

THE CLWYD-POWYS ARCHAEOLOGICAL TRUST

*Plâs Machynlleth, Machynlleth, Powys:*  
ARCHAEOLOGICAL EXCAVATION

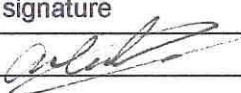


CPAT Report No 208

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*Plâs Machynlleth, Machynlleth, Powys:*  
ARCHAEOLOGICAL EXCAVATION

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November 1996

Report for Powys County Council

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## **1 Introduction**

- 1.1 In Spring 1994 the Clwyd-Powys Archaeological Trust (CPAT) was commissioned by Watkins Jones and Son Ltd of Bangor, acting on behalf of the Architects Messrs Arrol and Snell of Shrewsbury, to carry out an archaeological investigation of land affected by the construction of an exhibition building at Plâs Machynlleth, Machynlleth, Powys which was to be constructed as part of Montgomeryshire District Council's *Celtica* Project.
- 1.2 The site affected by the development (fig 1) lay within the gardens of Plâs Machynlleth which were established by Sir John Edwards after 1844/5. The creation of the garden involved the realignment of Heol Pentrehedyn 20m to the west of its former alignment, and the demolition of a number of buildings along the road. Archaeological excavations in 1988-9 (Barfoot 1991), in advance of the construction of the Bro Ddyfi Leisure Centre, demonstrated that the previous road line and associated buildings were well preserved to the north-west of the development area, and may well have extended into the current development area.
- 1.3 A brief for the archaeological investigation of the site was prepared by the curatorial section of CPAT on behalf of Montgomeryshire District Council (CPAT EVB 71). The brief recommended a three stage response to the development consisting of an initial evaluation phase (stage 1), a secondary phase of total excavation of the affected area (stage 2), the implementation of which would be dependent on the results of stage 1, and a watching brief (stage 3) to be carried out during topsoil stripping and trench cutting associated with the main building development. A written specification for the work was then prepared by the contracts section of CPAT, which was submitted to the client for approval, and which was subsequently accepted.
- 1.4 Work on stage 1 of the investigation commenced on 9th of May 1994 under the direction of AG and continued for a period of three days. Two 1.5m x 10m trenches were excavated by machine and cleaned by hand which revealed the existence of significant archaeological deposits on the site, consistent with the suggestion made in the brief that there were surviving elements of pre-1844/5 buildings on the site.
- 1.5 It was decided after consultation with Montgomeryshire District Council to proceed immediately with stage 2 of the investigation, which commenced on the 17th of May, under the direction of AG, and continued for a period of 18 working days until the 10th of June. Stage 2 of the investigation involved the amalgamation of the stage 1 trenches to create a single trench measuring 12m x 10m (fig 1, Site C). This was fully excavated down to the natural gravel subsoil level. The results of both stages of investigation are dealt with together in this report.
- 1.6 Stage 3, the watching brief, was undertaken by JB during July 1994.

## **2 RESULTS OF THE EXCAVATIONS (Site C)**

- 2.1 The excavations at Plâs Machynlleth demonstrated the survival of substantial well-preserved archaeological deposits (figs 2 and 3). Both clay- and mortar-bonded mudstone walls of former buildings were associated with slate-flagged floors and thresholds and with surfaces of well-laid water-worn cobbles. These buildings fronted the former line of Heol Pentrehedyn which was recognised by its hard gravel and blue clay metalling (fig 2 [24 & 73]) set on a basal layer of mudstone hardcore [23]. The intersections, superimpositions and modifications of walls, surfaces and other stratified deposits indicated a history of building alterations on the site. The stratigraphy suggests that there were five phases of building activity but the ceramic record suggests that this activity spans a relatively short period from the late 18th century to the demolition of the buildings just before the middle of the 19th century.



These phases are described and discussed below in their relative chronological sequence. Numbers in square brackets are context numbers.

## **2.2 PHASE 0 (not illustrated)**

- 2.2.1 Phase 0, the earliest phase identified and preceding the main building phases, consisted of a single shallow, square-sided feature [70], filled by a grey-brown loam [69] which contained a single sherd of Coal Measures Red slipware and a bovine horn core. The pottery can probably be dated to the late 17th or early 18th century (see below). This feature was demonstrably earlier than the first building phase on the site as it underlay the northern corner of the wall of this building. It was also sealed by the cobbling [61] in the entrance of the second phase building (fig 2).
- 2.2.2 Feature 70 was cut into the underlying orange mottled gravel subsoil [100]. It was not recognised within the dark brown loam-gravel layer [44/57/66] which overlay context 100 in most parts of the site and which is interpreted as a former topsoil.

## **2.3 PHASE I (figs 2 & 4)**

- 2.3.1 Phase I represents the first of the building phases and comprises a single rectangular building consisting of walls 32, 36, 58 and 75 (fig 2) all of which were constructed from clay bonded mudstone. This building measured 3.8m E-W x 4.8m N-S internally. The walls, where their full width could be determined, averaged 0.56m wide at their highest surviving level, increasing to 0.62m at the level of the footings in the NW. The surviving walls varied from 0.14m high in the S to 0.44m high in the N. The walls sat directly on the natural gravel surface [100] and had been presumably cut through the former topsoil [44/57/66], though no traces of wall-trench could be identified in this stratum.
- 2.3.2 The entrance or entrances to the building could lie in any of the NW, NE or SE corners. In the NW corner (W wall), later building phases have had a detrimental effect on the wall survival. In the SE corner, the corners of the S and E walls were removed during the excavation of the trial trench, their loose rubble construction making them indiscernible from the loose rubble overburden which was machined off. In the NE corner, the N wall was seen to continue underneath the flagged threshold of phase II. It remains a strong possibility that the entrance lay in the NE corner of the E wall. Here the wall thickens as if forming a return and no trace of a continuation of the wall was located below the phase II cobbles [61]. However, there was similarly no trace of a threshold or sockets for wooden door furniture.
- 2.3.3 The interior of the building accommodated the ash-pit of a corn-drying or malting oven or kiln which consisted of a brick and stone built ash-pit (fig 2) cut into the underlying natural [100]. Two steps allowed access to the ash-pit. The upper step had two shallow and circular pivot holes and a short rectangular slot cut into it, which suggested the existence of an access door. The ash-pit was filled with a mixture of ash and demolition rubble, and by collapsed flags at the uppermost level.
- 2.3.4 No interior or exterior surfaces were recognised which could be associated with this phase.

## **2.4 PHASE II (figs 2 & 4)**

- 2.4.1 The walls or wall-lines of phase I were retained in phase 3. The W and S walls were used as footings for the phase II building. A wall running from N-S [31] was butted against the W end of wall 32, the E end of which was cut through by the right-angled wall 37/76. The original building had become a room (room 1) within a larger structure. Wall 31 may be associated with wall 30 (fig 3) to create another large room



(room 3) to the west of the original core, though direct evidence is lacking for the existence of this room until the following phase. All the walls of this phase were clay- or mortar- [34] bonded mudstone structures.

- 2.4.2 The upper courses of wall 32 at the E end were removed to create an entrance into room 1, and a threshold stone laid. A cobbled surface [61] ran from this entrance and into room 2, traces of the flagstone and cobble in-filled floor of which still remained [62]. Pottery from [61] indicates a late 18th or early 19th century date (see below).
- 2.4.3 Whether the area to the N of room 1 was an enclosed room or a yard is difficult to determine, though the limited evidence may favour the latter interpretation. Firstly, the angled nature of wall 37/76 would have resulted in a strangely shaped room, though this is not in itself an overwhelming argument in favour of the yard theory. Secondly, there was no trace of any flooring in this area associated with this phase. Thirdly, the well may have been associated with this phase, having been dug through the brown gravelly palaeosoil [44/57/66] the top of which was level with the threshold into room 1. Fourthly, the small wall [56] butting onto wall 31 and parallel with wall 32 was only 2 courses deep, sealed by later deposits and constructed on top of the palaeosoil already mentioned. Such shallow footings may be the base of some lean-to construction with a wooden superstructure in keeping more with external than internal architecture. None of these arguments are in themselves conclusive but may be combined to form a body of evidence in favour of a yard interpretation.
- 2.4.4 It may be during this period that the well [20] was excavated. Although there is no direct stratigraphic evidence until phase III, the well cut context 44, the top of which may have been the old ground surface of phase 2. The well measured c.0.75m in diameter and 4.5m deep with about 0.4m depth of water in the base. Auguring of the base proved it to be clean gravel with no silt covering. The shaft was edged with mudstone, vertical and well-constructed. It had later been capped with poor quality mudstone which had started to collapse.

## **2.5 PHASE III (figs 3 & 4)**

- 2.5.1 Phase III saw a remodelling of rooms 1 and 2. Wall 36 was removed down to footings level, and wall 35 added to extend room 1 into room 2. Both rooms were floored with slate flags [15] though the kiln or oven had only been filled with rubble [17] with one well-worn slab projecting into this rubble from floor 15. Wall 37 was removed down to footings level, although the south-eastern end was retained and wall 35 butted onto it.
- 2.5.2 Room 3 was certainly in existence by phase III. The ground surface within this room was levelled by the laying of a yellow clay base [60], into which was set, at the S end, a pitched slate floor (fig 2 [59]). Access between rooms 1 and 3 was possibly through the gap in the NW corner of room 1. The late 17th/early 18th century pottery from [60] is probably residual. A mortared surface [42] was then laid across the entire floor of room 2, and up against the interior of the walls. A flagstone [29] within 42 may represent a base for a wooden post, perhaps a roof support as may be the two similar flat stones within the pitched slate floor [59].
- 2.5.3 Within room 1 a malting oven was constructed, the footings of which were all that remained [17]. This would have had a brick superstructure within which would have been set perforated floor tiles, fragments of which were found in the upper levels of room 1. The hollowed and charred slab [18] would have allowed access to the fire whose temperature would have been regulated by iron doors above floor level.
- 2.5.4 A wall [40] was constructed across the S end of room 3, on the street frontage and overlying the road surface which was located directly beneath the eastern end of the pitched floor [59]. This wall butted onto wall 34. Outside this wall a cobbled surface



[25] was laid on top of the road metalling. This cobbling may well be associated with an entrance in the SE corner of room 3, outside the excavated area.

2.5.5 The yard area was also remodelled by the laying of the cobbled surface [8] over a gravelly levelling [43], the addition of wall 38 and the threshold 27. The gravelly levelling [43] contained early 19th century pottery. Wall 38 probably represents a lean-to structure built against the exterior of the W wall of room 3 and possibly a N extension of wall 35, outside the area excavated.

2.5.6 The cobbles [8] were laid around the uppermost surviving stones of the well-head which, if not as early as phase II, was certainly in existence by this phase and disused by phase IV (see below). Large flagstones formed a flagged area around the well opening. These lay directly on 43 and the cobbles [8] were laid around them.

## 2.6 PHASE IV (figs 3 & 4)

2.6.1 The basic ground plan of phase III was retained in phase IV, but the putative entrance to room 1 from room 3 was blocked.

2.6.2 Two pits were cut through the lower flagstone floor [15] in room 1. Pit 11 was oval in shape with a possible flue to the south. The lower fill [10] was a hard coal dust which extended up the sides of the pit and along the flue. The upper fill [9] was a loose mixture of mortar and bricks. The other pit [14] was circular in shape with a lower fill [13] of coal dust similar to 10. The upper fill [12] was a blue-grey clay, the top of which lay flush with floor 15.

2.6.3 A slate built covered drain [21, 22] was chopped through the cobbled surface [8] in the yard, and through wall 32 and the doorway through 35. This drain lead water into the well [20] indicating that the well was disused by this phase. Some stones lining the well were removed to allow access for the drain which was floored with overlapping re-used roofing slates. The south-eastern end of the drain led from room 1 just to the north of pit 11, but was truncated at this point, so it is unclear where it began.

2.6.4 In this phase, the well also acquired a capping of large mudstone flags [19] and rubble packing including fragments of perforated flooring from the malting oven. Early 19th century pottery was incorporated within this capping. The capping flags had started to fragment, were inwardly pitched and were in imminent danger of collapse.

2.6.5 Part of a structure was uncovered in the NE corner of the trench, which chopped through the cobbled surface [8]. It consisted of a wall [39], with an offset angle, which enclosed a flagstone surface [65]. An iron pivot was *in situ* in a threshold stone which extended into the eastern baulk of the north corner of the trench. A channel [64] flanked by mudstone edge-set stones and located just outside this structure to the south. It ran parallel with the wall and may well be associated with it.

## 2.7 PHASE V

2.7.1 Phase V sees the demolition of the property and the sealing of the deposits with a resulting layer of building rubble [1].



### **3 RESULTS OF THE WATCHING BRIEF (SITES A & B)**

#### **3.1 Site A (fig 1)**

- 3.1.1 A short length of disturbed roadside gutter was recovered which in both build and width paralleled that found during Barfoot's excavations on the Leisure Centre site in 1988-9 (Barfoot 1991).

#### **3.2 Site B (figs 1 & 5)**

- 3.2.1 The majority of the trench was occupied by a good length of pavement and gutter laid in the same manner as that observed in the 1988-9 excavations, though the gutter was narrower than that on the opposite side of the road. An unusual feature was a single row of quartz cobbles dividing the pavement and not quite central to a threshold stone in the west of the trench. No obvious explanation of this feature was recovered either from the excavations or from documentary research, though it may possibly represent some sort of boundary mark.
- 3.2.2 The mudstone wall in the west of the trench was clay-bonded and its comparative narrowness suggests that it may well have enclosed a yard or garden rather than being the external wall of a building. An iron pivot survived in this threshold stone.

#### **3.3 The Plâs**

- 3.3.1 During demolition and construction work within Plâs Machynlleth a well was discovered during the stripping of the ground surface that followed the demolition of the kitchen and servants' quarters in the north wing of the building. The well had been sealed using three 2" iron strips supporting two sheets of iron upon which a stone floor had been laid. Like that discovered in Site C, the well was steened with clay-set local mudstone and it had an overall depth of 6.5m (21ft) with 0.3m (1 ft) of water. A lead pipe stretching down to the water level and presumably originally connected to a pump, was still *in situ* when the well was discovered. This was supported by an iron brace halfway down the well. There was no trace of any well-head furniture.
- 3.3.2 Footings of an earlier building were also noted below the floor level in a room at the western end of the southern wing of the Plâs.

### **4 THE POTTERY by Paul Courtney**

- 4.1 The pottery from Plâs Machynlleth is almost entirely post-medieval and non-local in origin. There does not appear to have been any local production of ceramics in the early modern period. Two medieval sherds were recovered from [43] and one from [57], both generally unstratified contexts. One of the sherds from [43] was from a late Valencian lustreware vessel, possibly a dish, of late 15th to early 16th century date and imported from Spain. The other two medieval sherds came from glazed vessels, probably jugs, and both are probably of Dyfed origin.
- 4.2 The earlier post-medieval wares were dominated by two sources; north Devon and especially the Buckley area of north-east Wales. North Devon gravel-tempered coarse wares of 17th or early 18th century date were recovered from several contexts (table 1) and the forms were probably restricted to bowls or jars. The most important source of both fine and coarse wares in the 17th and early 18th centuries was the Coal Measures. These wares occurred in red or buff fabrics with lead glazes and were sometimes slip decorated. Forms include mugs, bowls and press-moulded

dishes. It is clear on stylistic grounds that the overwhelming majority of these wares derive from the Buckley area or southern Lancashire, with few, if any, Staffordshire or Bristol products being represented. Two sherds from Westerwald stoneware mugs imported from the Rhineland in the late 17th or early 18th century were also found in [43] and [61]. The clay pipe bowl and stamp fragments ([61]) appear to come from the Broseley area of Staffordshire. It should be noted that though some of the wares found could date to the first half of the 17th century, none need be earlier than the second half of the century.

**Table 1: The Pottery**

Context	Date	Fabrics	Comments
1	mixed	CMB, CMR, NDGT, English brown stone-ware, Staffs porcelain, Staffs slip dec yellow wares (c.1810-40), Staffs slipped redware (c.1810-40), Mottled, English TGE, Creamware, Pearlware, SGSW, brick frags, firebrick.	Latest wares in the group are C19. Pearlwares are probably c.1810-20 but also includes much late C17-18 pottery.
2	<1810-20	CMR, CMB, SGSW, Pearlware.	
19	<1810-20	Pearlware, CMR, Mottled, CMB.	
32	c.1680-1760	Mottled.	
43	<1810-20	CMR, SGSW, Scratch Blue, Creamware Pearlware, Mottled, CMB, NDGT, English TGE, Westerwald, Mocha Ware(c.1810-20), English brown stoneware, Staffs porcelain, Staffs slip-decorated red earthenware (c.1810-20), Staffs yellow-glazed buffware (slip & mould dec.), Med. Gravel-tempered ?jug, Valencian lustreware dish.	The latest ware in the group is c.1810-20 but also includes much late C17th-18th pottery.
44	C17-C18	CMB, CMR.	
45	C18-C19	NDGT, CMR, Creamware, Pearlware.	
55	C17-C18	CMR, NDGT, CMB, English brown stoneware, SGSW, brick frags.	
57		Medieval sandy jug.	
60	C17-18	CMR, CMB, NDGT, TGE, English brown stoneware.	
61	<1810-20	CMR, CMB, NDGT, Staffs yellow ware (early C19th), Staffs lustreware (early C19th), Westerwald stoneware, English brown stoneware, SGSW, Pearlware, Creamware.	Clay pipe of Broseley type with stamp RICHA[R]D ? c.1680-1720.
63	<1810-20	63NDGT, CMB, CMR, Scratch Blue, SGSW, Pearlware, Creamware.	
66	C17-C18	CMR, CMB.	Clay pipe bowl fragment of Broseley type (c.1680-1720).
70	C17-C18	CMR.	

**Abbreviations and dates:** NDGT - North Devon Gravel Tempered; CMB - Coal Measures Wares with buff fabric; CMR - Coal Measures Wares with red fabric; Mottled - Mottled tankards with brown glaze on buff fabric. Bristol/Staffs c.1680-1760 but possibly also Buckley; SGSW - Salt-glazed white English stoneware, c.1720-80; Scratch Blue - SGSW with incised cobalt blue decoration, c.1740-80; Creamware - 1740s onwards; Pearlware - c.1775 onwards; TGE - Tin-glazed earthenware (all English and post-1650); English brown stoneware - C18th or early C19th.



- 4.3 The north Devon and Buckley-type products were succeeded by industrially produced products from the Staffordshire region in the mid 18th century with white salt-glazed stoneware, creamwares and pearlwares predominating. The latest pottery recovered probably dates to the second decade of the 19th century. The two largest pottery groups from [1] and [43] date to this period and include sherds from the same vessels. However, both contexts also include a high proportion of late 17th to early 18th century pottery.

## **5 DISCUSSION**

### **5.1 Phases I & II**

- 5.1.1 These buildings may be seen as part of a range of buildings known to have stood on the line of Heol Pentreheydn in the late 18th century. The presence near the centre of room 1 of a well-made ash-pit indicates a kiln structure above floor level. The oven may well have been a corn-dryer or malting oven though the absence of a growing floor area with this phase suggests that the latter interpretation is less likely.

### **5.2 Phase III**

- 5.2.1 This can be indentified as part of a malt-house documented as operating from the early to mid-19th century. The type of kiln used is uncertain, but the presence of the well-worn and blackened central slab suggests that it could have consisted of a set of fire bars in a vertical brick shaft with iron doors for draught control. Except for fragments of perforated tile, no evidence for the drying floor survived which would have been a floor of such tiles set above the kiln shaft. The mortar floor and lower side walls of room 2 confirm this to be the growing floor where the soaked barley was spread to germinate in a rodent-free environment prior to kilning.
- 5.2.2 Documentary evidence for a malt-house on the site is recorded on two maps of the early to mid-19th century. The first is a map and accompanying schedule of the Machynlleth properties owned by Miss Harriet Averina Brunetta Herbert, heiress of John Owen Herbert of Dolforgan (Harrison 1928). This shows a rectangular building enclosing a yard and is described as a house, garden and malt-house tenanted by Margaret Lewis. The second is a sketch plan with an indenture for the sale of five properties, including the malt-house, to Sir John Edwards of Plâs Machynlleth in 1845 for £400 (Londonderry Collection). This too shows the property as a rectangular building enclosing a yard, while the indenture lists the then present and late occupants.
- 5.2.3 Trade directories for 1828/9 and 1834 (Pigot & Slater) record a John Jones, maltster, of Heol Pentreheydn but not for 1844 or subsequently. From this it is possible to see the malthouse as being in operation from c.1820 until the early 1840s when malting ceased and the kiln was dismantled.

### **5.3 Phase IV**

- 5.3.1 This is the period between the end of malting and the demolition of the building by Sir John Edwards in 1845. The making of a drain from the interior of room 1 to the well, the capping of the well with slate flags and its use as a sump together with the fire-pits cut into the floor of room 1 suggest a short-term use of the building for small-scale industrial purposes perhaps associated with the extensive building programme then being undertaken by Sir John Edwards at Plâs Machynlleth.



## 5.4 Phase V

- 5.4.1 From 1797, Sir John Edwards had bought up the properties adjacent to his house until by 1845, with the purchase of the malt-house and associated dwellings from his step-daughter, Harriet Averina, he was able to demolish them all. move Heol Pentreheydn 20m to the W and so create the enclosed parkland.

## 6 ACKNOWLEDGEMENTS

- 6.1 The writers would like to thank Brian Hart, David Thomas and Glyn Owen (CPAT) for their help during the excavations. The staff of Watkins Jones and Son Ltd of Bangor and Messrs Arrol and Snell of Shrewsbury, provided valuable on-site assistance. Dr Stephen Briggs and Olwen Jenkins of RCAHMMW and Amber Patrick provided useful information during and after the excavations.
- 6.2 Paul Courtney would like to thank Reg Jackson for his comments on the pipes and to David Barker for discussing the later ceramics.
- 6.3 The illustrations are by Brian Williams.

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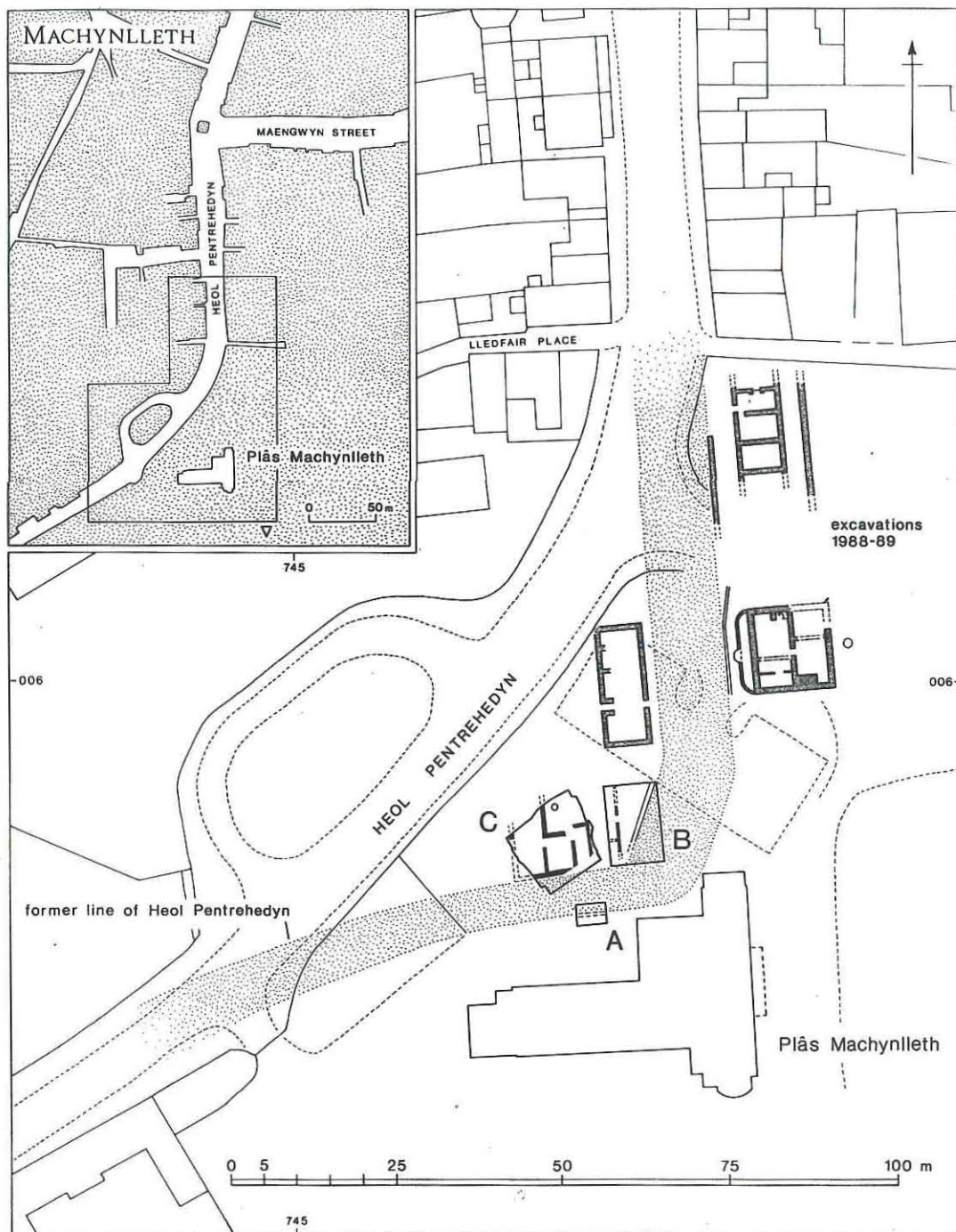


Fig 1 Location of Plâs Machynlleth, the present investigations and the buildings discovered during the 1988-9 excavations.



# Plâs Machynlleth Site C

## UPPER LEVELS

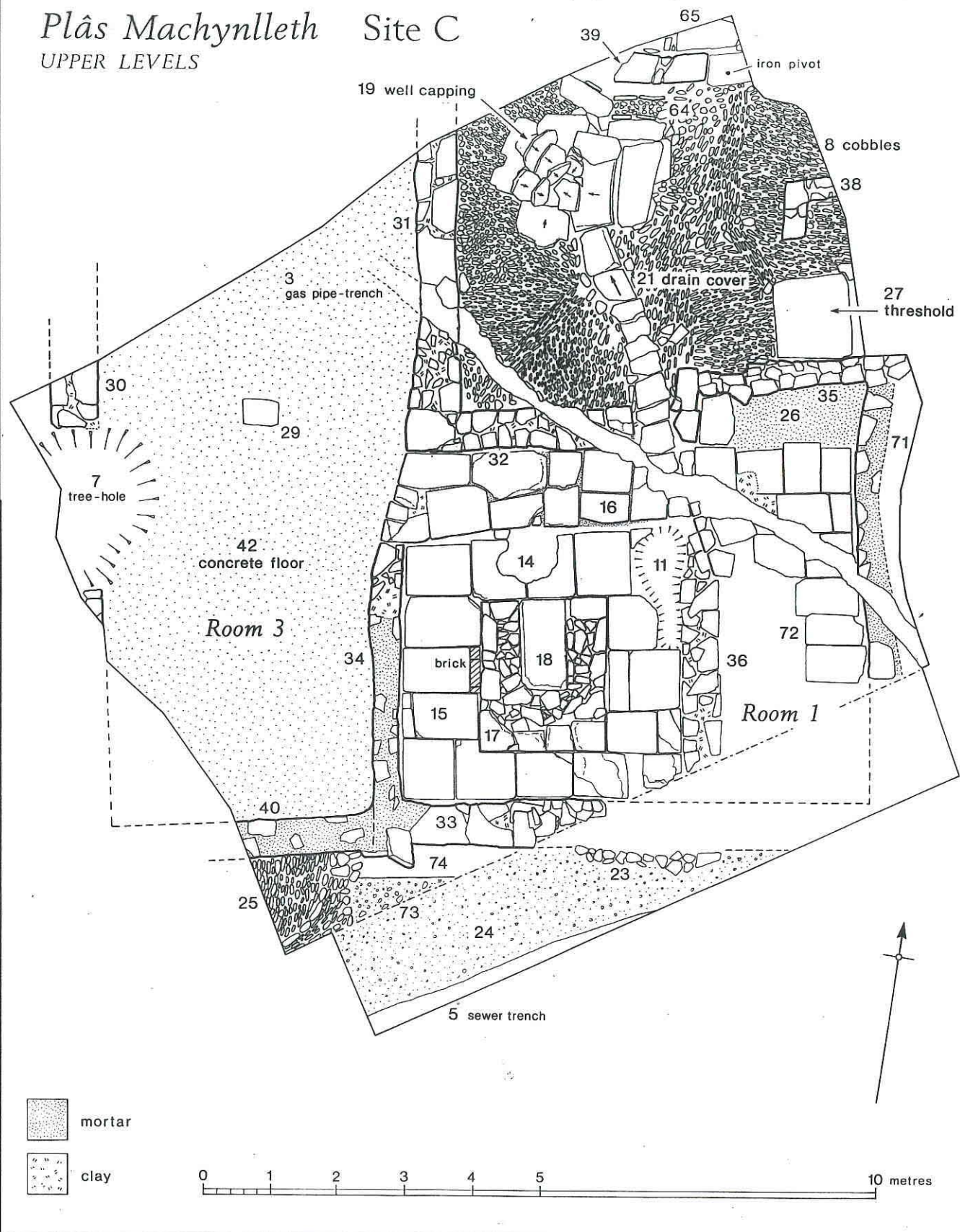


Fig 2 Plâs Machynlleth Site C: upper levels.



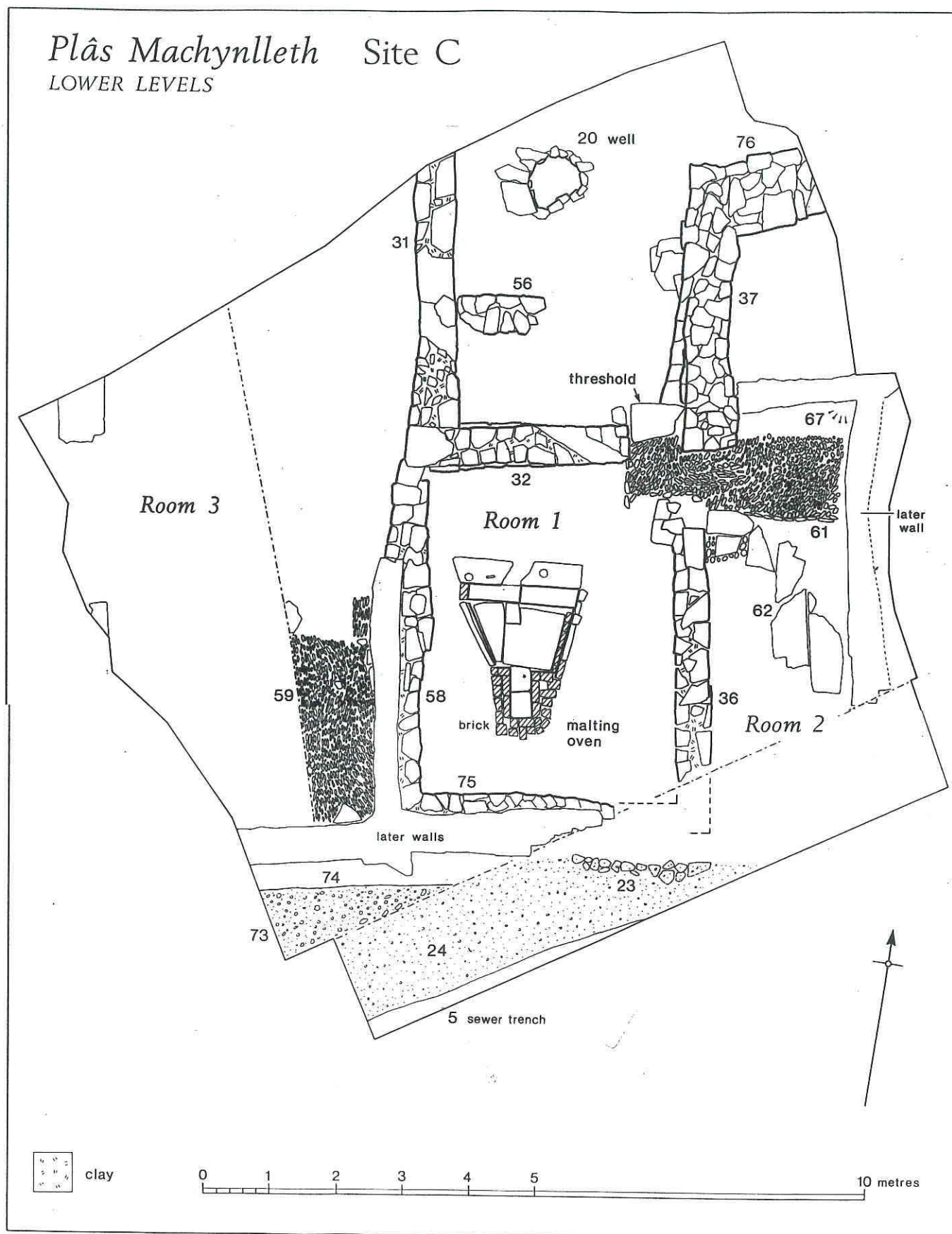


Fig 3 Plâs Machynlleth Site C: lower levels.

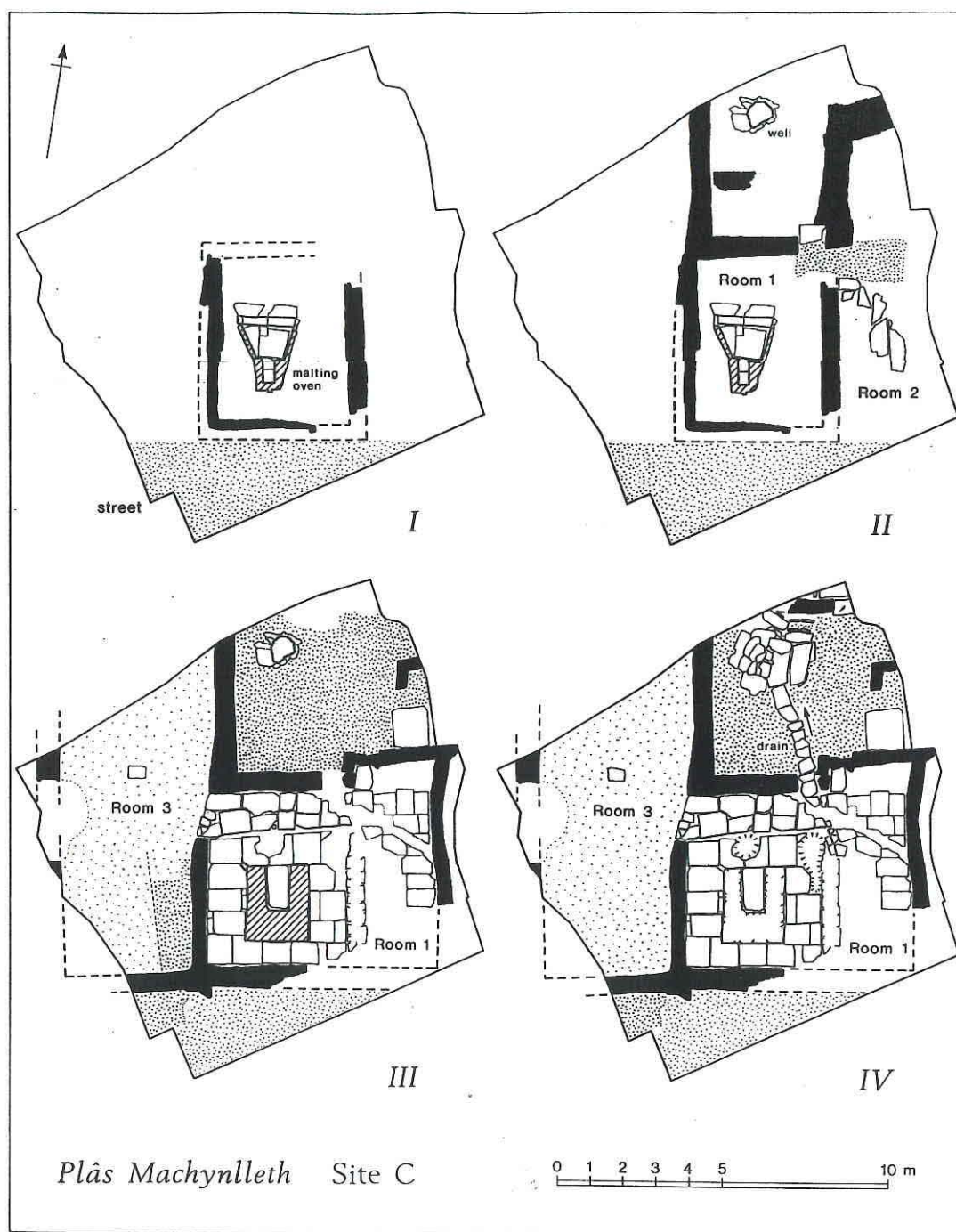


Fig 4 Plâs Machynlleth Site C: building phases.

*Plâs Machynlleth*  
Site B

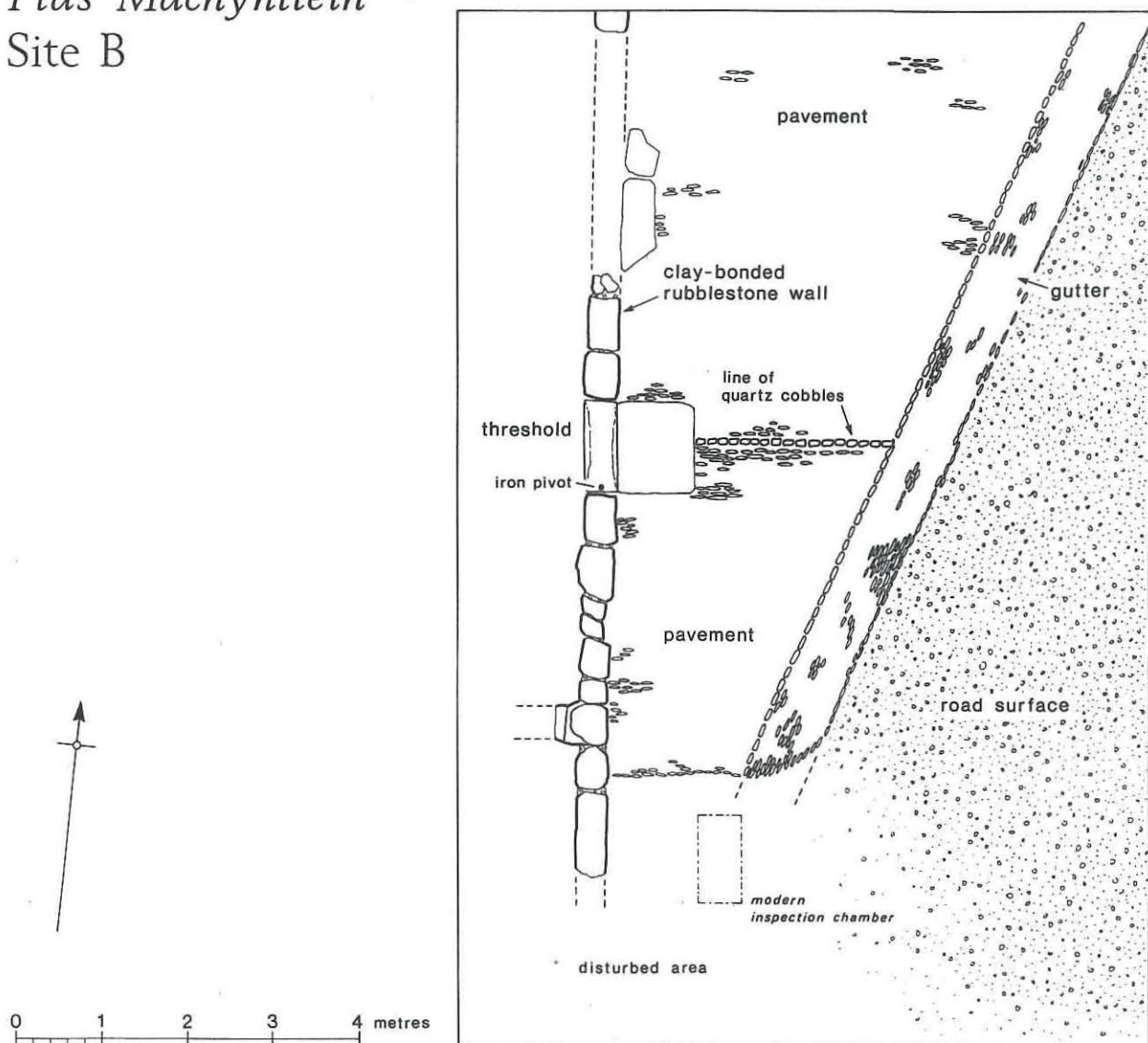


Fig 5 Plâs Machynlleth Site B: excavation plan.