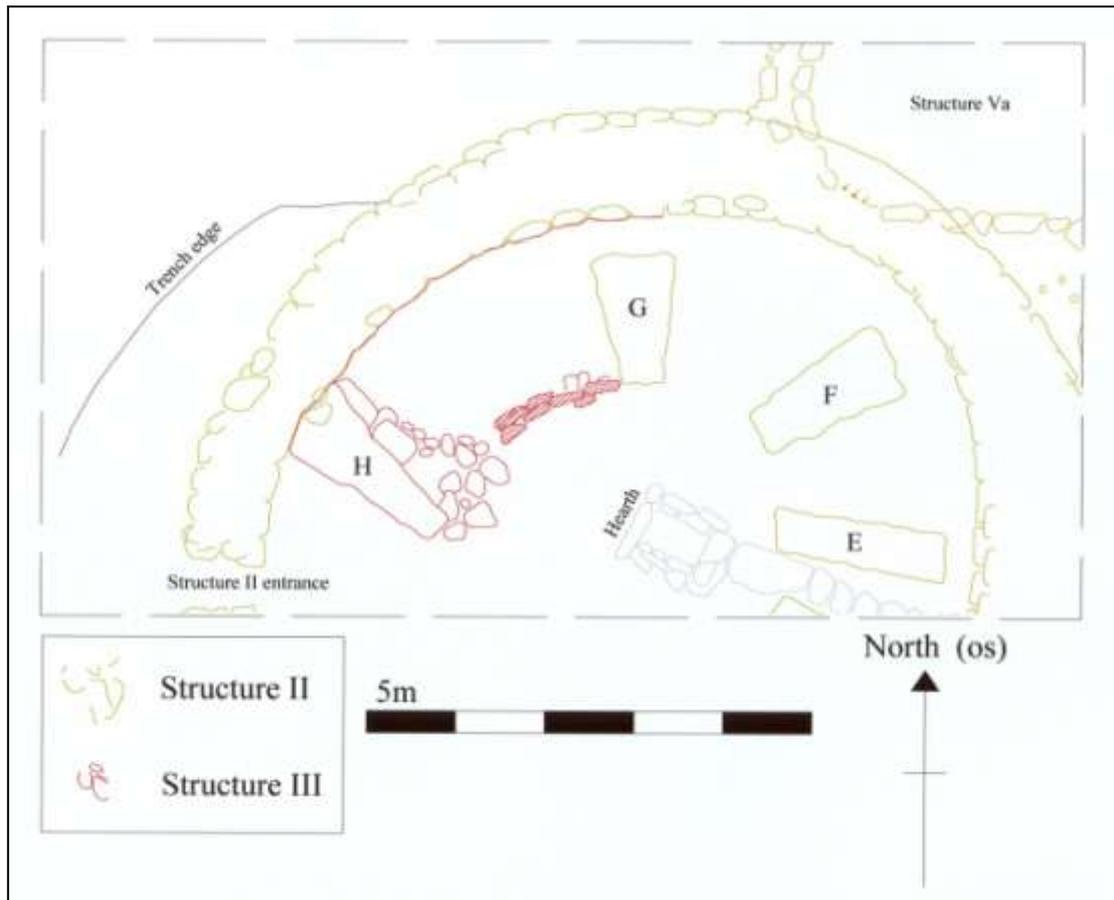


Figure 27: Plan of structure III (after Wood 1998, 8).



Plate 35: Small stones set into the floor of bay two, curving from the 'benching' around to the orthostatic kerb, leaving a small void.

The 1998 survey interpreted the fallen stones around the base of pier H as part of the orthostatic division that had collapsed (Wood 1998, 9), however, it is suggested here that this break relates to the entrance of structure III. Further excavation would establish whether this is the case or not.

In the centre of bay two, a baulk was left intact by the excavator, which has since slumped to less than half its original height which was approximately 70cm. (Plate 36 & Figure 28).



Plate 36: View of structure III in 1998 with baulk (centre) intact (© Hothersall).

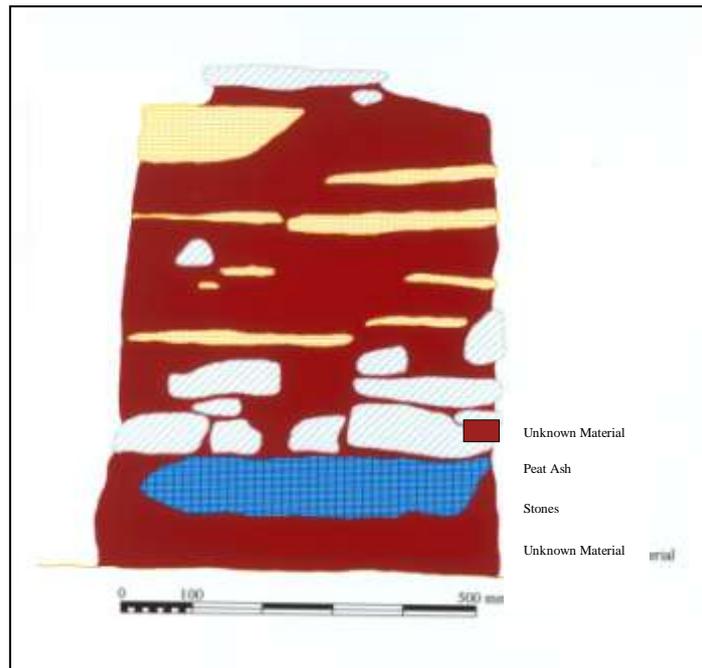


Figure 28: Transcribed drawing of section made in 1998 by Hothersall.

The top of this feature was interpreted by the excavator as the uppermost occupation floor. The soil contains fragments of pottery and peat ash deposits along with a black midden material. The unidentified material at the lowest part of the section is not visible on any earlier photographs and the key to the original drawing is not known. A small cluster of

stones appear above this material and is then followed by intermittent layers of peat ash indicating a considerable duration of occupation and use of this area.

The orthostatic stones at the front of bay two have been thrust into the ground and then supported by packing smaller stones around the base. The stones almost form a double skin with a deposit of midden material in the core. It is unclear as to how this small wall functioned and there is some hint in the aerial photograph that this stood to a greater height with additional stones on top.

Later occupation within wheelhouses is often visible in the archaeological record of excavated sites and Bagh nam Feadag would appear to follow this trend. With an abundance of building stone nearby, such a small structure could have been easily inserted into the derelict wheelhouse, with a timber and thatch roof spanning between piers H, G and the outer wheelhouse wall.

Structure IVa and IVb

The results of the 1998 Association of Certified Field Archaeologists survey interpreted structures IVa and IVb as a single structure (termed their structure II) and described it as follows:

This is a substantial sub-rectangular building with rounded external corners. The south, east and west walls are massively built double faced walls with an earth fill, but the north wall, constructed across a gap where the wheelhouse has fallen or been demolished, is single skinned. A curving cross wall, one stone thick and standing to 0.5m, runs across the west end of the building, leaving a 0.45m gap at the south end. Another slight cross wall runs from the south wall, surviving as an earth bank with some stones imbedded in it, towards the north wall, with a gap 0.80m. There are a number of large fallen stones in the east compartment of the structure. The only entrance appears to be in the northeast corner, a narrow squeeze between walls standing to 0.70m. This passage turns right as it emerges from structure II and passes down slope, with a stony platform built over and round the flue [duct] exit defining it on the north east (Wood 1998, 13).

It is the opinion of the writer that this structure can be separated into at least two separate phases of occupation. As can be seen from a plan view of the site (Figure 29) the eastern wall has well defined right angle corners whereas the western wall is sub-rectangular.

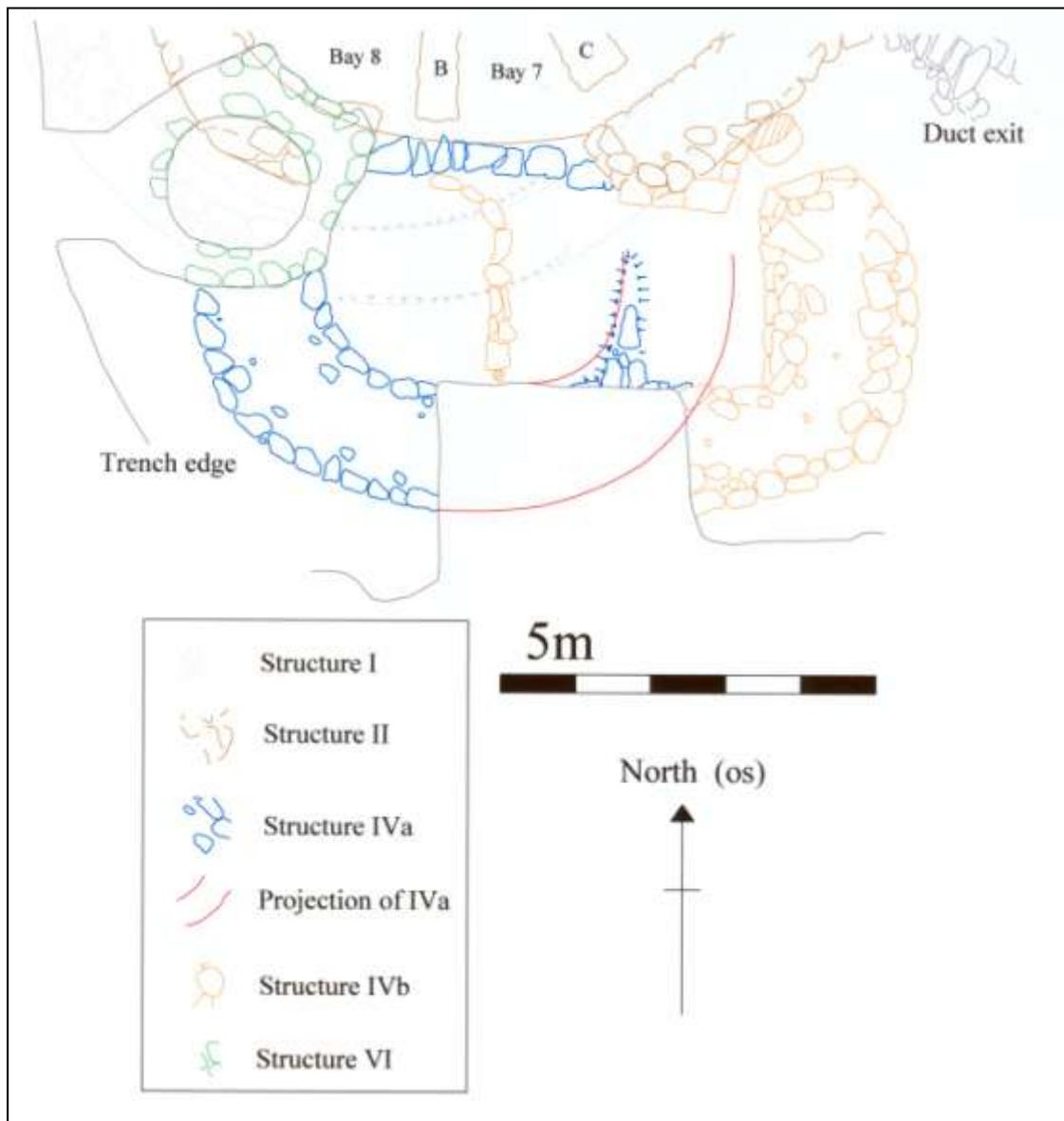


Figure 29: Plan created by the Association of Certified Field Archaeologists in 1998 with projected IVa wall (in red) (after Wood 1998, 8).

Although all internal features except for two low piers have been removed from the interior, a small trace of curving stonework can be seen low down at the south eastern corner of structure IVb. It is suggested here that this trace of walling forms the outer wall of structure IVa. As can be seen in figure 28, by projecting the lines of the sub-rectangular walling where the western division can be seen, the feature meets this trace of walling. Plate 37 illustrates the point at which the walling has been altered.



Plate 37: Detail of the junction between structure IVa and IVb.

From examination of the style of construction it is clear that structure IVa is made up of larger stones, with IVb made up of smaller stones and a poorer finish (Plate 38).



Plate 38: View of structures IVa and IVb looking westwards.

This thickness of the walling for structure IVa is consistent all round with the exception of the northern section which abutted the wheelhouse (II) and the eastern portion which has been removed. The walls appear to be double faced, with a turf core on all sides apart from the northern side. The northern wall is significantly thinner and of a different style. It would seem plausible that this northern wall was revetted against the mound containing the wheelhouse which by his stage, presumably, was already established (Plate 39).



Plate 39: The northern wall of structures IVa and IVb as it cuts through the arc of the wheelhouse (structure II) wall.

The entrance to structure IVb can be found on the north eastern corner, built against the outer wheelhouse wall which contributes, along with the outer wall of structure IVb, to form a short passage (Plate 40). A platform has been created immediately in front of this entrance with small flat stones and continues over the exit of the duct which extends from inside the wheelhouse. It is unclear to what extent the duct was covered with these stones when first built or whether they were adapted to accommodate the entrance to structure IVb.



Plate 40: The entrance to structure IVb.

Upon entering structure IVb, the walling immediately to the right has been abutted against the outer wheelhouse wall (II). The interior is broken up by two small pier-like divisions, although these are far less substantial than the piers found inside the wheelhouse (II). The eastern of these two divisions may relate to structure IVa, whereas the western division appears to be contemporary with structure IVb given its relationship with the northern wall. A photograph taken shortly after the excavation in 1998, depicts a raised earthwork curving through structure IVa before continuing on under the wheelhouse (II). During the survey in 2004 this feature was not visible due to vegetation cover; however it would appear that this was clear to the excavator who penetrated the floors of structures IVa and IVb in its pursuit.

During the 2004 survey a small sherd of Scottish White Gritty Ware was recovered from within these structures, at the base of the eastern stone division, amongst the packing

soil. This type of pottery can be dated to the late thirteenth to early fourteenth century (Will pers comm.). It is unfortunate that this sherd did not come from a secure context and can not be attributed to any specific phase of construction. However, given the proximity of the sherd low down in this area of the site, after the excavator had removed much of the internal contents in search of the earliest structure in that area, we could preliminarily assign a date in this region for the construction of these sub-rectangular buildings against the wheelhouse mound. The other material recovered from this area of the site is presented and discussed in chapters four and five.

Structure V(a)

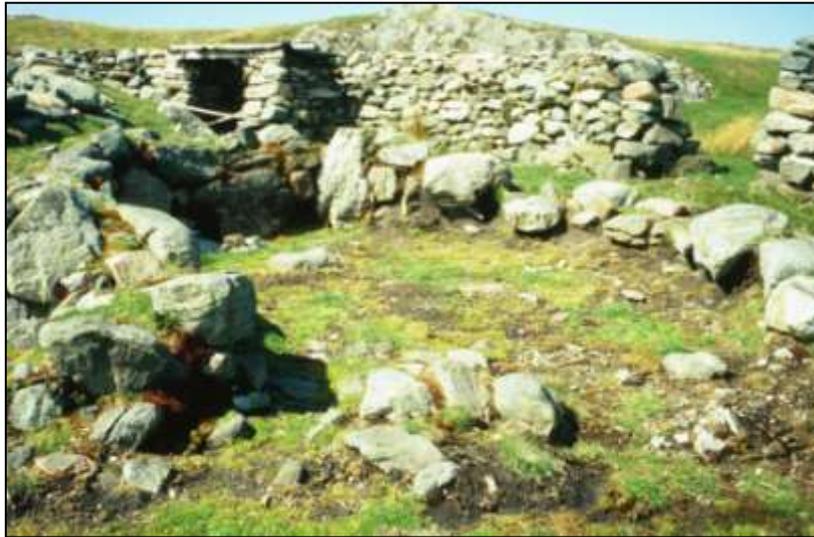


Plate 41: Two photographs depicting structure V(a) in 1998 (top ©Hothersall) and in 2004 (bottom).

Structure V(a) (Plate 41) has been revetted into the side of the wheelhouse (II) and has no surviving wall on the east side. The original floor of this structure V(a) was probably not reached during the excavation. The walling that is visible is quite substantial with possible double facing and an earthen core. The walls stand to a maximum height of 0.7m sloping down to 0.25m on the eastern edges. A slight trace of stones can be seen along the eastern flank.

On the south west corner it can be clearly seen that structure V(a) has been built into the wheelhouse wall, partly removing an outer skin of stones. A similar structure to this can be found at Druim nan Dearcag, North Uist. Structure A was constructed on an artificial flat platform, revetted against a stone outcrop. Armit assigned a date of 16th-17th centuries, describing the structure as a storage area (1997, 916).

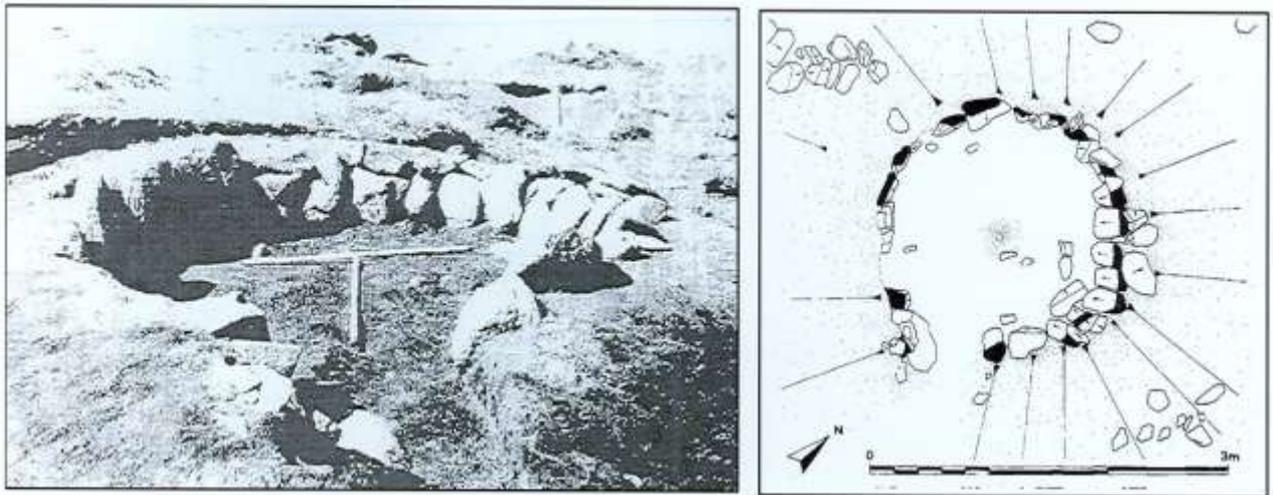


Plate 42: Structure A at Druim nan Dearcag, North Uist (from Armit 1997, 903).

There is no indication of a hearth in this structure and the earliest photographs do not show any signs of burnt material. It is expected that any possible hearth would be found at a greater depth than was reached during the excavation.

To the south of this structure, built up against the outer wheelhouse wall a stony platform can be found with a finished face on the eastern side. This feature appears to be associated with the construction of structure V(a) but is of unknown purpose. One explanation could be of a store area or working platform related to the occupation of structure V(a).

Structure V(b)

Structure V(b) can be described as a small oval stone ring with only the inner face visible, the outer currently unexcavated. The walls stand to 0.35m at its highest point and is 0.8m wide at the northeast corner (Wood 1998, 13).

Structure V(b) has been classed as a different construction to Structure V(a) as there is currently no evidence for them being conjoined. However, it is possible that walling

continues at a lower level than was excavated suggesting a figure-of-eight or jelly-baby shaped building. An alternative explanation for such a low lying arc of stones could be the pens used to mark where hay was stacked after cutting and drying. This was a practice which continued in the Uists up until the last century.

Structure VI: The Shieling

The shieling found overlying structures I, II and IIIa is what initially intrigued the excavator about the site (Hothersall & Tye 2000, 22). The excavator, who had an interest in archaeology, was curious about this mound at Bagh nam Feadag that had a shieling located on top of it. An almost identical scenario is present at North Structure One, where a series of shielings and later constructions have been revetted into a fern covered mound, which clearly contains earlier structures. Although we cannot be certain about what existed at Bagh nam Feadag before excavation commenced, given the nature of the vegetation growth around the shieling, it appears that the shieling was exposed like those on the North Sites and possibly where Roy Ashworth began excavating.

Although the shieling has been fully excavated, its outline still survives, and it would appear that the excavator was primarily intent on revealing the structures and not removing them completely to find what lay at the bottom of the mound. Plate 43 shows the round shieling which has a diameter of 1.95m. The stones were bedded on a dark brown loam which does not contain the same midden addition common elsewhere and utilised in the earlier structures. Floor surfaces associated with this shieling have been removed in the pursuit of structure I, the line of which can be seen running under and into structure IVa.



Plate 43: The shieling (structure VI) that had been inserted on top of the mound.

The type of shieling found here is typical of many others throughout the Western Isles. Furthermore, it is interesting that these shielings are often found on top of much older sites and may be useful in studying seasonal occupation in the Western Isles and identifying the location of possible pre-historic settlements.

Structure VII: The Excavators Wall

An arc of dry stone walling has been built on the western side of the site in the space between the structures and the quarry face.



Plate 44: The surrounding dry stone wall built by the excavator.

This dry stone wall also incorporates a temporary structure which can be described as the ‘dig hut’, utilised by the excavator for protection from the wind and rain. This wall was built using the tumbled stones removed from the mound during the excavation and demonstrates the vast quantity of stones that had been quarried nearby or brought to the site. Although the quarry adjacent to the site has been cited as the main source of stone (Wood 1998, 7) it is also possible that a significant portion could have been sourced from the bay to the north east where loose stones are still evident (Plate 45).



Plate 45: View of the sea inlet at low tide with loose stone along the shoreline.

At Bagh nam Feadag, unlike the Cletraval wheelhouse in North Uist, the stones that were removed during the excavation are at least still visible on the site, albeit in the form of a recent wall and shelter (Plate 44 above). Although no detailed quantification of the building material at the site was carried out, it appears likely that most of the stones remain and have simply been moved around the site by the various phases of occupation. Given the remoteness of Bagh nam Feadag in relation to the modern road and settlement on Grimsay, it seems logical that the mound was not realised as a source for pre-quarried building material in recent years.

The volume of stone required to execute the construction of a wheelhouse can only be theorised as the only experimental work in rebuilding a wheelhouse was conducted in Shetland using the vastly different flagstones prevalent both there and in the Orkney Isles.

At Cletraval, the excavator made a novel attempt to reconstruct the corbelled bays on paper, based on the location of fallen stone around the piers (Scott 1948, 48-50). Given that preservation to lintel height is not seen anywhere in structure II at Bagh nam Feadag and the lintels were not re-positioned by the excavator, a practice that may have been likely given his approach to the excavation, it is anticipated by this author that the excavator either could not discern the remains, other than the more substantial and secure pier bases, or the modifications of the structures in antiquity exploited these more specifically shaped and scarce stones in the construction of later buildings. Such a practice would not be unusual and is suspected for other wheelhouses such as Eilean Maleit (Armit 1998, 267).

It has been proposed by Tye (pers comm.) that the presence of corbelling as a rule in all wheelhouses may be presumptuous, arguing that the amount of building stones at sites too remote to have been robbed were inadequate for such a substantial building. This argument was cited primarily in reference to the wheelhouse at Usinish, and was also applied to Bagh nam Feadag. This author would dispute that argument, as a comprehensive survey of the Usinish area would undoubtedly expose a complex and long standing sequence of occupation from prehistory to more recent times and the total amount of stone in the area used for building is unknown. The large quantity of stone at the Bagh nam Feadag site, particularly when assimilated with the amount presumably retained under the mounds at NS1 and NS2, should be, until proven otherwise, considered adequate for such a stone demanding building as a wheelhouse.

The dry stone wall (VII) built by the excavator is situated very close to structure I and would have prevented the excavator from extending his trench westwards. This may or may not be the explanation for the outer face of structure I not being fully explored. As well as functioning as a depository for the displaced stones during excavation, the dry stone wall (VII) was also built with a view to presenting the site to the public with the addition of a small shelter being a desirable extra for the excavator.

Summary of Structures

The main sequence of development for which clear evidence remains can be outlined as follows (figure 30):

◆ Phase 1

The construction of a possible wheelhouse (structure I) in the Early Iron Age

◆ Phase 2

The construction of a wheelhouse with either eight, nine or ten piers and positioned half a metre to the east of the earlier structure. The earlier structure (phase 1) had either been out of use and re-modified after a period of abandonment or had been dismantled shortly before the new wheelhouse (structure II) was erected. Additional excavation would be required to explore the sequence of construction further.

◆ Phase 3

There is evidence that the interior of the wheelhouse (structure II) has been remodelled on at least one occasion, primarily on the western side within bay two and the two piers flanking it, H and G. The hearth demonstrates further evidence of alterations to the interior as the hearth has been expanded from a smaller rectangular box to a larger rectangle. This may be associated with the occupation in Phase three or may be associated with metalworking activities, supported by the presence of iron artefacts, slag, crucibles and moulds (see chapter 5). As the excavation of the site did not reach the primary structure II floors and the lower structure I occupation levels, it is anticipated that neither of these hearths are original to the wheelhouse (structure II).

◆ Phase 4

This phase saw the construction of a sub-rectangular building (structure IVa) revetted against the southern side of the settlement mound. The nature of the northern wall of this structure in comparison with the remainder of the structure would suggest that a considerable mound remained where the wheelhouse (II) was, and building (IVa) utilised this as a pre-made boundary.

◆ Phase 5

Phase five saw the modification of structure IVa to produce IVb, the remains of which can be seen currently at the site. This modification extended the existing sub-rectangular building eastwards by approximately three metres, terminating with a rectangular inner face. An entrance was established on the north-eastern corner, flanked by the mound of the wheelhouse (II) wall. Two internal features remain, consisting of thin walled divisions separating the space into three zones. One piece of Scottish White Gritty Ware recovered from the floor of this structure (IVb) dates from the late thirteenth to early fourteenth century.

◆ Phase 6

A pennanular structure (Va) was revetted against the north-eastern wheelhouse wall which, although cannot be dated to any specific period, it is likely to be related to some time after the wheelhouse had gone out of use. Very few artefacts were recovered from within this structure and excavation to a considerable depth did not reveal a hearth. Therefore, this structure may have functioned as a storage area in conjunction with later use of the site. Between the southern wall of this structure and the wheelhouse wall a small stone platform has been incorporated before the ground level drops off to the east.

A small oval structure to the north-east of the pennanular structure is visible although obscured by turf and vegetation. There is no indication that this conjoins with the adjacent structure Va.

◆ Phase 7

The penultimate phase of construction saw the placement of a circular shieling (VI) on the south-western area of the mound where the wheelhouse and structures IVa and IVb meet. This structure measures 2.8 metres by 2.2 metres and the floor and much of the interior has been removed during the excavation.

◆ Phase 8

The final phase of construction at Bagh nam Feadag was conducted by the excavator utilising the rubble removed from within the mound. This comprises a dry-stone wall with a small square shelter and surrounds the western flank of the mound.



Figure 30: Phase plans of the structures at Bagh nam Feadag (after Wood 1998, 8).

