

Bothwell Castle latrine tower, consolidation and repair works

ENVIRONMENTAL IMPACT STATEMENT

Introduction

Overlooking the River Clyde, Bothwell Castle is one of the outstanding monuments of the medieval period in Scotland, the circular keep justifiably described as "the grandest piece of secular architecture that the Middle Ages have bequeathed to us...." It was planned on an exceptionally grand scale by the Morays in the 13th century, and completed to its present form by the Douglasses after the Wars of Independence.

This environmental impact statement considers the proposed consolidation and repair of the latrine tower projecting from the external face of the castle's S curtain wall, which was built on an outcrop of bedrock overlooking the river.

Conservation background

As elsewhere on the site, large areas of the latrine tower's sandstone masonry are eroded, having suffered from water ingress, wetting and drying cycles and the adverse effects of the introduction of cementitious pointing during previous consolidation campaigns.

It is evident that the lower parts of the S curtain wall, including the latrine tower, have become more eroded than the upper levels. This may be due in part to the drainage of moisture from the adjacent courtyard level into the fabric of the wall, resulting in a broad band of increased erosion. The fabric of the latrine tower itself may also have been affected by salt contamination as a result of its function.

Due to the particularly severe erosion problems in the latrine tower, the conservation proposals include a relatively high level of indenting (stone replacement) in order to preserve the structure. Soft-capping of the wallhead and capping of the latrine shaft are also proposed, in order to reduce future water ingress and reduce erosion. Soft capping works have been successful in reducing water ingress to the N curtain wall in recent years.

In addition to the erosion, a series of vertical cracks in the latrine tower's masonry have been identified. Concerns over the structural integrity of the walls have been addressed by the proposed insertion of a series of helical bars into masonry joints.

A major campaign of consolidation and repair of the latrine tower was conducted in the early part of the 20th century, as revealed by comparison of archive photographs showing the condition of the structure before and after this work. It seems likely that these repairs were carried out during the 1920s or 30s, possibly before the castle came into state care. A photograph dated 1899

shows extensive areas of missing stonework. The repairs may have been carried out during the period when nearby Bothwell House was being demolished, offering a source of geologically matched sandstone. Indeed, it is possible that some of the stone derived from Bothwell Castle itself originated in the medieval castle, in which case some of the stone may have been re-used twice. It appears that, in places, the masonry introduced in the early 20th century has fared worse in terms of surface erosion than has the original medieval stonework. The use of cementitious pointing in the more recent work may have exacerbated the situation.

Significance of the latrine tower

The latrine tower would have served the noble apartments in the (now missing) S range of the castle's courtyard buildings. Its survival increases our understanding of the way in which latrine systems functioned, and the loss of associated courtyard ranges makes this structure particularly important to our understanding. The traditional phasing of the castle suggests that the tower dates from the early 15th century, part of the works overseen by the 4th Earl of Douglas, although the phasing of the S curtain wall and its associated structures is a subject of debate (Rutherford and Malcolm 2011) and it is possible that some of the work is earlier. From a brief examination of the junction between the latrine tower and the adjacent sections of curtain wall to the E and W, it would appear that at least some parts of the tower may be contemporary with the curtain wall, as masonry blocks tie in. Modifications to the tower may have taken place during its period of use.

Archaeological investigation of areas of the castle by The Ministry of Works in 1937-38, as part of a campaign of clearance work, included excavations at the base of the latrine tower. It would appear from the photographic evidence that this led to the exposure (or re-exposure) of the lowest courses of the tower's masonry. A fine assemblage of pottery and other artefacts was retrieved from the garderobe chute at the base of the 15th century S range latrine tower. Now in the NMS collections, the pottery forms an important contribution to the corpus of Scottish medieval pottery, and provides a valuable insight into the style and nature of what was being produced in this part of Scotland.



Detail of eroded stonework, probably representing early 20th-century repairs



Architectural details at the wallhead. An opportunity can be taken to examine these during the works.

Impact of the proposed works

The proposed works will impact upon certain areas of original medieval masonry, and upon areas of 1920s-30s repairs. They will also have an impact upon the visual appearance of the latrine tower.

Although extensive in terms of indenting, the proposed works are likely to represent the minimum necessary to consolidate and conserve the structure of the latrine tower, ensuring its future survival. Although some loss of original fabric is anticipated, the form of the structure will be preserved, and, in general terms, the original stones likely to be affected do not include significant architectural forms; rather they are examples of facing stonework of which many examples will survive in the wider structure. It will be important to record

all replacement of original stonework carefully, including noting any surviving tooling that can be replicated in the replacement stonework.

The greater part of the proposed indenting will affect stone repairs introduced in the 1920s-30s. This is significant in terms of the more recent history of the castle and its conservation, but of lesser significance than the original stonework. Once again, it is important that all replacement is recorded carefully.

The proposed stone replacement works will be readable in the fabric, and, appropriately recorded, there should be no confusion in the future as to which masonry represents modern replacement. The appearance of the latrine tower will be affected, with new repairs visible and readable in the structure, but this offers the opportunity to inform visitors about conservation techniques and approaches, and, most importantly, the works will ensure the survival of the latrine tower itself, preserving this significant element of the overall castle.

The proposed soft capping of the wallhead, along with the capping of the internal latrine chute, is thought unlikely to have a significant visual impact, but (as demonstrated by soft-capping works to the N curtain wall) is likely to be successful in reducing water ingress and will be beneficial to the future conservation of the structure.

Recommendations

I would recommend that an opportunity is taken to examine the latrine tower's masonry archaeologically while the scaffolding is in place, particularly to examine and further our understanding of any phasing or alterations at the upper levels of the structure. This work would be undertaken under the terms of the archaeological call-off contract managed by CNR.

References

Rutherford, A and Malcolm, J. 2011 "'That stalwart toure': Bothwell Castle in the Thirteenth and Early Fourteenth Centuries", in A. Dakin, M. Glendinning, and A. MacKechie, *Scotland's Castle Culture*, Berlin.

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