Blakemoore Flats Ruins Recommendations for Conservation DRAFT





February 2022

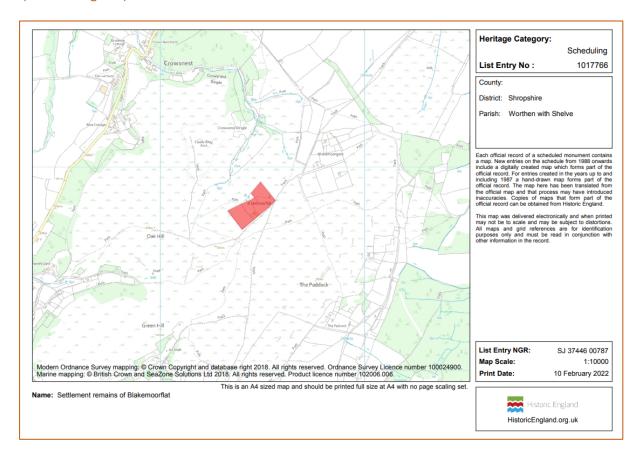
Brief

was approached by the client, Mr Simon Cooter of Natural England, to consider options and prepare costs for the consolidation and conservation of the ruined remains of two stone buildings within the area known as Blakemoorflat. The site is designated a Scheduled Ancient Monument and is currently considered by Historic England to be at risk. Natural England (the owners) propose to fund a project to conserve the site and the ruins in such a way as to be 'readable' and understood as part of the story and contemporary experience of the Stiperstones upland landscape.

The brief is to confine observations, recommendations, and costs to the areas of immediate concern, specifically the stone remains.

met initially on site with Simon Cooter of Natural England and later on the 29th July 2021 with Cassy Clayton of Natural England and Bill Klemperer, Principal Inspector of Ancient Monuments at Historic England. During the latter meeting a general approach to the consolidation and conservation of the structures was discussed and agreed with Bill Klemperer.

(Historic England) Site Location Plan



Blakemoorflat Historic England Listing Entry

Reasons for Designation

The Stiperstones offers a considerable diversity of archaeological remains which provide direct evidence for the exploitation of this area of upland and the well preserved and often visible relationship between settlement sites, land boundaries and trackways as well as industrial remains, allows significant insights into successive changes in the pattern of land use through time. Distinctive farming patterns, with cottages and smallholdings, are especially associated with the Stiperstones, where settlement often developed as a result of mining employment during the late 18th and early 19th centuries. This period represents a time in which arable farming increased in popularity on the moor, resulting in a number of new settlements being established on previously unenclosed moorland. These settlements survive as groups of cottages and outbuildings which sit within their own plots and are generally associated with contemporary field systems, many of which still remain in use for grazing. Many were abandoned after a relatively short time, usually in response to changing economic conditions, and thus provide information on the diversity of social organisation and farming practice amongst the communities occupying this area of upland. The better surviving examples are therefore considered worthy of protection. The settlement remains of Blakemoorflat survive well as both ruins and earthworks and represent a good example of a deserted mining and crofting settlement. It retains both structural and artefactual evidence for the cottages and outbuildings which originally existed here, allowing an insight into the farming and domestic activities which took place in this area during the 19th century.

Details

The monument is situated towards the northernmost limit of the Stiperstones ridge and includes the ruins and earthwork remains of a 19th century mining and crofting settlement and its enclosed fields.

Map evidence indicates that the settlement was established by the early 19th century and is believed to have had close associations with Snailbeach lead mine to the north. Mining was always piecemeal, and even at its height, many of the miners supplemented their income by farming. Blakemoorflat lies within an area of cleared moorland and is enclosed by a series of boundary wall and earth banks. Map and documentary records indicate that there was one cottage at the site, occupied by a Robert Evans, by around 1847 and a further cottage was erected at a later date in the northeastern part of the site. During the early to mid-20th century, in response to the economic decline of the lead mining industry, the cottages at Blakemoorflat were gradually deserted.

Each stone-built cottage and its associated outbuildings, which include a part-underground root store, are situated within a small enclosed yard, beyond which is an enclosed field and several small paddocks. Both cottages at Blakemoorflat are in ruins but retain evidence for their plan and internal walls. The water supply for the settlement was provided from a well to the northwest of the site and the 1st Edition Ordnance Survey map shows pathways running between both cottages and the well. The enclosed fields have been cleared of stone and a large clearance cairn is situated beyond the settlement's northwestern boundary. These fields are thought to have been used for cultivation; traces of ridge and furrow are visible in the southern field, whilst the moorland was used for livestock grazing.

Approximately 150m to the northeast of Blakemoorflat is a second crofting settlement which is the subject of a separate scheduling. MAP EXTRACT The site of the monument is shown on the above map extract.

Site Description

Structure (Area) No. 1

Located to the northeast of the scheduled enclosure, the structures consist of a primary single cell building (dwelling or barn?) approximately 5.5m long x 4.65m wide. Adjacent to this is a secondary/ ancillary structure, possibly a root store or animal house of undefined area/dimensions. The construction generally is of random coursed rubble stone. Earth mortar is apparent within the core of the structure with evidence of a low ratio lime binder and mud mortar used on the outermost pointed masonry face. The structural condition of the remaining masonry is very poor, with much of the core construction and pointing mortars washed out, leaving the structure with the appearance of a 'drystone' construction. Individual stones are therefore very loose and the whole is highly vulnerable to further erosion and collapse. The stone walls of the primary structure survive to approximately 1m high, and approximately 1.6m high at the south gable wall. The dimensions, including widths and constructional details are still readily discernible. The roof, all internal fixtures and fittings, and all joinery are absent, although some remains may be buried below the collapsed masonry. The stone type has not been formally assessed, however, reference to the English Heritage 'Strategic Stone Study' (A Building Stone Atlas of Shropshire) Published May 2012 by Andrew Jenkins of the Shropshire Geological Society identifies the stone in the immediate vicinity to be 'Stiperstones Quartzite' (Formation). The stone is described as a 'very hard sandstone', and this would correspond with observations made on site.

Notable features of the remains include the possibility of a chimney piece in the south gable, visible doorways and an offset internal wall located parallel to the outer west wall. The latter may be an informal repair, possibly to allow the ruinous building to be used as a store/ shelter, prior to its further demise.

The adjacent secondary/ancillary structure is almost entirely collapsed, resembling little more than a cairn. It is additionally compromised by large trees growing through the remains and very few constructional details are identifiable.

Recommendations

During the on-site meeting with Historic England, it was agreed that to stabilise the remains, some limited unpicking of the collapsed masonry both internally and externally would be required, followed by some rebuilding of the walls necessary to provide improved visibility and stability of the structure generally. Rebuilding is to include the collapsed Northwest and Northeast corners and the East wall. The height of those areas of the wall to be reconstructed should be no less than 1m.

It was agreed that much of the structure comprised an earth mortar, and some unpicking will help to ascertain further constructional details. If, as recommended, earth mortar is to be re-used in the construction of the core, a lime binder in small proportions should be added to help improve the longevity of the construction material. Under the guidance of Natural England, an area nearby should be selected as a source of earth for construction. Due to the presence of a lime/earth mortar within the pointed (Outer) stone face, it was agreed that this should be replicated. It was agreed that the wall tops will benefit from being soft capped and with guidance from Natural England, the turfs could be taken from the immediate vicinity, the bare earth then allowed to regenerate naturally from the local seedbank. It was noted that natural soft capping had developed on Structure No. 2. It was agreed that trees and vegetation should be cut back from the walls and the inside of the structure.

In respect of the ancillary structure (Root store?) to the north of the primary remains, the substantial nature of the collapsed stone indicates its location, and it was agreed that the best approach was to leave this structure as is.



Image 01. Structure No.1 As viewed from the Northeast.



Image 02. Structure No.1 As viewed from the Southwest.



Image 03. Structure No.1 As viewed from the Southeast.



Image 04. Structure No.1 As viewed from the East.

Structure (Area) No2.

Located to the south of the scheduled area. The primary structure is larger than that of Structure No.1 being approximately 7.8m long and x 4.2m wide. The presence of clay roofing tiles, items of window joinery along with domestic items such as a bed frame and cooking pots strongly suggests that this served as a dwelling. This appears to be the primary occupation site of Blakemoorflat and it is possible that Structure (Area) No.1 is a barn or store that economically and socially belongs to Structure (Area) No.2.

Recommendations

It was agreed that the overall approach here should be the same as for Structure (Area) No.1, except for the treatment of the internal collapsed masonry, which currently provides support for the remains of the standing walls and serves to prevent grazing animals from sheltering within; the collapsed masonry within the building should therefore remain in situ. It was agreed some external clearance and dismantling should be undertaken to permit limited rebuilding of corners and to repair and arrest areas of active collapse. Some fixtures and fittings are present and notable items include bed irons, a window frame and cooking pots, It was agreed that all such items should be left at the site. Structure (Area) No2 has well defined yard areas confined within low stone walls and include remains of possible supporting/ ancillary structures. The area is largely stable with extensive and naturally occurring soft capping. There are some areas that will need limited unpicking and stabilising. It was agreed that trees and shrubs should be cut back from the walls and inside the structures.



Image 05. Structure No.2 As viewed from the Northeast.



Image 06. Structure No.2 As viewed from the West.



Image 07. Structure No.2 As viewed from the Northeast

Item	Schedule/ Costs	Qty	Unit	Rates	Total Value
	TOTAL COSTS				
	Contingency				
	Preliminary costs				
	Works Costs				
	Blakemoorflat				
1.0	Structure (Area) No.1				
1.1	Undertake a photographic survey/record of the structure prior to clearing and structural works commencing	1.0	ltem		
1.2	Carefully remove trees from within and immediately adjacent to the stone remains	1.0	By Others		
1.3	Prepare area for turf cutting by mowing grass to approx 50mm in height. Using a turf cutter, cut turf to maximum 50mm depth and set aside for reuse as soft capping on wall tops. Cut only enough to be laid the same day.	1.0	Item		
1.4	Excavate area of ground adjacent to the structure to provide suitable earth for construction mortar. Sieve earth down to maximim 5mm aggregate and set aside for hot mixing with quicklime as required.		Item		
1.5	To the exterior of the structure, carefully clear debris and stone to a width of approximately 1m from the area immediately surrounding the discernable outermost line of the stone walls. Grade and store the stone nearby for use during reconstruction. Special attention should be paid to possible features such as doorways and openings.	1.0	ltem		

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1.6	To the interior of the structure, carefully clear the fallen and loose stone from within the floor area. Grade and store the stone nearby for use during reconstruction. Special attention should be paid to possible features such as doorways and openings.	1.0	Item		
1.7	For masonry generally, the appearance of rebuilt stonework is to closely match the existing in terms of style/ bond/ construction.				
1.8	Carefully dismantle and rebuild the Northeast corner and the north gable to a maximum height of approximately 1m.	1.0	ltem		
1.9	Carefully dismantle and rebuild the north gable to a maximum height of approximately 1m.	1.0	Item		
1.10	Rebuild the East elevation to a maximum height of approximately 1m. Allow for doorway/opening with returns	1.0	ltem		
1.11	To all areas, consolidate wall tops by carefully dismantling the top three courses of stone and setting aside in the order to which they were dismantled, enabling stones to be reinstated in their original location. To visible mortar joints, ensure the mortar is well compacted into the joint and rake back to leave lightly recessed. Rebed using earth/ lime mortar, Prepare the mortar on site using three parts earth (Sourced from the adjacent area) to one part quicklime. Add water sufficent only to ensure adequate slaking and to produce a 'workable' mortar. Ensure the mortar is suitably protected from the elements using hesian until adequetly carbonated.	12.0	m		

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	To consolidated/ rebuilt wall tops, cap walls using earth/ lime bedding mortar to a thickness of approximately 30mm. Leave the lime capping approximately 50mm back from a vertical face. Allow the mortar capping to carbonate before soft capping with locally cut turf. Where possible allow for a total build up of turf/soil of 150mm. Surplus stone cleared from within and around the structure should be safely stacked nearby, the height of which should not exceed 1m.	26.0	m Item			
2.0	Structure (Area) No. 2					
2.0	Structure (Area) No.2					
	Undertake a photographic survey/record of the structure prior to clearing and structural works commencing Carefully remove trees from within and immediately adjacent to the stone remains		Item By Others			
	Prepare area for turf cutting by mowing grass to approx 50mm in height. Using a turf cutter, cut turf to maximum 50mm depth and set aside for reuse as soft capping on wall tops. Cut only enough to be laid the same day. Excavate an area of ground adjacent to the site to provide suitable earth for construction mortar. Sieve earth down to maximim 5mm aggregate and set aside for hot mixing with		Item			
2.4	quicklime as required.	1.0	Item		1	

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To the exterior of the structure, carefully clear to a width of approximately 1m debris and stone the area immdeiately surrounding the discernable outermost line of the stone walls. Grade and store the stone nearby for use during reconstruction. Special attention should be paid to possible features such as doorways and openings.	1.0	Item	
To the interior of the structure, provisionally allow to carefully clear a limted amount of the fallen and loos stone to enable reconstruction. Special attention should be paid to possible features such as doorways and openings.	2	Item	O O O
To all areas, consolidate wall tops by carefully dismantling the top three courses of stone and setting aside in the order to which they were dismantled, enabling stones to be reinstated in their original location. To visible mortar joints, ensure the mortar is well compacted into the joint and rake back to leave lightly recessed. Rebed using earth/ lime mortar, Prepare the mortar on site using three parts earth (Sourced from the adjacent area) to one part quicklime. Add water sufficent only the ensure adequate slaking and to produce a 'workable' mortar. Ensure the mortar is suitably protected from the elements using hesian until adequetly carbonated. To consolidated/ rebuilt wall tops, cap walls using earth/ lime bedding mortar to a thickness of approximately 30mm. Leave the lime capping approximately 50mm back from a vertical face. Allow the mortat capping to carbonate before soft capping with locally cut turf. Where possible allow for a total build up of turf/soil of 150mm.	24.0		

2.10 2.11		1.0 4.0	m	
	Surplus stone cleared from within and around the structure should be safely stacked nearby, the height of which should not exceed 1m.		Item	