

**GLAMORGAN-GWENT ARCHAEOLOGICAL TRUST
CONTRACTS SECTION**

**ARCHAEOLOGICAL RECORDING
EAST BLOCKHOUSE, ANGLE, DYFED**

SUPPLEMENT: RESEARCH AND EROSION ASSESSMENT

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GGAT REPORT NO. 94/015

(SUPPLEMENT TO REPORT NO. 93/074)

**PROJECT NO. A144
EXCAVATION NO. 235**

EAST BLOCKHOUSE, ANGLE, DYFED

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Summary

GGAT Contracts was commissioned to record the remains of the Scheduled Ancient Monument of East Blockhouse, Angle, Dyfed. Following completion of the main report, further research on the map evidence was undertaken, allowing a revised interpretation of the site to be presented, with an assessment of the rate of erosion of the monument.

Acknowledgements

This report was prepared by M Locock BA AIFA, (Projects Manager (Assessments), Glamorgan-Gwent Archaeological Trust), with the assistance of other GGAT staff.

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1. Introduction

1.1 Background

GGAT Contracts was commissioned by the Defence Research Agency in 1993 to undertake a survey of the East Blockhouse, Angle, Dyfed (Dyfed PRN 3061; Scheduled Ancient Monument Pe 398; NGR SM 841 027). The results of the survey were presented in November 1993 (Locock 1993; GGAT Report 93/074); some of the documentary evidence was not available at that time. The survey archive has been deposited with the National Monuments Record, RCAHMW, Aberystwyth. This report reviews the evidence and revises the conclusions of the earlier study.

1.2 Project design

The project specifications were included in the survey report (GGAT Report 94/074, 15-17); these were drawn up to fulfil a brief (CO15Q933) prepared by Cadw: Welsh Historic Monuments on behalf of the Defence Research Agency.

2. Review of the map evidence

2.1 Background

The survey report included a discussion of the pictorial and verbal sources for the appearance and form of the site in the 19th century (GGAT Report 93/074, 18-20). It was recognised that cartographic evidence was likely to provide valuable additional information, and so the large-scale maps held by the National Library of Wales were examined.

2.2 The map evidence

Four large-scale maps were available, covering the period 1830-1900, allowing the site's erosion to be assessed. The tithe map of 1840 did not show any details of the site.

2.2.1 Denham's chart of Milford Haven, 1830 (fig.1)

This navigation chart, although based on a detailed survey, was published at too small a scale to show any features of the site.

2.2.2 Denham's chart of Milford Haven, 1832 (fig. 2)

This chart is probably based on the same survey as that published in 1830, but was printed at a scale of c. 1:20,000. The East Blockhouse was shown as a solid square building, with a wall running northwest from the north corner of the building. The fact that the building was shown blacked-in may imply that it was roofed at the time. A possible further wall may be depicted to the south of the building, but the line may simply indicate the top of the cliff.

2.2.3 Ordnance Survey 25", 1st edition, 1870 (fig. 3)

This map is the best source of evidence for the now-lost parts of the site. It showed the surviving chamber as an unroofed shell. Running south from the southwest corner was a short wall, which then turns east and then south. There was no wall shown to the west of the building.

2.2.4 Ordnance Survey 25", 2nd edition, 1900 (fig. 4)

By this time, only the walls of the chamber itself were shown; all other walls were presumably not standing much above ground-level. The south wall of the chamber was still standing, though.

2.3 Summary

The map evidence suggests that the site deteriorated significantly in the 19th century. It may have been relatively complete in 1832, but by 1900 most of the erosion (apart from the loss of the south wall) had occurred. The lost features are shown schematically on fig. 5.

3. Revised interpretation of the site

3.1 Lost features

In the survey report, the evidence for a second rectangular building to the southeast of the surviving structure was discussed. This feature was still traceable (and measurable) in the 1920s, but is no longer extant. The map evidence clarifies the sequence of decay and the probable interpretation (see fig. 5: lost walls are labelled A-C).

The structure may have been roofed in 1832; the roof had gone by 1870. Wall 002 survived at some height in 1832, although by 1870 it was probably only a foundation. Although the 1832 map is at too small a scale to be reliable, it seems that 002 then extended further to the west.

The map evidence implies that wall A ran south from the southwest corner of the building for c.3m; it then joined wall B, which ran east for c.10m, until turning south as wall C for c.10m. All of these walls were standing to some height in 1870, but by 1900 survived only as low walls. Wall C is likely to have been lost completely by 1907, leaving walls A and B to be incorrectly interpreted as a building by Laws and Owen (1907), followed by the Royal Commission (RCAMCWM 1925).

3.2 16th century (Phases I and II)

The evidence for the continuation of 002 as a straight wall running to the west confirms the previous rejection of a circular plan for the structure, which must have been either rectangular or D-shaped.

The lost walls A-B-C are likely to have been a curtain wall or breastwork protecting the less steeply sloping south side of the blockhouse; they may have supported insubstantial lean-to structures. Close defence for such artillery forts was a major concern in their design.

3.3 Second World War (Phase III)

In the survey report, it was suggested that the blockhouse was refortified as an Observation Post in the Second World War. Following discussion with Roger Thomas, this interpretation has been revised. It is now considered to be better characterised as a Defence Post, since the loophole in 005 was deliberately reshaped. The brick blocking of the concrete-lined loophole may reflect a subsequent change in tactical deployment. The circular feature (002) to the east of the building had been suggested as a mine clearance crater, but the identification as a weapon pit is now preferred, since it is small for such a crater.

4. Assessment of erosion

4.1

A preliminary assessment of the rate of erosion of the monument was presented in the survey report. Some quantification is now possible, although average annual rates have little meaning for intermittent major events.

4.2 Erosion from the south

The scar to the south of the site has been responsible for a significant level of erosion to the structures. Over the period 1870-c.1907, all of wall C (10m long) was lost. Between 1920 and 1950, walls A and B were also lost (3m north-south), and further erosion has caused the collapse of wall 008. The scar has therefore eroded from the south at a rate of approximately 0.25m per year.

4.3 Erosion from the west

Wall 002 has lost approximately 4m in the last 100 years due to erosion from the west.

4.4 Erosion from the north

There is little change visible between the 1881 illustration (GGAT Report 93/074, fig. 2) and the present.

4.5 Condition of the walls

Although the site has been unroofed since before 1870, the walls have not suffered badly from weathering.

4.6 Summary

The most active erosion is from the south; if left unchecked, this will cause the loss of the order of 50% of the present site in the next 10 years.

5. Recommendations for further action

5.1 Options for protection from erosion

The detailed preventative measures should be drawn up by engineers following study of the site.

If no preventative measures are implemented, the site is likely to be significantly degraded in the near future.

If the south side of the building were consolidated and stabilised with concrete tied in to bedrock, the immediate threat would be averted, although the erosion is likely to affect the concrete over a few decades.

If extensive consolidation and stabilisation works were undertaken (including repointing and capping of masonry, and stabilisation of the scar area), the site would be preserved for a considerable period.

5.2 Archaeological works

If preservation in situ of the monument is deemed to require an excessive investment of resources, the continuing erosion of the site will entail the loss of important archaeological deposits, structures and finds. Therefore a programme of archaeological work should be implemented, to suit the probable rate of loss, to ensure that a record of the archaeological resource is made prior to destruction. This will involve the enhanced recording of standing masonry, excavation of building interiors, and monitoring of all groundworks and consolidation work for archaeological evidence.

5.3 Preferred option

In general terms, the total preservation in situ by extensive consolidation works is to be preferred. It is recognised, however, that such an approach will be costly to implement, and will have an impact on the archaeological resource and the appearance of the site.

It is therefore considered that minor remedial works, associated with a structured programme of archaeological monitoring and recording, is the best option.

The "do nothing" option would necessitate extensive archaeological rescue work in advance of erosion in hazardous conditions, and is the least preferred option.

Bibliography

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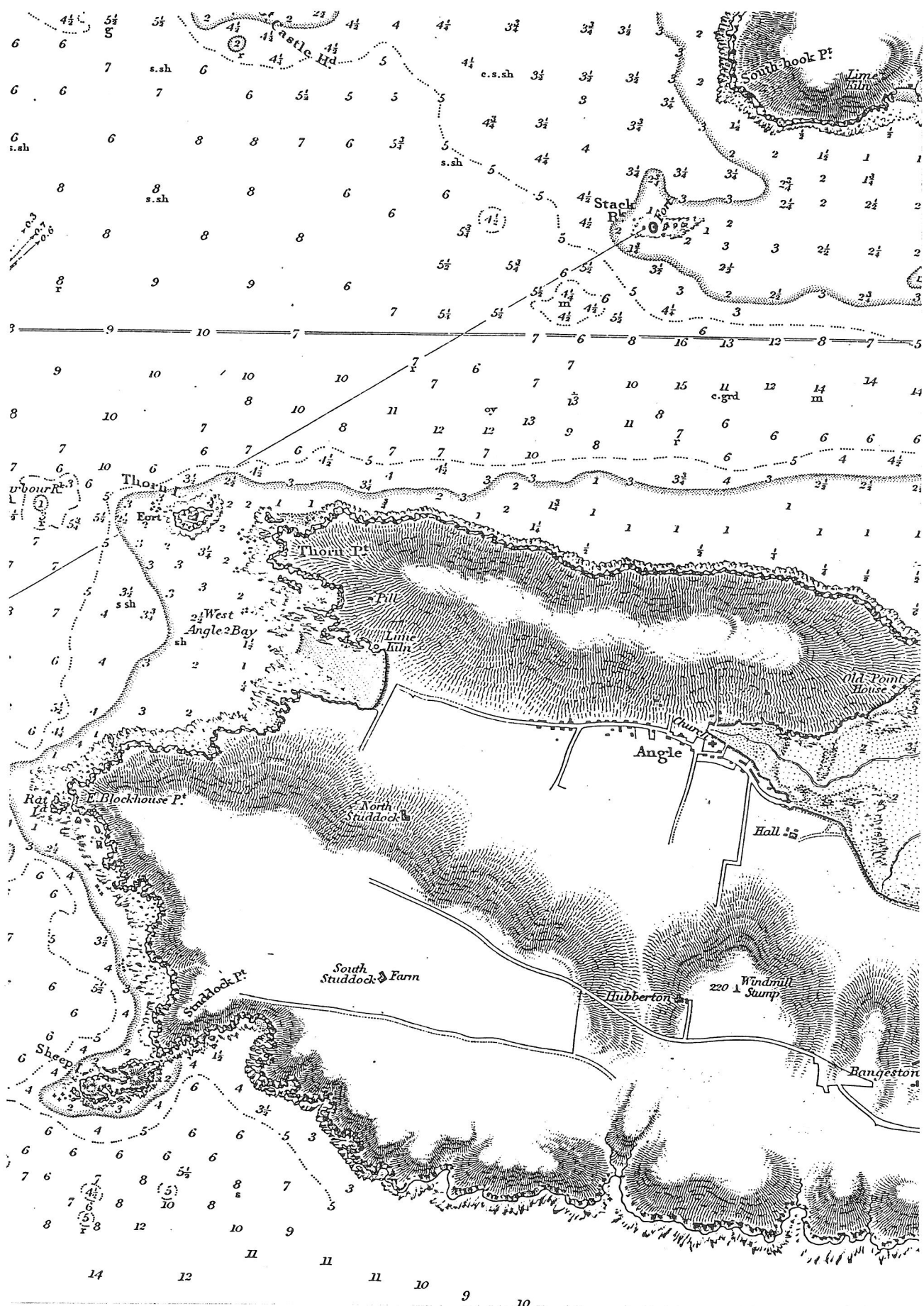


Figure Two: Denham's chart of Milford Haven, 1832



Figure Three: Ordnance Survey 25" (1:2500), 1st ed, 1870

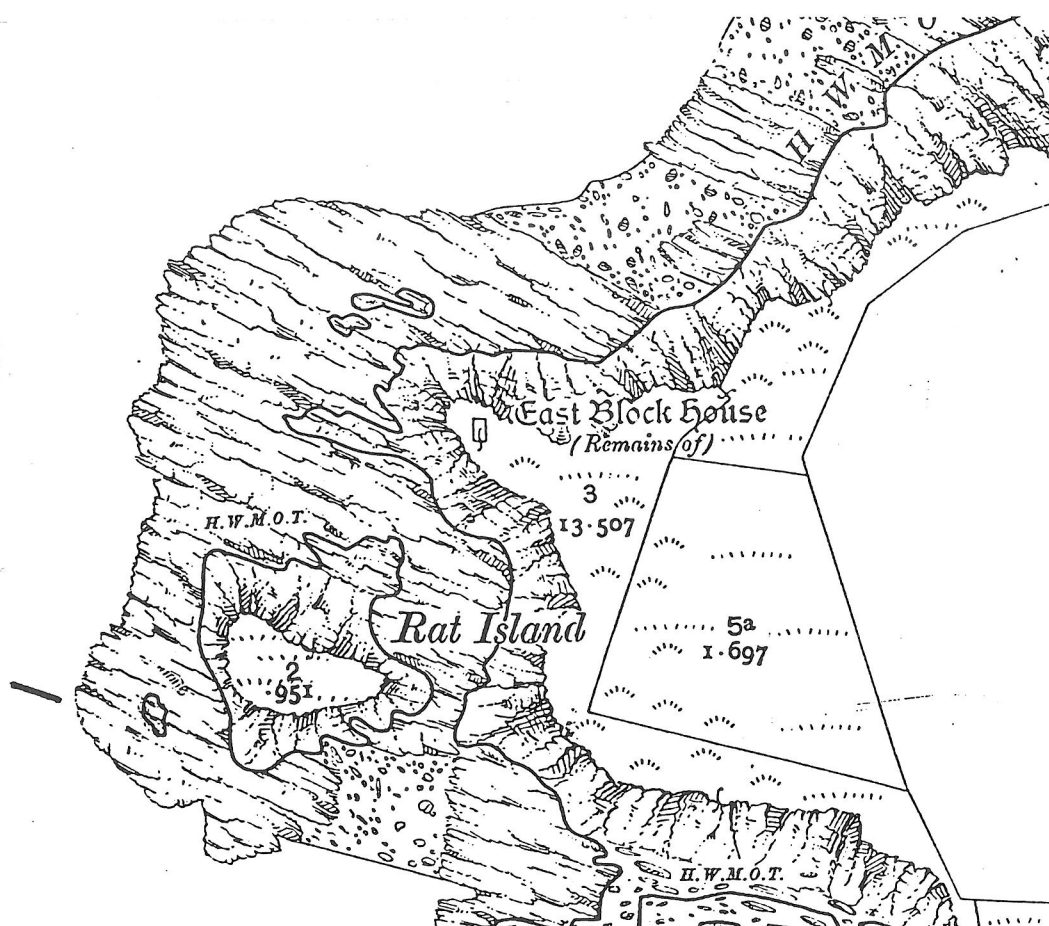


Figure Four: Ordnance Survey 25" (1:2500), 2nd ed, 1900

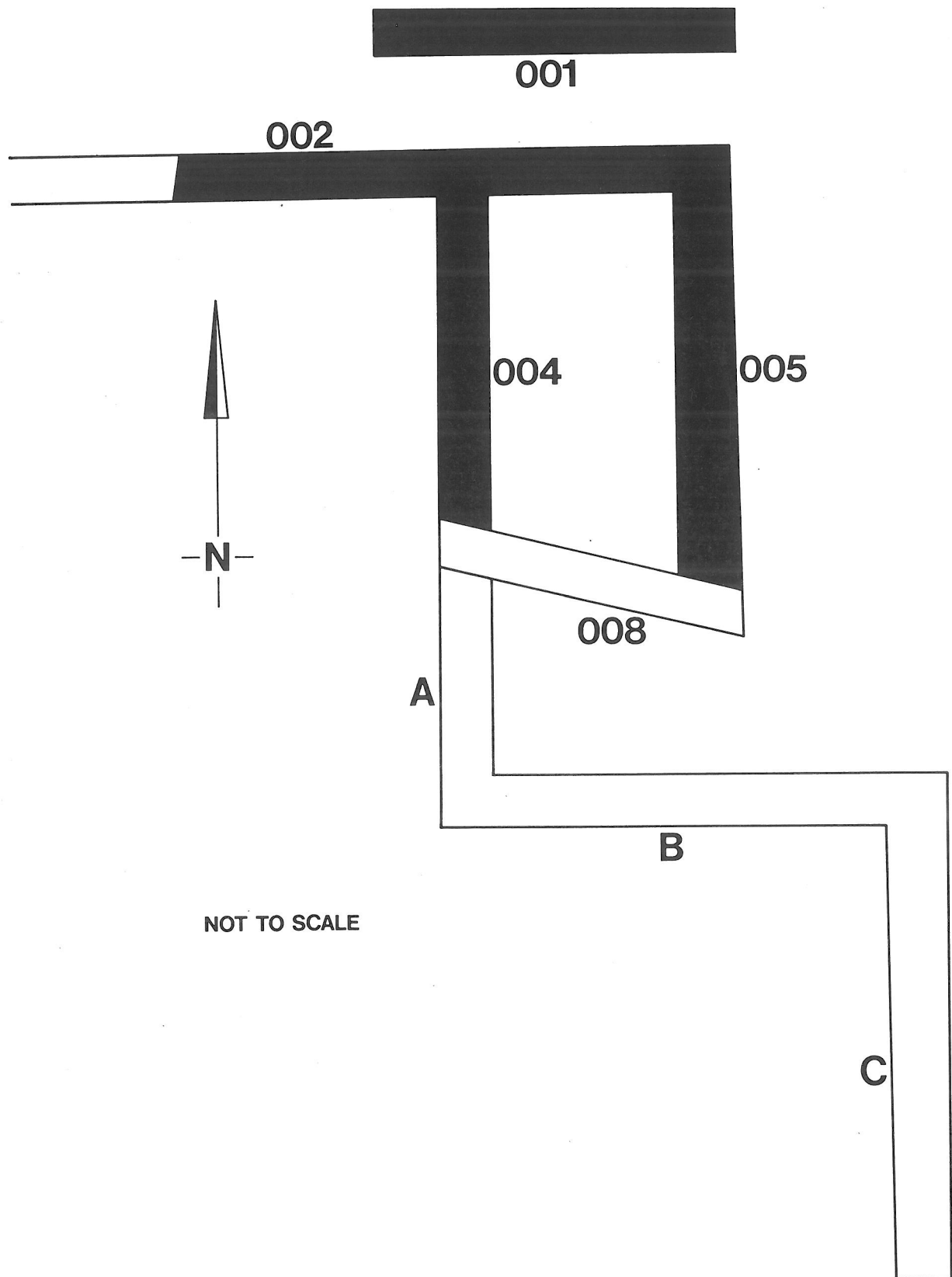


Figure Five: Schematic plan showing lost walls