

CPAT Report No 1139

Strata Marcella Abbey, Welshpool, Powys

SURVEY AND RECORDING 2011-12



THE CLWYD-POWYS ARCHAEOLOGICAL TRUST

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Report for Cadw

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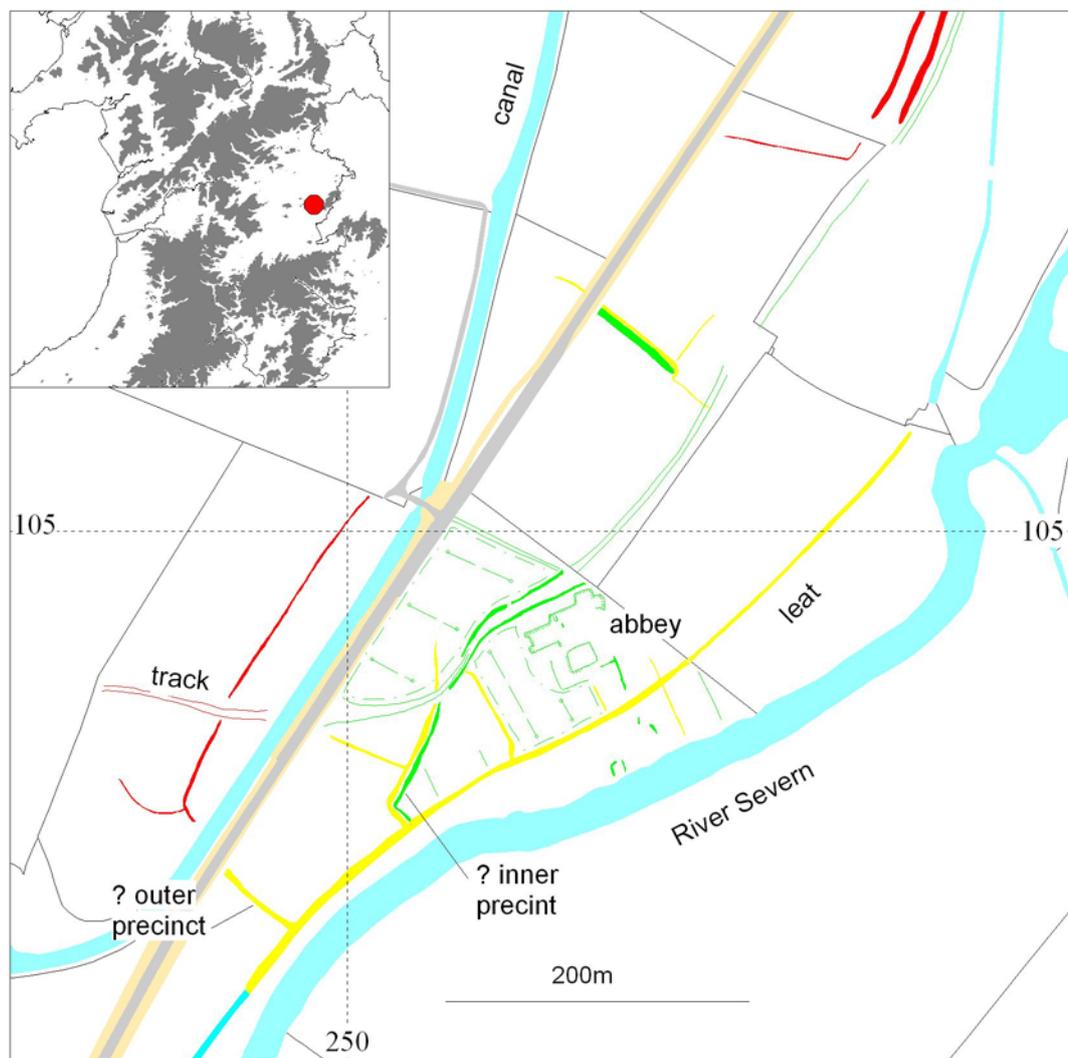
Cover photo: Aerial view of the abbey earthworks (CPAT 82-4-0033)

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1 INTRODUCTION

- 1.1 The earthwork remains of the Cistercian abbey of Strata Marcella lie on the west bank of the Severn, to the north of Welshpool (SJ 2515 1044; Fig. 1). The abbey was founded in 1170 at the invitation of Owain Cyfeiliog, prince of southern Powys, and he was buried there in 1197. Although the abbey suffered during Edward I's Welsh wars, building work continued on the site until the early 14th century. In 1400-5 the abbey was partially destroyed during the Owain Glyndwr risings, and though the abbey remained active until the Dissolution it went into decline as a result. By 1536, when it was dissolved, there were few monks and some of the monastic buildings were already ruinous. It seems that the monastery was then largely dismantled, with some of the stone apparently being taken for use in the building of nearby churches, while Abbey Farm was erected in the ruins, probably over the claustral ranges with the cloister being used for the farm's courtyard. The site was the subject of excavations in 1890 by the Powysland Club, which largely focused on the abbey church, while a geophysical survey was undertaken in 1990, although this was not particularly revealing (Silvester *et al.* 2011; Arnold 1992).



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Fig. 1 Strata Marcella location showing features plotted from aerial photographs including the suggested earthworks of an outer and inner precinct

- 1.2 The current project follows on from a scheduling enhancement programme of medieval monastic sites conducted by the Clwyd-Powys Archaeological Trust (CPAT) in 2010-11 (Silvester 2011), funding for both studies being provided by Cadw. At that time it was felt that an interpretation of the visible earthworks would benefit from a detailed topographical study since no measured survey of the site had been conducted, other than that by the Ordnance Survey. In addition, various features, including stone surfaces, walls and gullies were noted during a field visit, eroding from the northern bank of the River Sever and the opportunity was therefore taken to record these as part of the wider survey.



Fig. 2 Aerial view of the abbey earthworks in 1982, viewed from the east.
Photo CPAT 82-4-0033

2 TOPOGRAPHICAL SURVEY

- 2.1 The topographical survey was conducted in March 2012 using digital total station equipment to record the visible earthworks, together with a random grid of spot heights from which a digital terrain model was later produced. The results present a complex and layered landscape within which elements of the abbey and associated features may still be seen, overlain by a later trackway, traces of ridge and furrow, and the site of Abbey Farm, which occupied the claustral area.

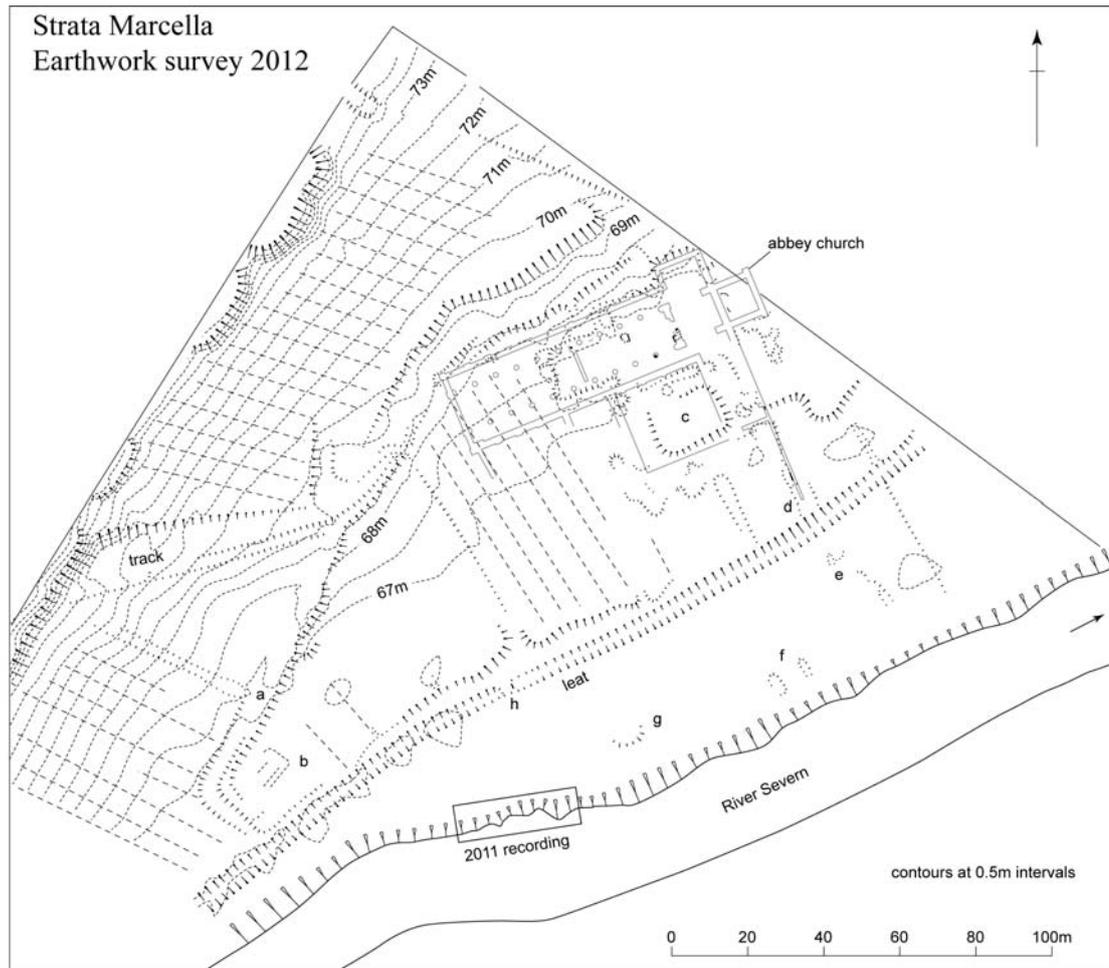


Fig. 3 Earthworks in the area of Strata Marcella, showing the suggested outline of the known structures together with the location of recording along the river bank in 2011

The Abbey Church and Cloisters

- 2.2 The earthworks relating to the abbey itself are often very slight and the picture has been confused to some degree by the 1890 excavations. Indeed, the most readily visible element, the earthworks of the abbey church, is entirely a product of the excavation, within which several parts of column bases were revealed. The earthworks are misleading, however, since the western end of the nave was never excavated to floor level and extends a further 25m beyond the obvious earthworks. This suggests that the north and west walls of the nave may be upstanding, though buried, to a height of perhaps 0.7m.
- 2.3 The plan of the abbey which resulted from the 1890 excavation (Williams 1992, 81; fig. 9) fits well with the earthwork evidence, indicating a high degree of accuracy in the late 19th-century recording. The plan, together with a reinterpretation by Dr Chris Arnold (1992, 93; fig. 15), has been used to produce a suggested outline of the known structure in Figs 3 and 4. On this basis the church may have had an overall length of 83m, with small north and south transepts and a nave around 21m in width. A series of earthworks, together with the excavated evidence, suggest the presence of a small chapel to the east of the south transept.
- 2.4 The cloisters, to the south of the nave, were only partly revealed in 1890, suggesting a courtyard area around 22m across from east to west, which is now occupied by a low mound, presumably spoil from the excavations. There is little visible evidence for the extent and layout of the cloisters, despite their later reuse as the buildings of Abbey Farm which was still standing until at least 1780.

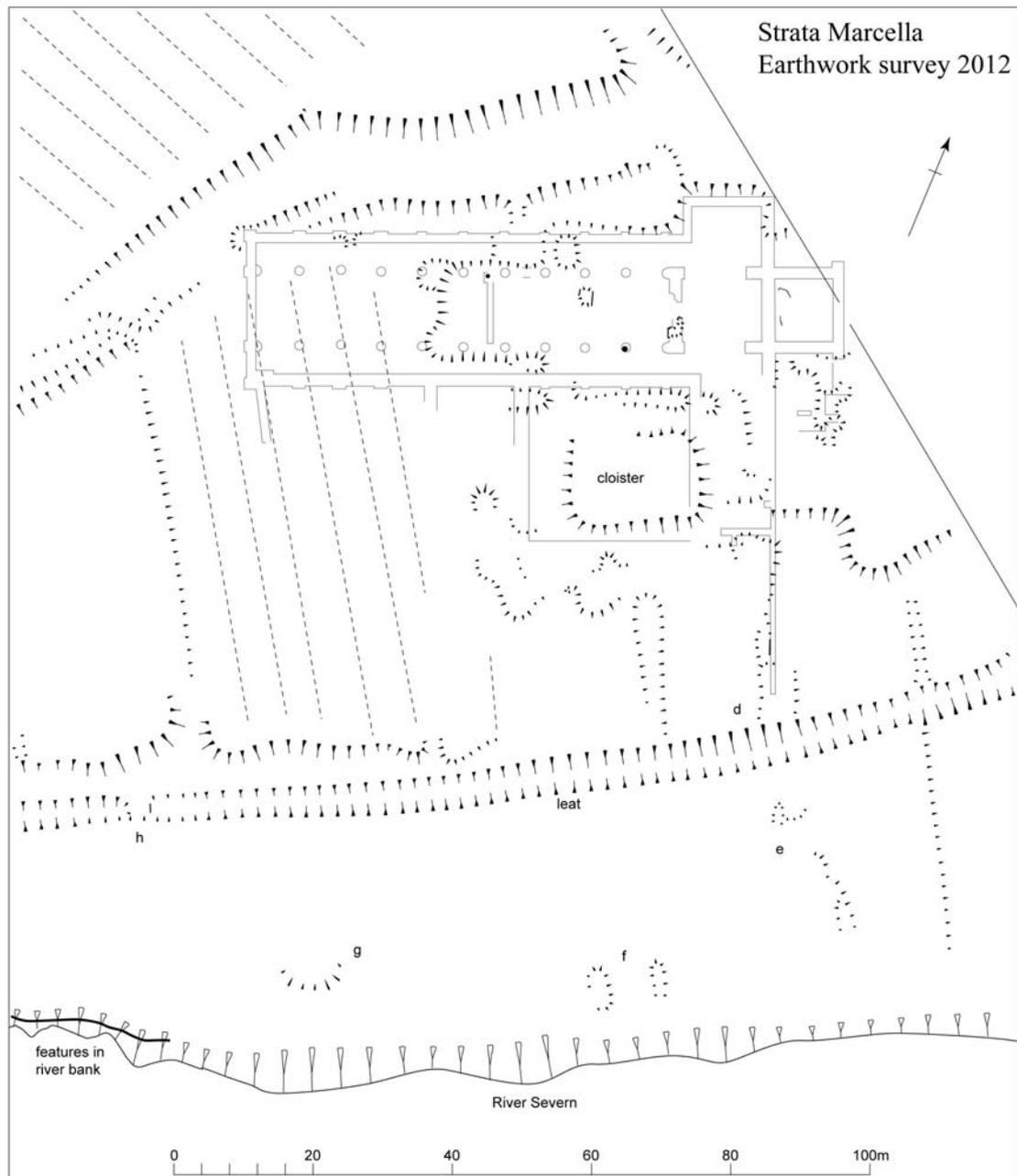


Fig. 4 The earthworks of the abbey church, cloisters and probable conventual buildings, showing the suggested outline of the know structures

Conventual Buildings

- 2.5 A number of slight earthworks suggest the presence of several conventual buildings to the south of the abbey church. The position of the Chapter House was postulated following the 1890 excavations, along the eastern side of the cloisters (Williams 1992, 81; fig. 9), although this has yet to be confirmed. What is clear, however, is that there was a long range of buildings in this position which extended at least as far as the leat (Figs 3-4, d). The eastern side of the buildings may be readily identified, including a short stretch of wall facing which was originally uncovered during the excavation. Indeed the line of this wall appears to be extended to the south of the leat, raising the possibility of a latrine block which would have straddled the leat, perhaps with a dormitory between it and the cloisters.

- 2.6 Other earthworks to the south of the leat include a pair of parallel banks (Figs 3-4, f) and a slight platform (Figs 3-4, g), both of which may be associated with buried structures. Evidence from the investigations along the river bank in 2011 (see below) suggests that this area may have been subject to a considerable build-up of alluvium which could be masking further evidence.
- 2.7 On the north side of the leat there is a level area bounded to the north and west by a substantial boundary (Figs 3-4, a) in the angle of which are faint earthworks and vegetational changes which suggest the presence of a rectangular building (Figs 3-4, b). To the north-east of this there are two slight, parallel gullies and also faint earthworks overlooking the leat.

The Abbey Precinct and Leat

- 2.8 Evidence visible on aerial photographs has revealed the presence of a former boundary to the south-west and north-west of the abbey which has been suggested as a possible precinct boundary (Fig. 1). It is equally possible, however, that this is just part of a field system which predates present the pattern of fields.
- 2.9 Perhaps of rather more interest is a substantial boundary bank which extends north-west from the leat for 15m before turning to the north-north-east. In places this survives as a substantial bank up to 5.5m wide and 0.9m high, with what may be a holloway along its outer side. It seems likely that this is associated with the abbey since it appears to predate the ridge and furrow in this area, which is assumed to be associated with the later Abbey Farm. The boundary and possible holloway are cut by a later trackway, beyond which they are visible for a short distance before all trace is lost.
- 2.10 The earthworks of a substantial leat pass through the area of the abbey earthworks, contouring around the slope. The source of the leat is not known, although given its height above the river at this point it must be assumed to have been some distance upstream. The leat is likely to have fed a mill at Pool Quay, 720m north-east of the abbey (SJ 2551 1107), although whether this was originally the abbey mill, or a later structure which utilised the monastic watercourse is uncertain. The leat had certainly become redundant by the later 18th century when a new weir was constructed downstream of the abbey to provide water for a smelting works, and was later used for a textile mill.
- 2.11 The leat, which is up to 6.6m wide, has become infilled with silt to some extent and now survives to a depth of up to 0.6m. At one point (Figs 3 and 4, h) stonework is visible within the leat suggesting that it was culverted or perhaps bridged.
- 2.12 Although its association with the abbey has yet to be determined with certainty, this is perhaps the most likely interpretation. Cistercian abbeys elsewhere in Britain are often known to have had good supplies of water and it was not uncommon for latrines to be built above the watercourse.

Post-dissolution Features

- 2.13 It would not be unreasonable to expect that the most obvious earthworks post-dating the abbey should be associated with Abbey Farm which adopted the claustral area and presumably reused some of the monastic structure. However, there is surprisingly little evidence for buildings in this area other than a series of low mounds on the south-west side and a rectangular mound occupying the courtyard/farmyard area, which may be spoil from the 1890 excavation.
- 2.14 There are a number of former field boundaries which are presumably associated with the farm, together with three areas of straight ridge and furrow, one of which overlies the western end of the abbey church. The other feature of note is a broad trackway which is terraced into the slope to the north and west of the abbey church and then occupies a

substantial holloway to the west, where it is cut by the modern road. Aerial photography indicates that the track also extends eastwards, passing through the site of Weir Head Farm and on towards Pool Quay, perhaps suggest that this was a precursor of the 1756 turnpike road.

3 ARCHAEOLOGY ALONG THE RIVERBANK

3.1 A range of features visible in the river bank between SJ 25123 10321 and SJ 25099 10321 were recorded in October 2011 (see Figs 3 and 4 for location). Where possible, the exposed river bank, which was up to 4.5m above the level of the river, was cleaned by hand to enable a written and photographic record to be produced, with the features being recorded in plan and section by means of total station surveying (Fig. 5).

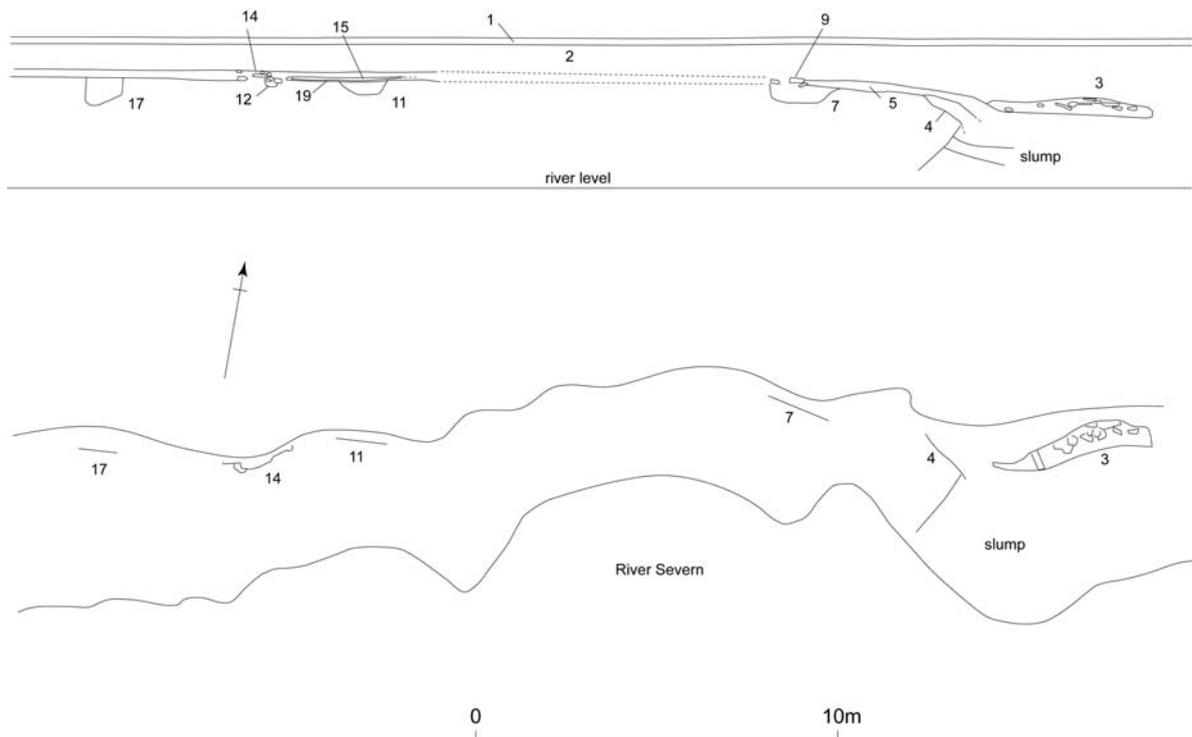


Fig. 5 Plan and section of features visible along the riverbank in October 2011.

- 3.2 The exposed section demonstrated that there had been considerable deposition since the medieval period, effectively sealing features beneath up to 1.7m of alluvium (2). The 28m-long section of riverbank contained four gullies (7, 11, 12 and 17), a ditch (4), and three sections of stonework which could represent the remains of walls (3, 9 and 14).
- 3.3 Although it was not possible to examine any of the features in detail owing to their location there was the impression that the gullies at least may have been aligned at an angle to the river bank, perhaps extending to the north-north-east, a slightly different alignment to that of the abbey.
- 3.4 It was evident that this section of the river bank is actively eroding and further archaeological features are likely to be revealed over time.



Fig. 6 Exposed stonework (3) visible in the northern bank of the River Sever, buried by around 1.6m of alluvium. Photo CPAT 3364-0032



Fig. 7 One of the gullies (7) with the edge of the ditch (4) beyond. Phot CPAT 3364-0059

4 MAP REGRESSION

Introduction

- 4.1 Map regression analysis is now a well-trying technique for examining the development of the landscape, so much so that it is unnecessary to explain it any detail here. That area of the Severn Valley immediately to the north of Welshpool is comparatively well served by estate maps, enabling an attempt to understand how the landscape has been modified over the last four hundred years.
- 4.2 The earliest map is of 1618 or thereabouts. Drawn for Sir John Hayward, it depicted his manor or lordship of Streetmarshall [sic] which covered a reasonable area of Welshpool and Guilsfield on the west bank of the Severn (National Library Wales/Powis Castle/M141). It has suffered some damage and unfortunately this has resulted in the loss of that part that displayed the abbey site but the mapping of the land to the west remains. Loss also explains the minor uncertainty about date. It could be 1619 or possibly even 1613 but certainly the survey was prepared in the second decade of the 17th century.
- 4.3 Next comes an estate map of Abbey Farm from 1780, included in a volume of surveys of the manors of Teirtref, Tirymynech and Streetmarshal (National Library Wales/Powis Castle/M9). This shows the entire environs of the former abbey.
- 4.4 The tithe map for this part of Welshpool parish is dated to 1840, and finally in the sequence is the first large-scale edition of the Ordnance Survey map (1:25,000) published in 1886.

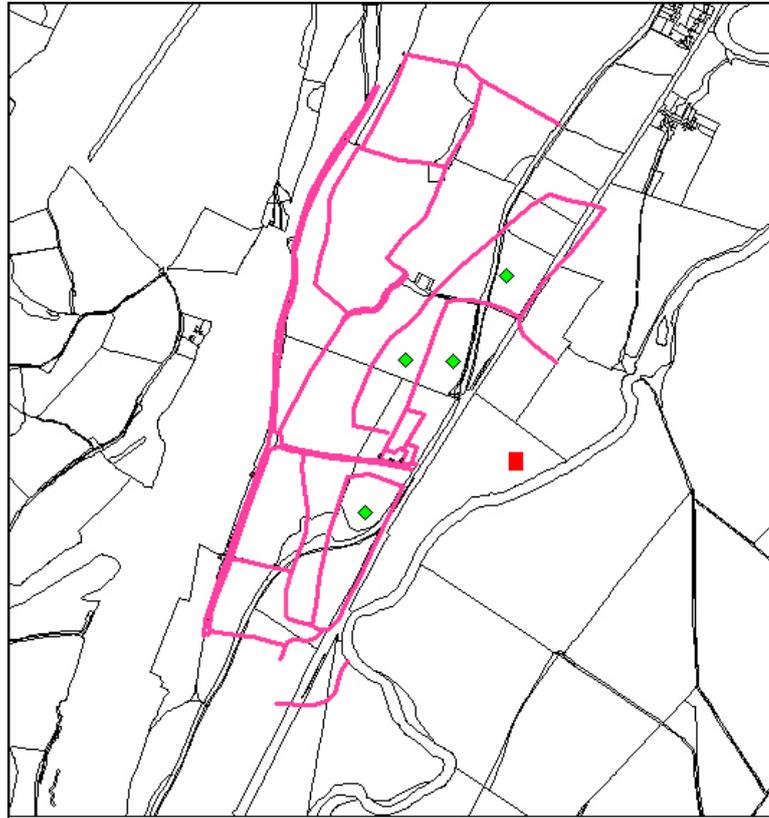
Methodology

- 4.5 The approach to regression analysis was influenced by the nature of the maps. Using GIS software (MapInfo), the 1886 Ordnance Survey map was compared with modern mapping. Any truly modern features were removed from the map and other features shown in 1886 but subsequently erased from the landscape were added on to digital layer.
- 4.6 The well-evidenced imprecision of the generic tithe map discouraged scanning and digitisation, so that for Welshpool was checked by eye and boundaries not depicted by the Ordnance Survey and thus presumably removed from the land between 1840 and 1886 were added on to the digital layer also by eye.
- 4.7 In contrast a copy of the 1780 estate map was scanned and rectified, and its metric accuracy found to be reasonably high. Previously unrecorded features were digitised.
- 4.8 Finally the 1618 map was checked and new information added by eye. It would probably be feasible to scan and rectify this map too, but for the relatively small area involved, it was felt not to be a useful exercise at this time.

The landscape - general

- 4.9 The maps demonstrate that there has been a steady change in the appearance of the landscape around the abbey over the last four hundred years, as might be expected. There is of course no possibility of determining the nature and scale of landscape change in the immediate aftermath of the Dissolution in 1536, although in due course the continuing research on Strata Marcella may provide us with further clues as to the appearance of the medieval layout
- 4.10 Two later events almost certainly affected the landscape picture. In about 1756 the turnpike road from Welshpool to Oswestry was pushed along the Severn Valley, bypassing the site of the abbey buildings by little more than one hundred metres. Its straight alignment is still immediately recognisable in its successor, the A83 trunk road.

- 4.11 Fifty years later the Montgomeryshire Canal was also excavated along the edge of the valley, swerving to run beside the road in the vicinity of the abbey. Of the two the new road undoubtedly had a greater impact on the field systems of the valley, and was also responsible for the emergence of Pool Quay, already well established by the time of the 1780 survey, and perhaps too for the appearance of Weir Head Farm close to the abbey site.



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Fig 8. The landscape of 1618. The field pattern is shown in purple, park names as green symbols and the position of the abbey as a red square.

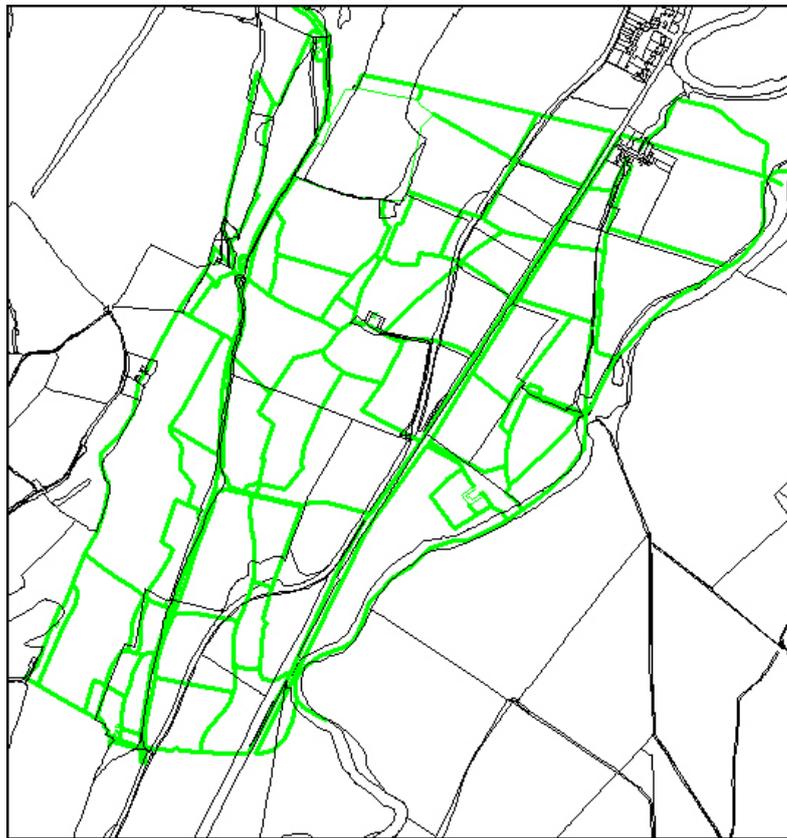
The landscape in 1618

- 4.12 The turnpike road of the mid-18th century was a completely new creation rather than an improvement to an existing thoroughfare. The main route along this part of the valley in the 17th century and before was a lane that ran along the contours at a slightly higher elevation, using the base of the valley slope and about 500m away from the abbey. It still be recognised as a farm track in places today, and earthworks are discernible on aerial photographs, but as a routeway it has now gone.
- 4.13 The 1618 map records various field-names including a group of four park names: Lower Parke, Midle Parke, Rough Parke and Parke R.th. These lie in a broad and virtually unbroken arc to the west of the abbey site, sharing an almost continuous western boundary. The evidence points then to a deer park, broadly elliptical in shape and at least one kilometre long. It is possible that this could have been established after the Dissolution, but if so it had a remarkably short life span for within a maximum period of eighty years it been fragmented into fields. It is much more likely tat that this was a park attached to the abbey when it was still in existence.

- 4.14 There is also a farm shown on the 1618, beside the trackway that led off the main route noted above and down to the abbey. It is not named but comprised three buildings around a large yard and its position might suggest that it was from here that the fields carved out of the park were farmed. There is no trace of this farm today, nor was there in the late 19th century.

The landscape of 1780

- 4.15 *Abbey Farm*, on the site of the abbey, is depicted as three sides of a square, open to the north-east with ranges of buildings on the other sides around a yard. Gardens lay to the south of them in a regular pattern though their depiction could be schematic. The farm was approached directly from the main road by a bounded lane which opened into an irregularly shaped area in front of the house.
- 4.16 The *main drain* by the abbey is not depicted, presumably because over much of its course, it did not form a boundary, but in places it did function in this way, as on the east sides of the garden and a field to the north, where its alignment is visible, so its existence in some form at this time is not in doubt.



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Fig. 9. The landscape of 1780. The field pattern is shown in green and the position of the abbey can be seen as the interrelated rectangles near the centre of the map.

- 4.17 *Fields* East of the road in the vicinity of the abbey several boundaries shown in 1780 have survived to the present. The generally rectilinear layout of fields which is maintained up to today was broken only by the triangular enclosure between Abbey Farm and Weir Head Farm.

- 4.18 *Fields* West of the road the picture is very different and it seems possible that the changes in the field patterns were an indirect result of the construction of the road. The generally regular pattern of stripfield-like enclosures is not apparent between the road and canal, but there is some continuity of the boundaries into the present, and it appears that after the canal was constructed the fields were broken down into smaller units to the west of Weir Head. Further west around Abbey Barn, the late 18th-century layout was very much more irregular with randomly shaped enclosures. In at least one place the continuous boundary of the park was cut through to create a field that lay 'against the grain'.
- 4.19 *Buildings* Abbey Barn was there in 1780, two small buildings set in the fields but without an obvious access track to them. There was also a patch of rougher ground, a field's distance to the north of Abbey Barn. None of the maps indicates the presence of a farm or building, but an abandoned settlement site is certainly a possibility. Cottages lay close to the main routeway and two of them can be detected on the 1780 map.

5 DISCUSSION

- 5.1 Only a part of the abbey church layout is known, together with the outline of the cloisters, and part of the adjacent east range, although the recent survey has enabled a direct comparison to be made between the surviving earthworks and the plan derived from the 1890 excavation. The main axis of the church lay on a south-west to north-east alignment. There are traces of buildings to the south-east of the abbey leat, together with other undefined earthworks in this area, but their relationship to the main abbey complex is not clear.
- 5.2 A ditch reputedly claimed as the Strata Marcella precinct can be seen on aerial photos, to the north-west of the modern road. It defines a rectangular area whose long axis is suspiciously similar to that of the modern road and other extant boundaries. The western portion shows as a cropmark (PRN 38131), to the north of the abbey it is a low bank (PRN 38134) and to the south an earthwork ditch which meets the leat PRN 38129 (for which see below). It is now thought that much of this boundary is an element of a later field system.
- 5.3 It is most likely that the precinct boundary is represented by the large bank and ditch (overall 10m wide, bank up to 1m high) which is present to the south-west of the abbey (recorded a ditch of unknown function in the HER – PRN 38133). This is partially overlain/disturbed by what appears to be the old road from Pool Quay to Welshpool to the west and north-west of the abbey.
- 5.4 It has been suggested that the abbey mill may have been on the site of the later Mill Farm to the north-north-east (PRN 20891) and that the weir (to the north-east of the abbey site) and mill leat (PRN 64532) could have originated in the medieval era. Another leat (PRN 38129) commences south-west of the abbey site and runs past it (and under the reredorter according to Williams) to join the post-medieval leat above. It would be logical to assume that the latter was a major source of water to the monastic community and perhaps served the mill, the latter a refurbishment in the post-medieval era.
- 5.5 It is interesting to compare the earthwork survey with the 1982 aerial photograph (Fig. 2), which was taken in ideal conditions, with low sunlight, in December of that year. Many of the earthworks appear to be relatively sharp, if slight, and the general impression is that in the intervening years some detail has been lost, either as a result of ploughing, although the field is permanent pasture, or simply through the action of livestock.

- 5.6 The site therefore remains somewhat enigmatic and is perhaps one of the least known and more poorly understood abbeys in Wales. The recent work has, however, demonstrated the potential for further elucidation of the remains and there are a number of areas where geophysical survey in particular may be beneficial: the area south of the cloisters and extending across the leat; the level ground in the angle of the potential precinct boundary; and the adjacent field to the east of the abbey where any earthworks have been levelled by ploughing. Depending on the results of the survey, targeted trial excavation would further assist with the interpretation of the abbey complex and aid the assessment of its survival and potential.

6 ACKNOWLEDGEMENTS

- 6.1 We are grateful to the owner, Mr Adrian Derwas, for granting access for the survey and recording, and also to Cadw for providing funding.

7 SOURCES

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