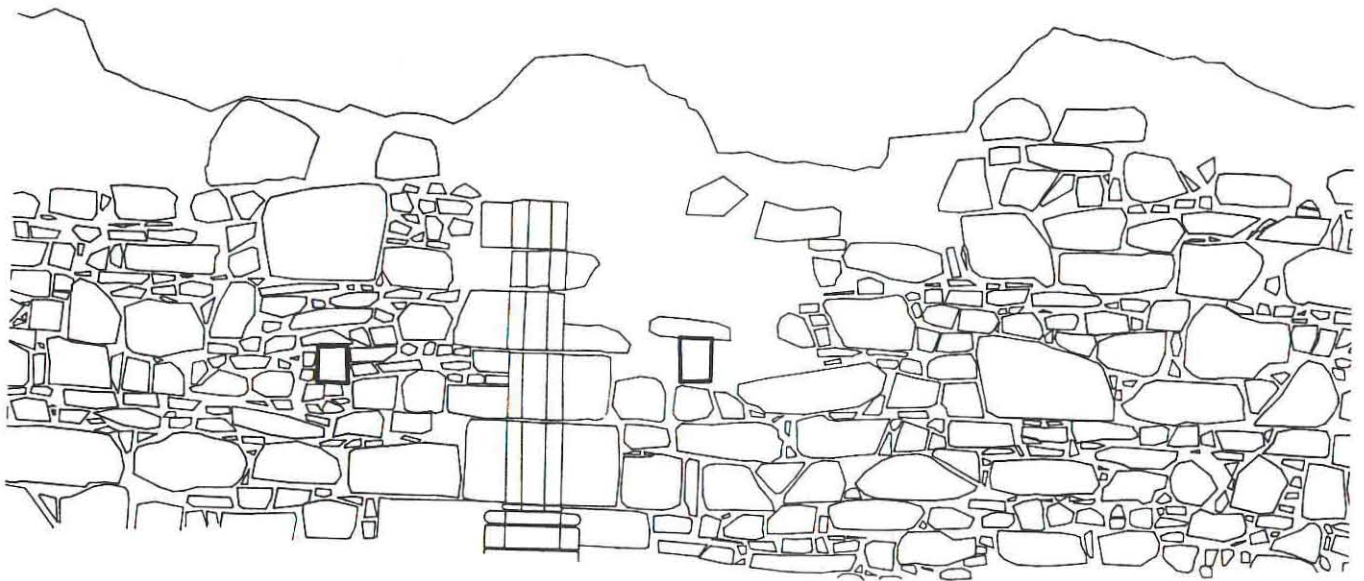


THE CLWYD-POWYS ARCHAEOLOGICAL TRUST

# *Abbeycwmhir*

RE-SURVEY OF THE RUINS



*pillar base*

CPAT Report No 225.1

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*Abbeycwmhir*  
RE-SURVEY OF THE RUINS

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December 1997

Report for Cadw/Welsh Historic Monuments

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## **1 THE VISIBLE REMAINS OF THE ABBEY**

- 1.1 The 12th-century Cistercian monastery at Abbeycwmhir, in northern Radnorshire, was both the largest and one of the remotest in Wales. A greater part of the monastic complex was dismantled at the Dissolution, and although parts of the original plan are known from small-scale excavations carried out in the 1820s and 1890s, only parts of the church are visible today. A description of the monastery and its historical background are provided by Raleigh Radford (Radford 1982).
- 1.2 Of the nave, all that remains visible above ground are the outer walls of the north and south aisles and three pier bases of the original fourteen-bay colonnade; the west wall of the nave is largely missing, but shows as a bank. At the eastern end, parts of the west walls of both the north and south transepts still survive, as well as a fragment of the north wall of the north transept, and a slight bank suggesting the line of the south wall of the south transept.
- 1.3 It has been suggested that the eastern crossing and chancel were never completed: traces of what is assumed to have been a temporary wall at the east end of the nave is represented by a stony bank. The bases of some of the pillars belonging to vaulting in the north and south aisles and the west wall of the north transept remain, although in most cases the dressed sandstone has been robbed away, leaving gaps corresponding to the original responds. At the eastern end of the nave the pier bases of the west crossing arch are partly visible, and the base of the respond at the junction between the north aisle and north transept still survives. No windows or doorways remain.

## **2 SURVEY WORK 1988**

- 2.1 A survey of the standing remains and a contour survey of some areas immediately around them, was carried out by CPAT with a small Community Programme team between May and August 1988, funded by the Manpower Services Commission. The survey took the form of a combined drawing and photographic survey of the standing remains, together with a detailed contour survey at 1m intervals of the claustral area, the nave interior and a stretch of the possible precinct boundary to the east of the church (Adams 1988).
- 2.2 Recording of the standing walls proceeded through the following stages:
  - 2.2.1 A base elevation drawing of each stretch of wall was prepared showing certain key features - the outlines of the wall, putlog holes, moulded stonework, and the extent of original facing stones etc - on a 2m grid.
  - 2.2.2 A photographic record on black and white 35 mm negative film was made of all wall surfaces with a standard 50 mm lens at a distance of 8m. This showed the same datum line and grid points used in preparation of the base drawing. Each frame was taken at the centre of the 2m grid, and both the centre of the base grid and its position are indicated on the photographs.
  - 2.2.3 Prints were enlarged to the same scale as the base drawings, and facing stones not recorded on the field drawings were traced onto the base elevation drawings, making a 'best fit' where there was any discrepancy between the field drawing and the photograph due to lens distortion
  - 2.2.4 Subsequent checking in the field showed that the maximum error in the case of wall facings was minimal, and in the order of 40 mm across the width of a 2m grid. The greatest problems were encountered with areas obscured by tree roots, and by parallax in the case of upstanding pillars of core masonry which it proved difficult to draw by conventional methods. In the latter case, some remedy was found by taking an outline of the wall from longer distance shots. Subsequent checking has shown maximum errors of about 300 mm in these instances.



### 3 SURVEY WORK 1997

- 3.1 The re-survey of the abbey ruins was carried out at the request of Cadw:Welsh Historic Monuments, who provided the funding. The survey was undertaken in two stages following reconsolidation work. The first stage, during Spring 1997, comprised a survey of the south wall of the nave and part of the south transept. The second stage was conducted during December 1997, completing the survey of the south transept as well as recording the interior of the north wall of the nave where reconsolidation had been undertaken. The reconsolidation work had lowered the ground level against parts of the walls, revealing additional facing not visible in 1988. New detail of putlog holes and masons' marks was also uncovered. In the years between the two surveys some masonry had become displaced, while the reconsolidation had inevitably altered the outline of the corework. The aim of the 1997 survey was therefore to record all new details and provide a drawn and photographic record to enable a comparison of the surviving masonry between the two surveys. The reconsolidation work is still in progress and will ultimately complete the north wall of the nave, north transept and part of the eastern crossing wall. Further survey work may therefore be undertaken at a later date to incorporate these areas.
- 3.2 The re-survey was conducted using a Wild TC500 EDM with Penmap survey software (versions 1.27 and 2.49) to record a plan of the nave and south transept, together with outlines of the corework. Targets were then temporarily attached to the wall on a rough 2m grid, their positions being accurately surveyed before being photographed.
- 3.3 The photographic survey involved a series of overlapping views taken in black and white 35mm format with a 50mm lens from a distance of 8m from the wall face, each view including sufficient targets to allow for later rectification. Masons' marks were also photographed, and general views were recorded on colour slide 35mm format.
- 3.4 A 10' x 8' print was made of each view, and these were then rectified and digitised in AutoCAD12, using the data from the EDM survey to provide an accurate base drawing. The results were subsequently plotted at 1:40 to provide the illustrations in this report. In each drawing the level line is at 250.00m OD.

### 4 BUILDING METHODS

#### 4.1 Building materials

- 4.1.1 A brief study was made of the building materials during the 1988 survey, which showed that the principal stone is a hard, grey, fine-grained quartzite of a type common to the area (not 'hard limestone', as suggested in Radford 1982, 69). It has been suggested that an old quarry at Fowler's Cave (PRN 244; SO 05827154) on the summit of a hill to the north-east of the abbey may have been used as a source of building material. In addition, there are occasional blocks of conglomerate containing quartz clasts in a similar matrix, which were probably obtained from the same source.

- 4.1.2 Minor quantities of slate were used as packing in the facing stones, and as string courses in the core masonry.

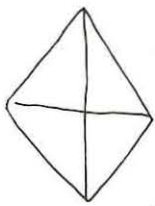
- 4.1.3 The surviving moulded stone at the site is composed of a yellowish-brown, fine-grained sandstone which is said to come from the Grinshill quarries near Shrewsbury (Radford 1982, 69). Blocks of similar dressed sandstone were also used to form the faces of the putlog holes through the core of the walls, which represent waste material or possibly, reused materials from the earlier establishment at Ty Faenor (cf. Radford 1982, 66).

#### 4.2 Constructional methods

- 4.2.1 Putlog holes, about 200 mm across, presumably used to support scaffolding during the construction of the abbey, appear to have been spaced at horizontal intervals of between about 2.5-4m. The walls are between 1.5-1.8m thick, and have a rubble core faced with angular blocks of stone which are characteristically 0.2-0.3m thick. The facing appears to have been built in 'lifts' of about 0.5m, which correspond with courses of the dressed masonry of the vaulting responds, and then filled with a mortared rubble core. Only parts of the original mortaring of the wall faces still survives in places. Occasionally, larger blocks of stone appear to have been used as ties between the inner and outer wall faces.

#### 4.3 Masons' marks

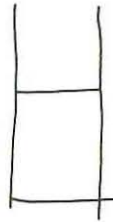
4.3.1 A total of 10 masons' marks were identified, mostly inscribed on dressed sandstone blocks (scale 1:2). See Drawings 7-11 for locations.



1



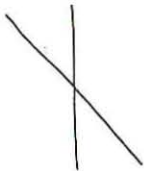
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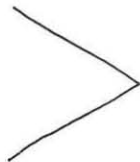
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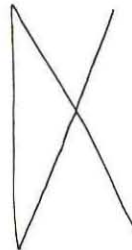
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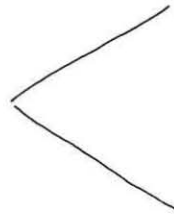
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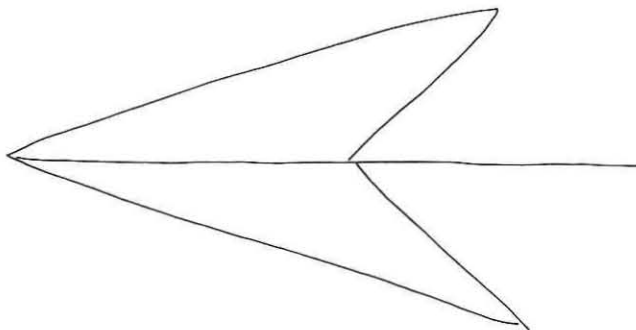
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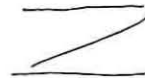
7



8



9



10

## 5 ACKNOWLEDGEMENTS

Thanks are due to the landowner, Mr Hamer, members of the 1988 survey team supervised by Mark Adams. The 1997 survey was conducted with the assistance of Wendy Owen and the overall plan (Drawing 1) was produced by Brian Williams.

## 6 BIBLIOGRAPHY

Radford, C.A.R., 1982. The Cistercian Abbey of Cwmhir, Radnorshire, *Archaeologia Cambrensis*, 131, 58-76.  
Haslam, R., 1982. *The Buildings of Wales: Powys*, (Penguin Books).



# ABBEYCWMHIR

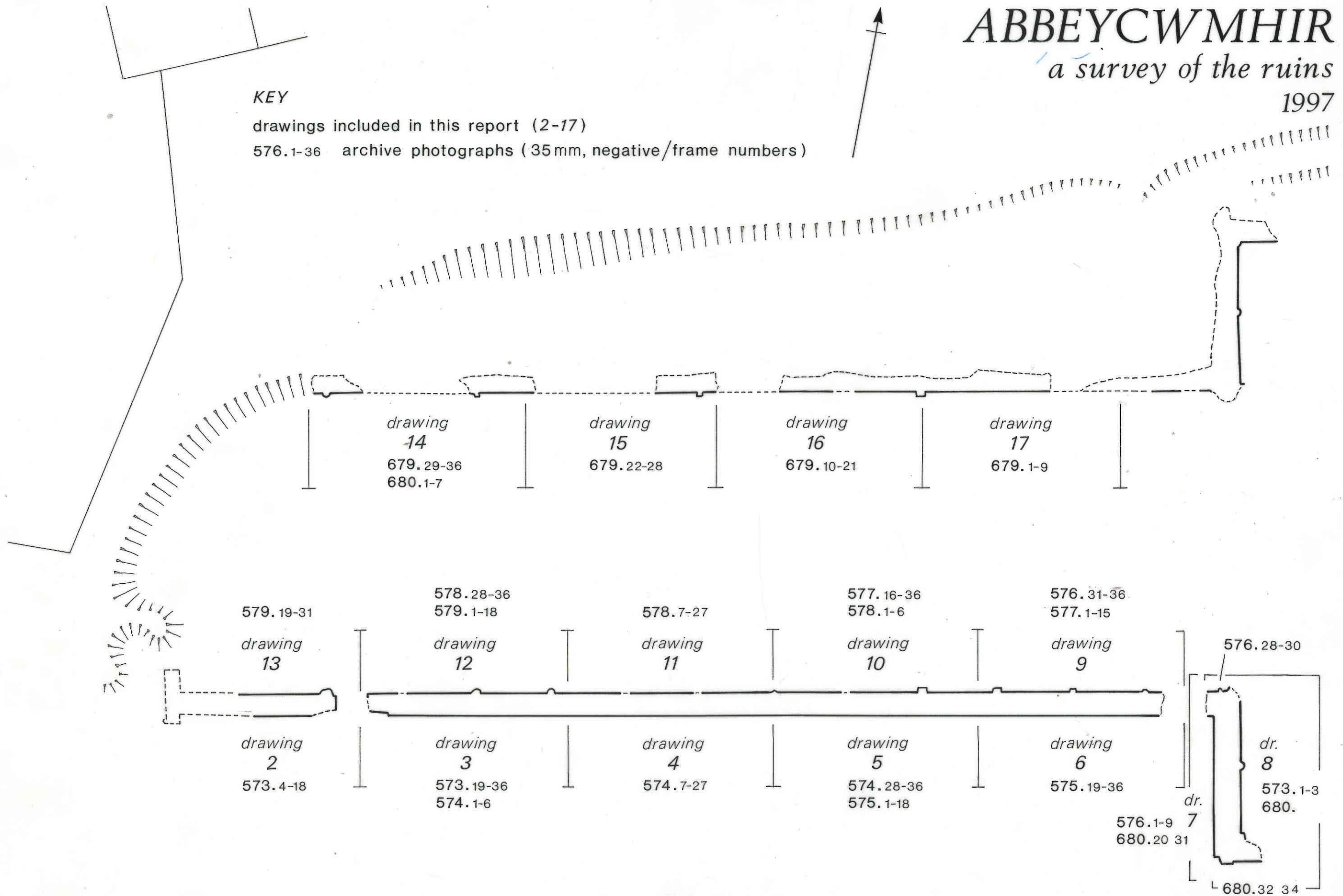
*a survey of the ruins*

1997

## KEY

drawings included in this report (2-17)

576.1-36 archive photographs (35 mm, negative/frame numbers)

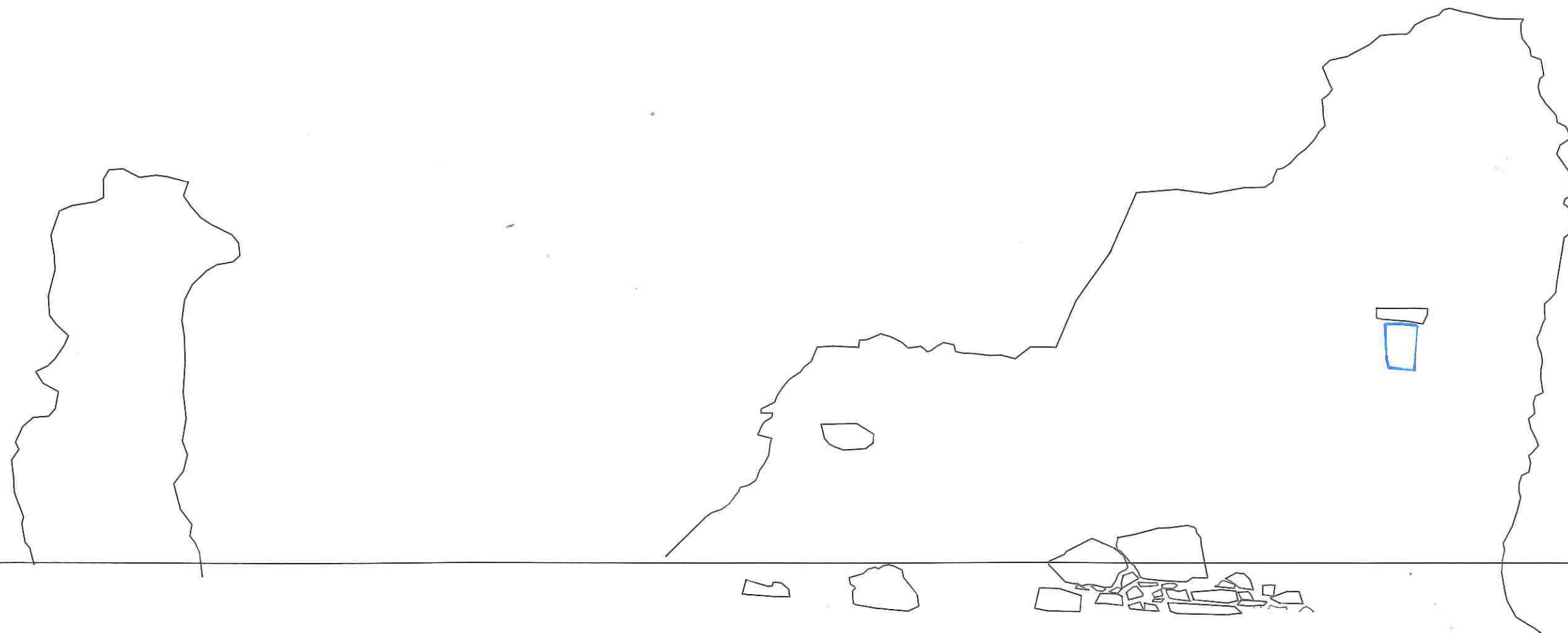


0 5 25 50 m

DRAWING 1

# ABBEYCW MHIR

Survey 1997



putlog holes

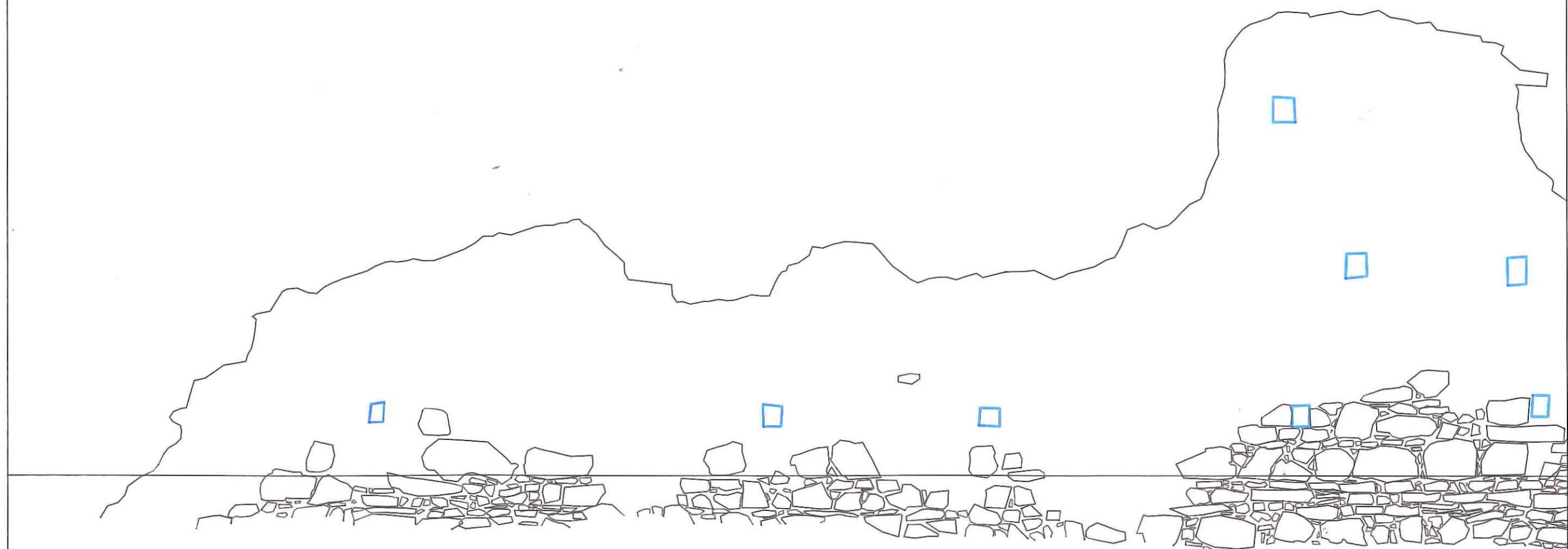


DRAWING 2



# ABBEYCW MHIR

Survey 1997



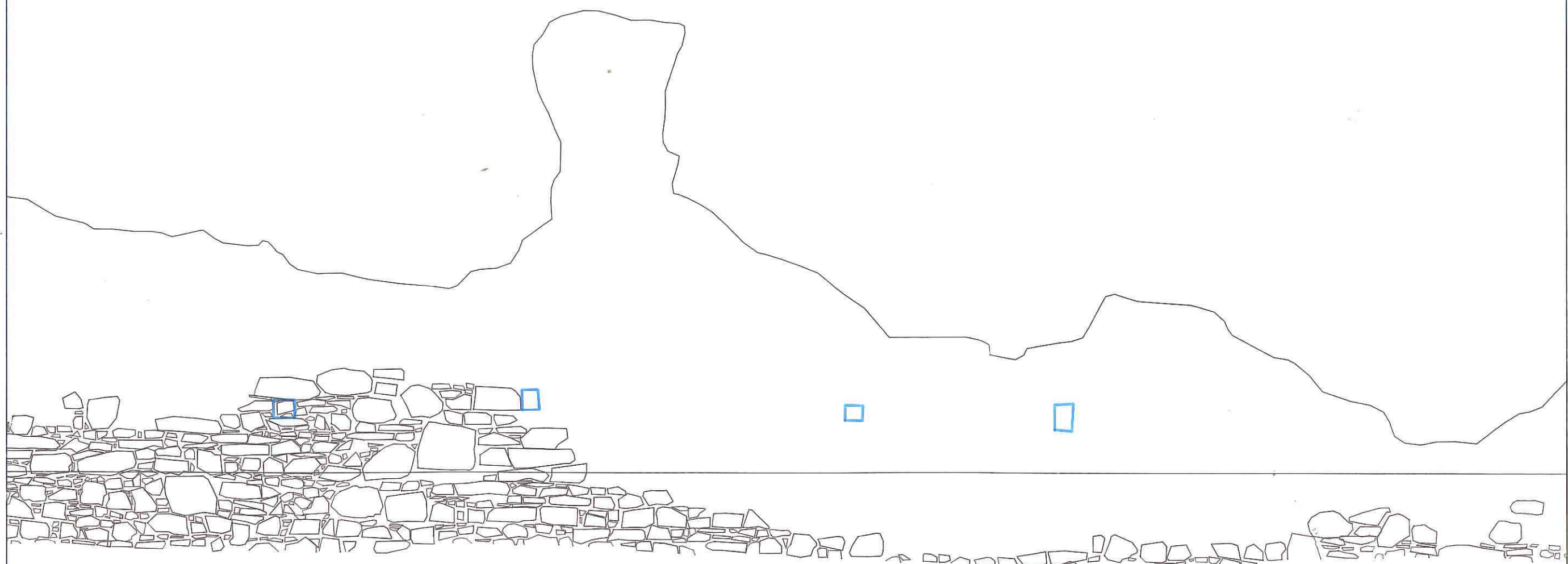
 putlog holes

0 1 2 3 4 5m

DRAWING 3

# ABBEYCW MHIR

Survey 1997



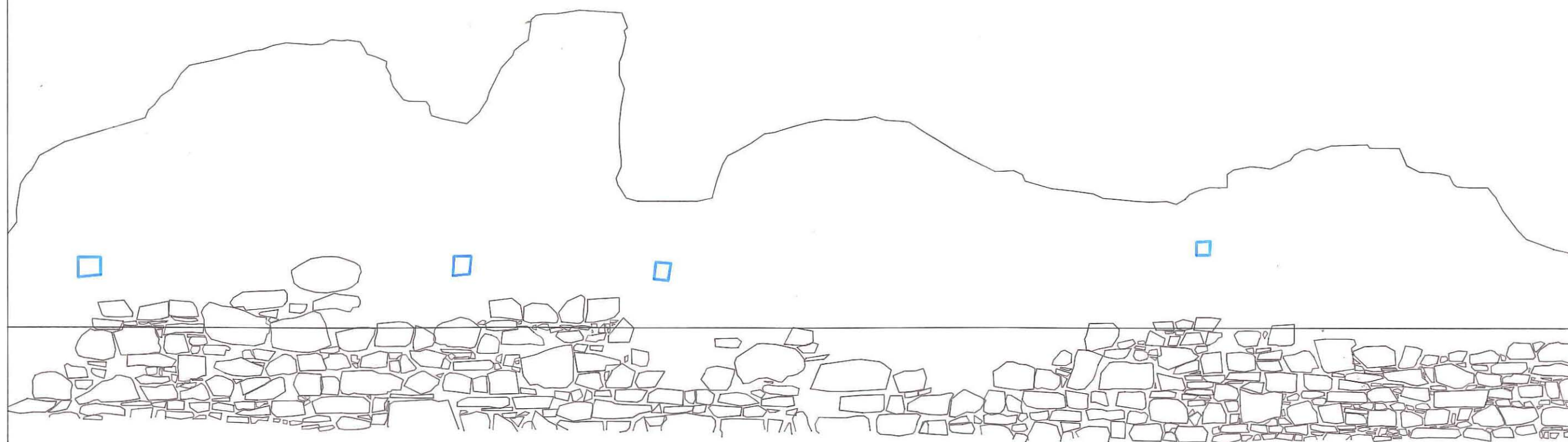
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0 1 2 3 4 5m

DRAWING 4

# ABBEYCW MHIR

Survey 1997



 putlog holes

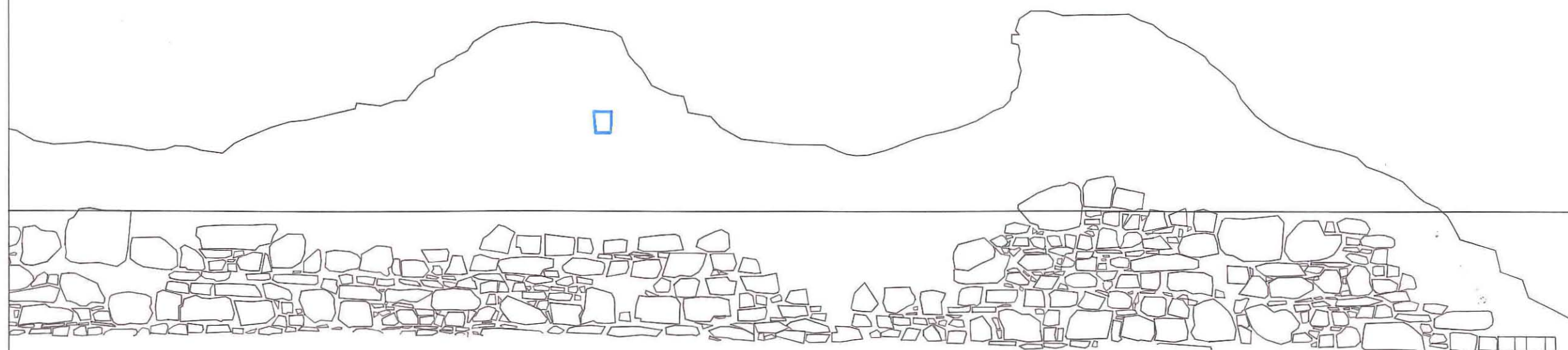
0 1 2 3 4 5m

DRAWING 5



# ABBEYCWMHIR

Survey 1997



pillar base

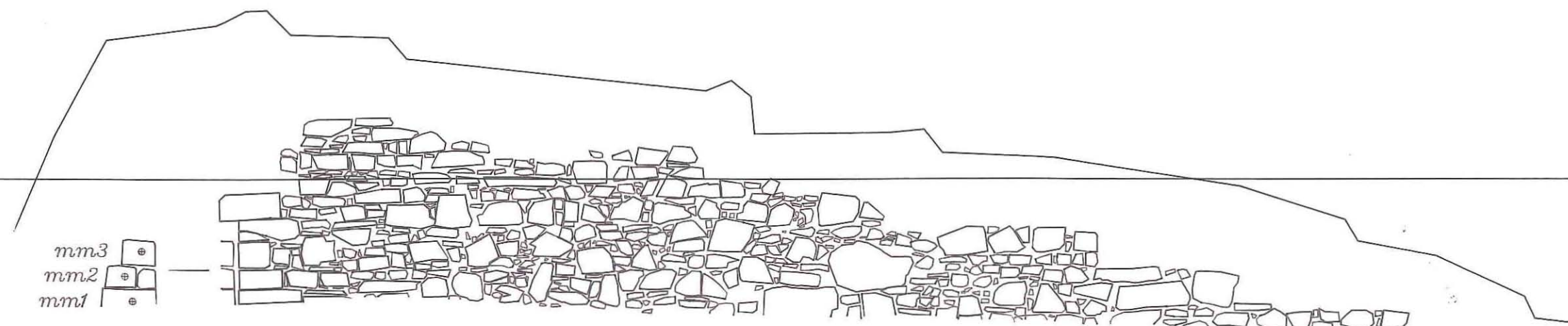
 putlog holes

0 1 2 3 4 5m

DRAWING 6

# ABBEYCW MHIR

Survey 1997



nave exterior,  
SE corner

south transept exterior

• mm masons' marks

0 1 2 3 4 5m

DRAWING 7

# ABBEYCW MHIR

Survey 1997

250m OD

south transept exterior end wall

pillar base

pillar base

south transept west wall interior

pillar base

south transept,  
north end interior

mm mason's marks

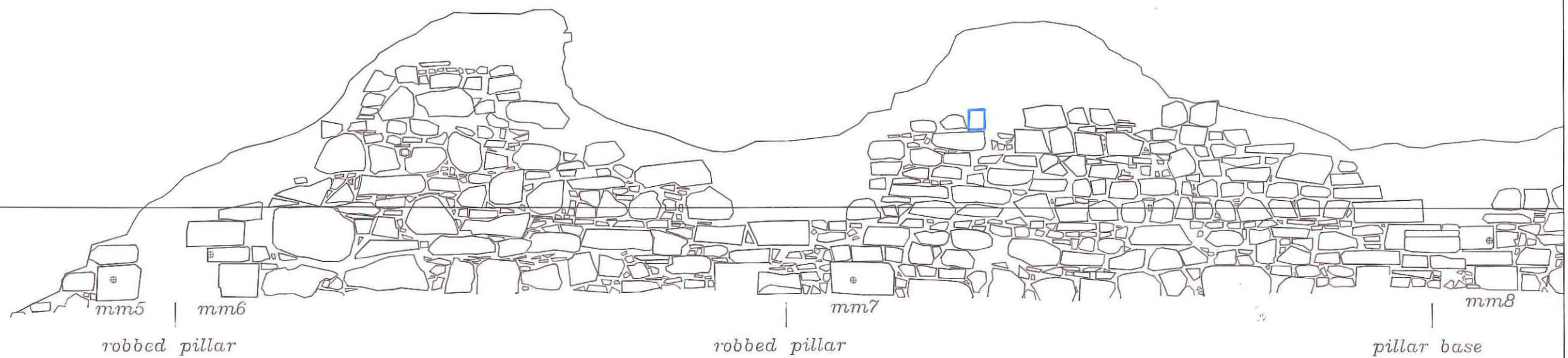
0 1 2 3 4 5m

DRAWING 8



# ABBEYCWMHIR

Survey 1997



⊕ mm masons' marks

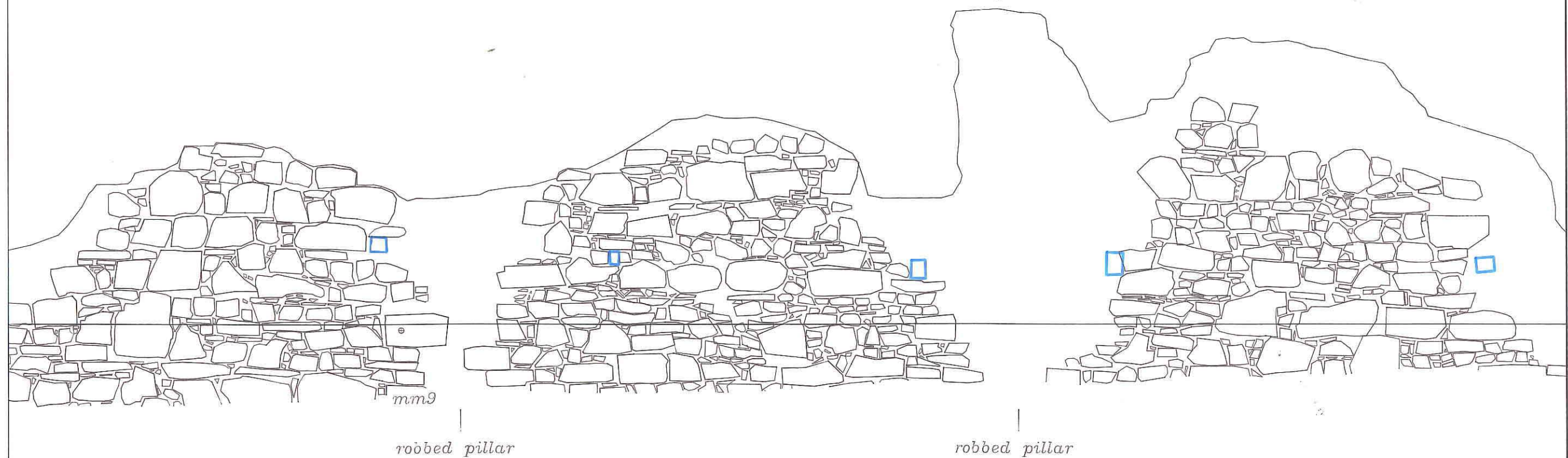
□ putlog holes

0 1 2 3 4 5m

DRAWING 9

# ABBEYCWMHIR

Survey 1997



mm masons' marks

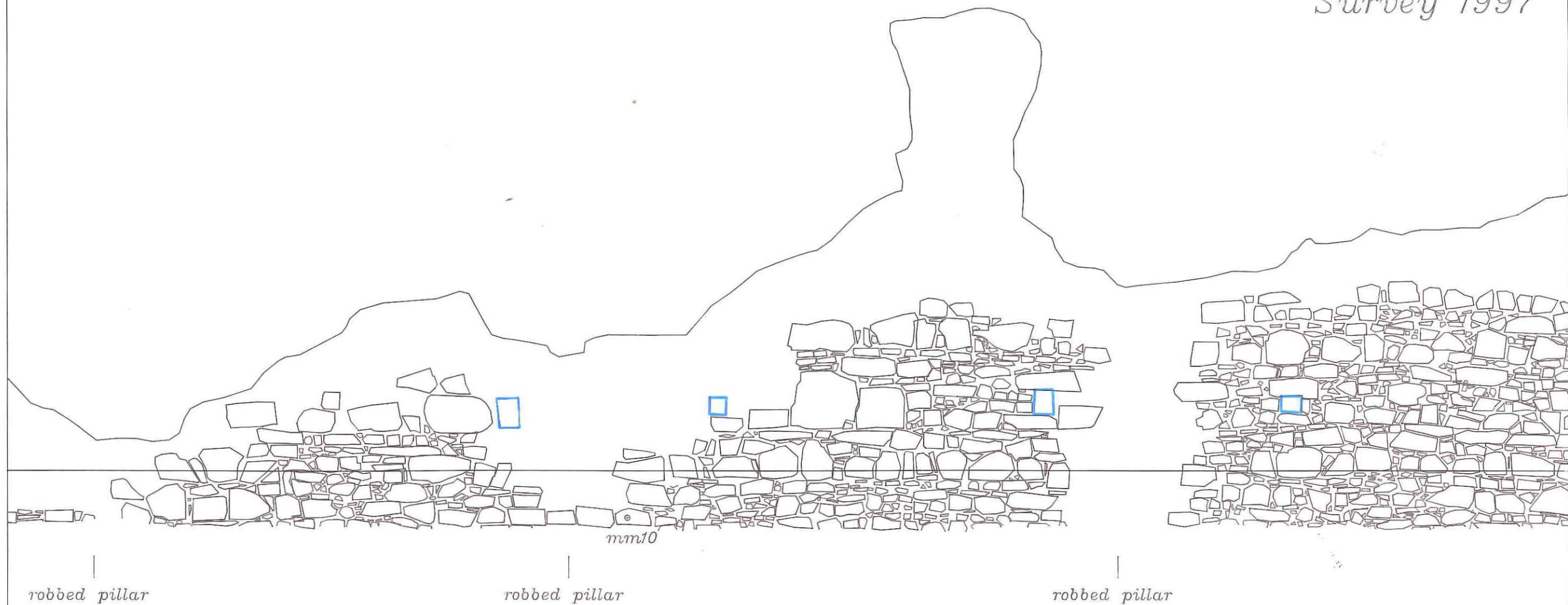
putlog holes

0 1 2 3 4 5m

DRAWING 10

# ABBEYCWMHIR

Survey 1997



mm masons' marks

putlog holes

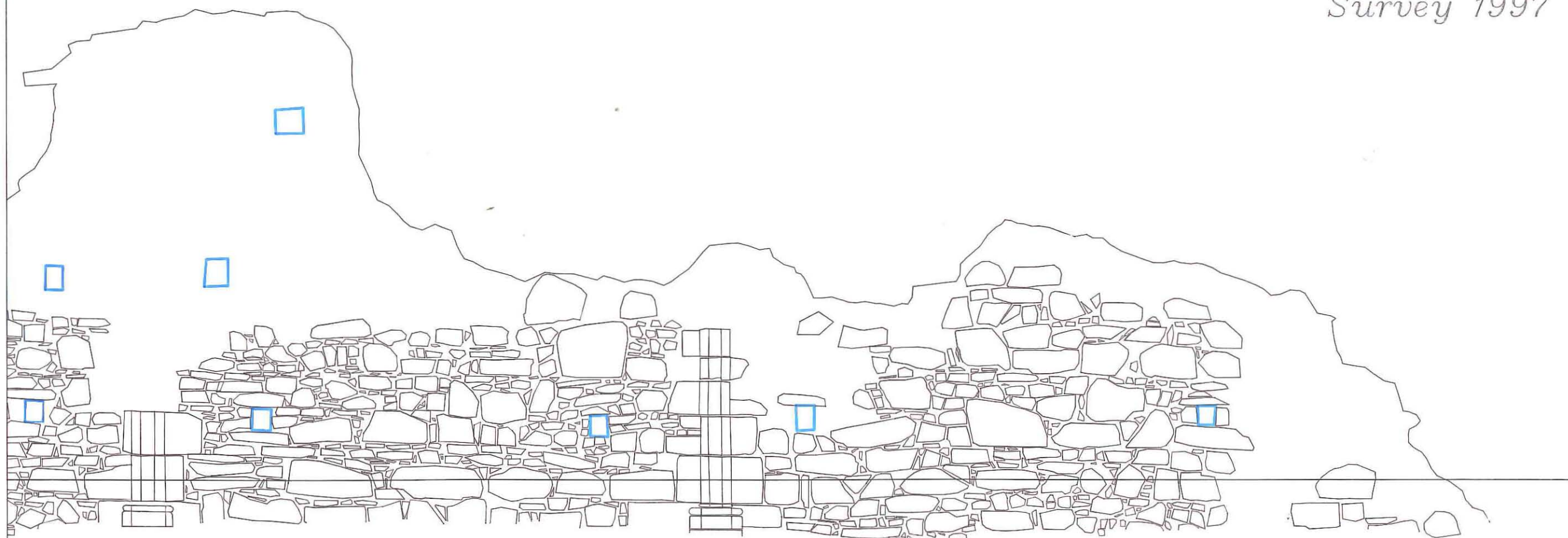
0 1 2 3 4 5m

DRAWING 11



# ABBEYCWMHIR

Survey 1997



pillar base

pillar base

robbed pillar



putlog holes

0 1 2 3 4 5m

DRAWING 12

# ABBEYCW MHIR

Survey 1997



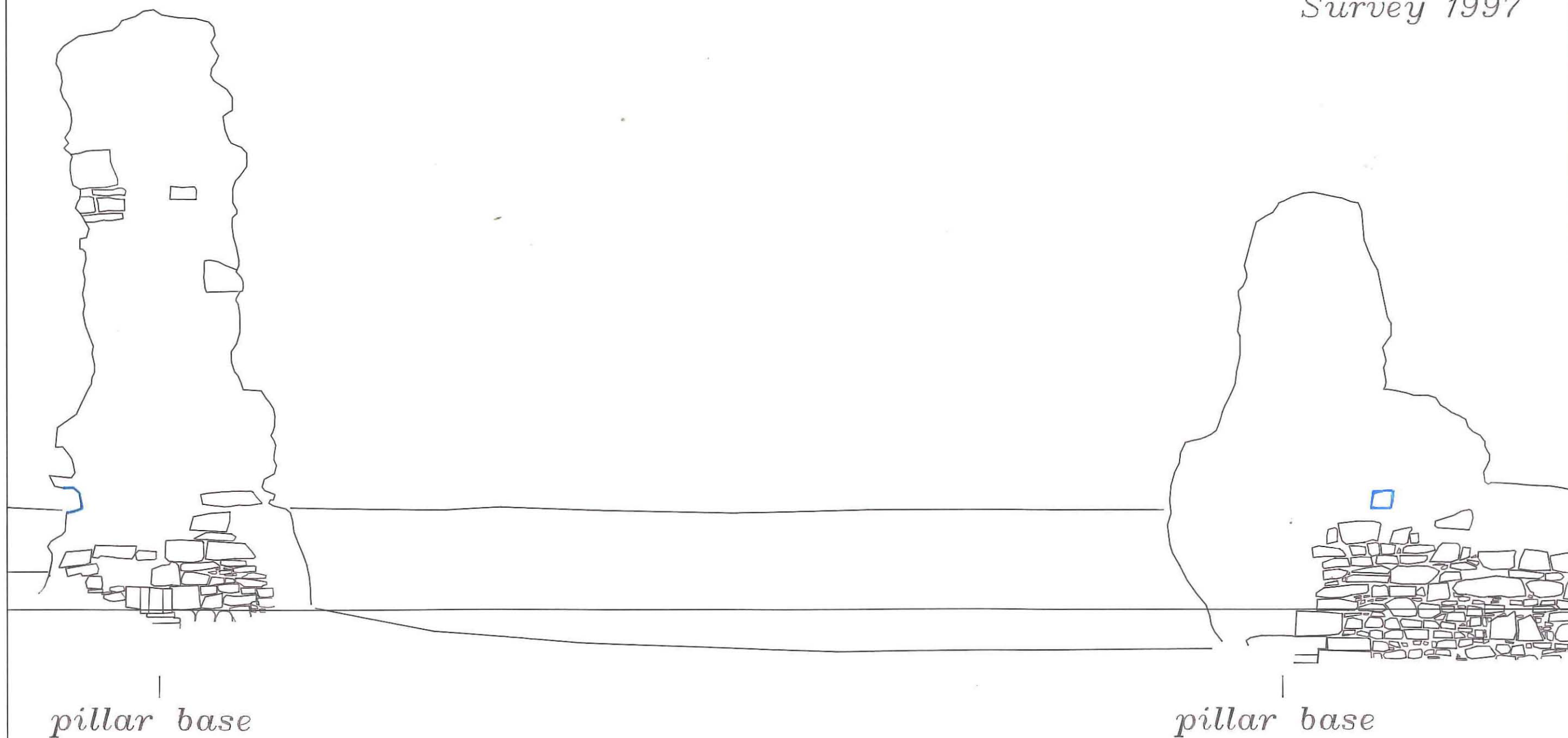
 putlog holes

0 1 2 3 4 5m

DRAWING 13

# ABBEYCW MHIR

Survey 1997



putlog holes

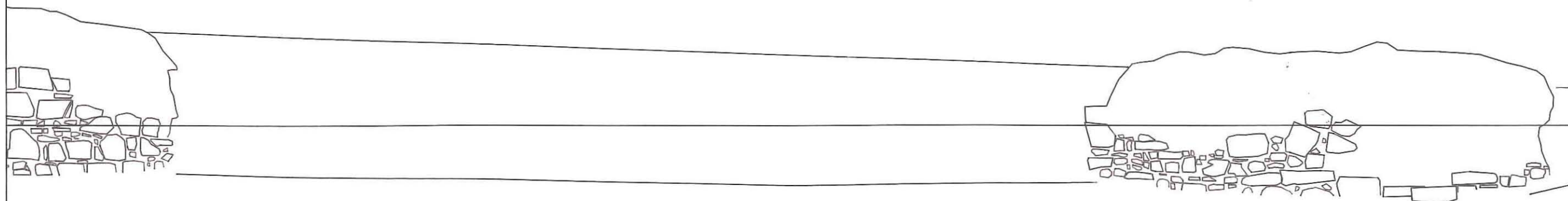
0 1 2 3 4 5m

DRAWING 14



# *ABBEYCWMHIR*

*Survey 1997*



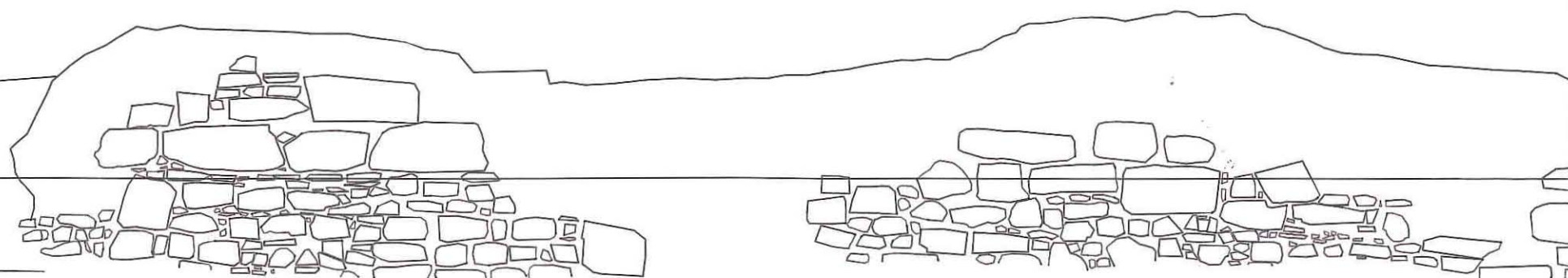
*pillar base*

0 1 2 3 4 5m

*DRAWING 15*

# *ABBEYCW MHIR*

*Survey 1997*



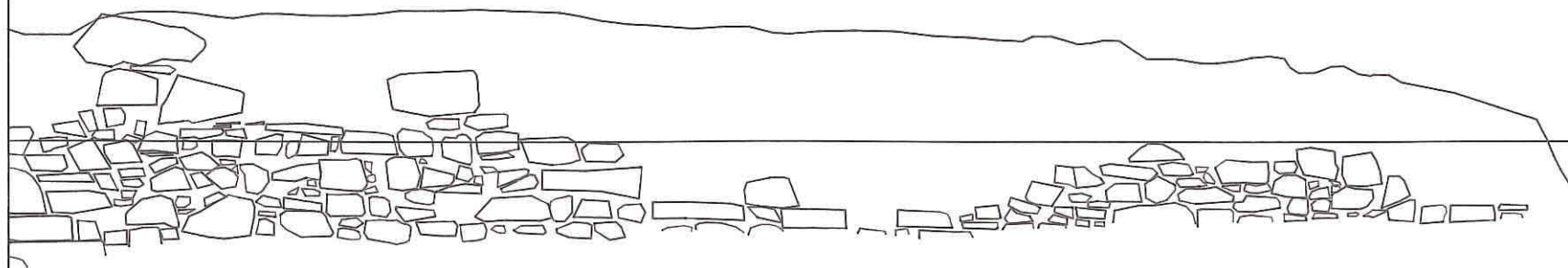
*pillar base*

0 1 2 3 4 5m

*DRAWING 16*

# *ABBEYCW MHIR*

*Survey 1997*



0 1 2 3 4 5m

*DRAWING 17*