

PEMBROKE CASTLE

ARCHAEOLOGICAL EVALUATION FOR THE NEW CAFÉ APRIL 2006



Paratowyd gan Archaeoleg Cambria
Ar gyfer Pembroke Design/Pembroke Castle Trust
Prepared by Cambria Archaeology
For Pembroke Design/Pembroke Castle Trust



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Gan / By

Neil Ludlow

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sydd gennych ar gynnwys neu strwythur yr adroddiad hwn

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SUMMARY

Cambria Archaeology were requested to undertake an evaluation in the outer ward of Pembroke Castle (PRN PRN 4518; NGR SR 981 016), immediately next to St Anne's Bastion, prior to the construction of a new café.

St Anne's Bastion is a medieval structure that appears to have origins in the early 14th century, possibly as a 'Gloriette', or private apartment(s). Its medieval form appears to have been similar to that of today, despite extensive restoration during the 1930s when the castle was restored and a cottage, now the present café/toilet block, was constructed within the bastion. This building work was accompanied by landscaping around the bastion, including the erection of a retaining wall. A second retaining wall was added during the 1950s.

The majority of deposits exposed during the evaluation appear to belong to this 1930s activity, representing make-up that was imported into the area to act as levelling, which was deposited behind the retaining wall to create a terrace. The lowest dateable context contained fragments of 19th-20th century brick. It appears that all earlier deposits were truncated during this landscaping; this late context directly overlies the native bedrock, over which were patches of natural soil. Amorphous areas of mortar adhering to the bedrock may represent the constructional level for ?medieval building(s). They appear to include what may be a small remnant of mortared walling, and may be associated with a feature cut through the bedrock.

It is suggested that the design of the new café takes into account the possibility that medieval building horizons, and a buried soil over the bedrock, may be represented on the site, and that constructional levels do not intrude into this level. This may mean raising the proposed floor level of the cafe and the provision of shallower construction trenches. It is also recommended that one of the design options, which intruded further into the outer ward, is not adopted.

INTRODUCTION

Site description

Pembroke Castle (PRN 4518), a Scheduled Ancient Monument (SAM No. Pe 005), lies at NGR SR 981 016, at the west end of the town of Pembroke. It has been fully described by David Cathcart King (King 1978). The castle occupies a Carboniferous Limestone headland between two tidal pills. Begun in 1093, it was enlarged and added to throughout the Middle Ages and later, including St Ann's Bastion - the site of the present café and toilets - which was probably added during the early 14th century (Fig. 1). Additional defensive works were built during the Civil War of the 1640s. The castle was slighted by Cromwell in 1648, charges of gunpowder being placed in four of the outer ward towers, blowing out their external faces. It was abandoned after the Civil War and lay ruinous until the 1880s, when the antiquarian J R Cobb leased it from its owners and undertook limited excavation, consolidation and rebuilding.

However, it was the acquisition of the castle by Sir Ivor Philipps, in 1928, that saw the large scale rebuilding and consolidation works that resulted in the castle that we see today, which is one of the most complete stone castles in south Wales. His work included, amongst other things, extensive (re)building in the area of St Anne's Bastion. It is not certain how much of this new build lies on original, medieval footings. However, the present café and toilet block, that lie within the perimeter of St Anne's Bastion, represent an entirely new construction, having origins as a cottage built during the 1930s.

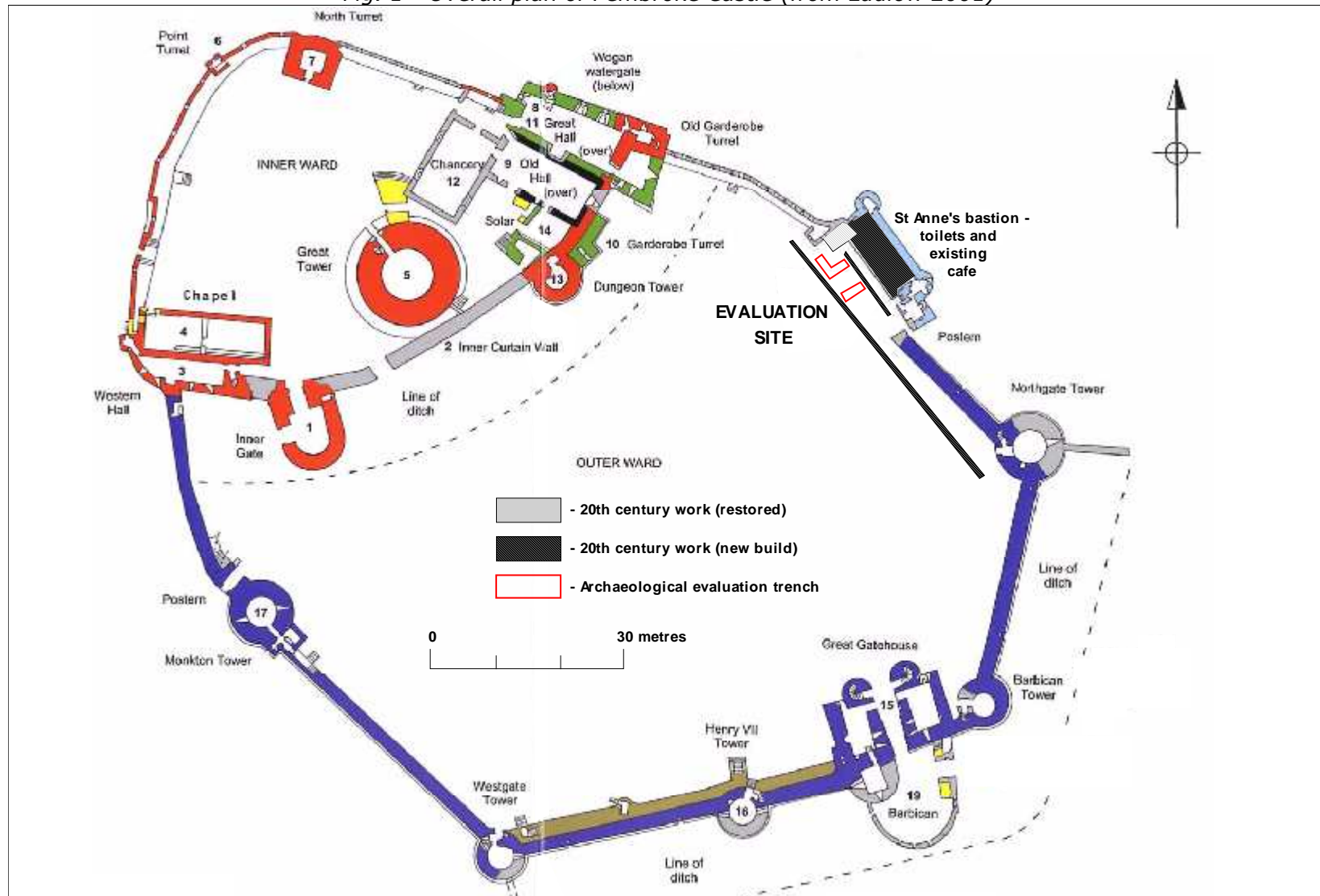
St Anne's Bastion (Figs. 1 & 2; Appendix)

St Anne's Bastion is a complex structure projecting from the northeastern side of the outer ward circuit. It is built on the edge of the limestone cliff on which the castle stands, overlooking the Pembroke River. It appears to represent a self-contained unit, rectangular in plan, comprising a circular turret to the northwest, connected by a stretch of curtain wall to a D-shaped turret conjoined with a square turret, to the southeast. Between the latter turret and the curtain wall to the southeast lies a postern. The whole structure projects boldly (9.5 metres) from the outer ward circuit.

In plan, the bastion in its present form reflects medieval arrangements and is shown in its unrestored form on the Ordnance Survey First Edition map of 1861 (Appendix 5). This map also shows the stump of a wall running parallel with the outer wall of the bastion but 8 metres to the southwest, as if to define a rectangular area within the bastion. Prints and photographs taken prior to restoration, provide some further detail (Appendix 1 – 3, 7 & 8). The arrangements shown appear to be reflected in the present structure, but much of the inner faces of the turrets, the parapets, and the small rectangular open 'turret' that now forms the northwest corner of the bastion (see Fig. 2), are missing. However, it is clear that the present corbel tables follow an earlier pattern (cf. Appendix 2 and 3). What is also clear is that it was always a substantial structure. Taken overall, the structural evidence suggests a date early in the 14th century, possibly under Aymer de Valence (1307-1324); succeeding Lords of Pembroke were largely absentee.

Was St Anne's bastion merely defensive in nature? It may have been, but the parallel wall shown in 1861 suggests that a rectangular building occupied the body of the bastion. Nevertheless, the pre-restoration prints and photographs suggest that the walls and turrets of the bastion were never any taller than today

Fig. 1 - Overall plan of Pembroke Castle (from Ludlow 2001)



(Appendix 1-3, 7 & 8) – particularly the northeast external wall which only stands to a height of one storey. However, there is space within the structure for a fairly large gabled building (at least 6 x 12 metres), open to the roof, with eaves at first floor level – in other words, a hall. Further (service) buildings within the outer ward may have been attached. Its detail – the corbel tables etc. – also suggest that the bastion may have housed a building of some status which, perhaps significantly, overlooked the river.

It is possible therefore that the bastion represents a 'Gloriette' – self-contained apartment(s) of high status, usually constructed for an individual and represented most famously at Leeds Castle in Kent, where it was built by Edward I for his wife Eleanor of Castile. The domestic buildings in the Lower Ward at Chepstow Castle, Monmouthshire, built by Earl Roger Bigod in the late 13th century, have recently been re-interpreted as a Gloriette (Rick Turner, Cadw, *pers. comm.*). They occupy a similar location to St Anne's Bastion, projecting from the curtain wall, on a clifftop overlooking the River Wye. These apartments appear to represent the main living accommodation, however, and it is possible that St Anne's Bastion was, like the Leeds Castle Gloriette, built for an individual – in this case, possibly Aymer de Valence's mother, Joan, who outlived her husband William de Valence by 11 years. It may have represented a dower apartment.

Rebuilding in the 1930s included the restoration of the bastion walls to their original height (indicated by surviving doorways from the turrets), the provision of crenellated parapets, the rebuilding of the inner faces of the turrets and the construction of the 'new' turret at the northwest corner. Two pre-restoration photographs (Appendix 7 & 8) show the interior of the bastion as an area of rough ground, overgrown with grass and other vegetation, with areas of rubble debris. The wall shown in 1861 is not visible. The exact nature of the then topography is difficult to determine but there is a definite downhill slope from the outer ward to the south – which had been levelled as a grass tennis court in the 1920s – to the interior of the bastion. This was enhanced under Sir Ivor Phillips by the construction of a retaining wall, which still divides the flagged area in front of the present café and toilets, from the upper level – currently paved – to the southwest. The second retaining wall, further into the outer ward 6 metres to the southeast, was apparently constructed during the 1950s when the tennis court was surfaced (Maj. Ivor Ramsden, grandson of Philipps, *pers. comm.*).

The present café and toilet block was constructed a cottage during the 1930s and was complete by 1939 (*ibid.*). The general form of this building and the disposition of its openings appears to have been more-or-less as today, to judge from an aerial photo taken in 1938 (Appendix 9); the same arrangements more-or-less persisted into the 1980s, by which time it had been converted into a café and toilet (Appendix 10). It was altered and upgraded in the mid 1990s but in overall form remained the same. The area between the two revetment walls was also surfaced with paving slabs.

The 1930s restoration makes it now difficult to determine the footings level of the medieval walls. However, it appears likely that the medieval walls were constructed directly on the limestone bedrock. One of the aims of the evaluation was to establish the level of this bedrock. A number of small test pits were excavated through the tarmac tennis court, southwest of the café/toilets, in 2001, and revealed that the bedrock lay directly beneath the tennis court make-up, at a depth of c.0.30 metres. However, the presumption was that the ridge that forms the main northwest-southeast axis of the castle was formerly more pronounced, with a tendency for erosion along the crest of the ridge (beneath the tennis court) and deposition around the periphery of the castle, against the walls.

RESULTS

Project objectives

The evaluation was in response to a proposal to build a new café, immediately southwest of the existing café/toilet block in the paved area between the two revetment walls. The proposed café will occupy a small footprint (10.5 x 4 metres), defined by the existing revetment walls, but with new end walls to the northwest and southeast which will require construction trenches. In addition, the proposed floor level of the new café will lie 0.80 metres beneath the present paved surface and at the same level as the present flagged area in front of the existing café/toilet block. The Scheduled Monument Consent therefore required that an archaeological evaluation was to be undertaken, in order to make recommendations on the final design of the new building and the establishment of its dimensions, levels etc. The evaluation would assess the character and extent of surviving deposits across the site through archaeological trial trenching. The level of the natural soil, and the bedrock, would also be established.

Methodology

Two trenches were hand-excavated. Trench 1 (T1) to the northwest was a reverse L-shape in plan, the northern limb of which ran southwest to northeast and measured 3.60 metres long, with a southern limb extending 2.85 metres to the northwest from its southwest end. Both limbs were 1.25 metres wide. Trench 2 (T2) to the southeast ran southwest to northeast and measured 3.60 metres long, and 1.25 metres wide.

The paving slabs were lifted from both trenches. They lay on a 0.15 metre thickness of concrete, which was removed using a jackhammer. The trenches were then hand-excavated and recorded. All archaeological features were sample excavated. All archaeological features and deposits were recorded using an open-ended numbering system. Significant archaeological features and deposits were planned at 1:20 scale, and photographed in digital and B/W analogue format. Section drawings were at 1:10 scale. Drawn records were related to standing buildings. In each trench, only the southeast facing sections were drawn, and detailed sections were only drawn at their deepest ends, to the northeast. Trench 2 was not fully excavated throughout, but in alternating half sections.

The evaluation was subject to a number of physical constraints. A live, high-voltage electricity cable, belonging to the castle's ring main, ran through both trenches, as did a water pipe connected to a stand-pipe and tap. Substantial baulks were left around both. Two dead ceramic water pipes (drainage?) also ran through Trench 1 but these were removed. These features cut through all deposits recorded in the trenches.

Results (Figs. 2 - 5)

In general, most deposits were seen to belong to the later post-medieval period, probably from the 1930s, and overlay a buried soil which was present, in localized areas, over the limestone bedrock. Only one possible earlier archaeological feature was seen, in Trench 1. However, mortar was present in patches on the bedrock suggesting that it had, probably the medieval period, been used as a construction horizon.

**FIG. 2 -
PLAN
OF TRENCHES**

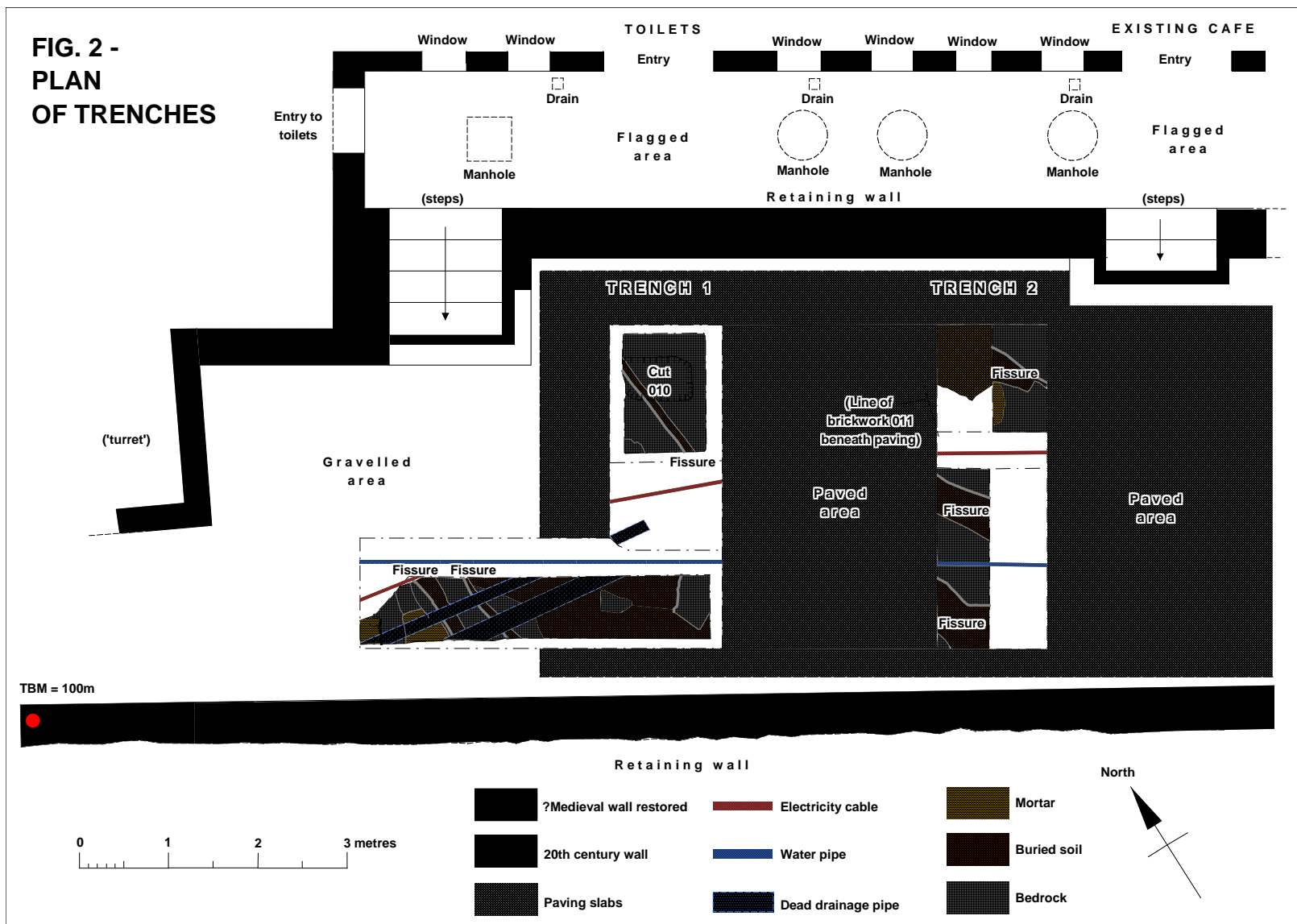
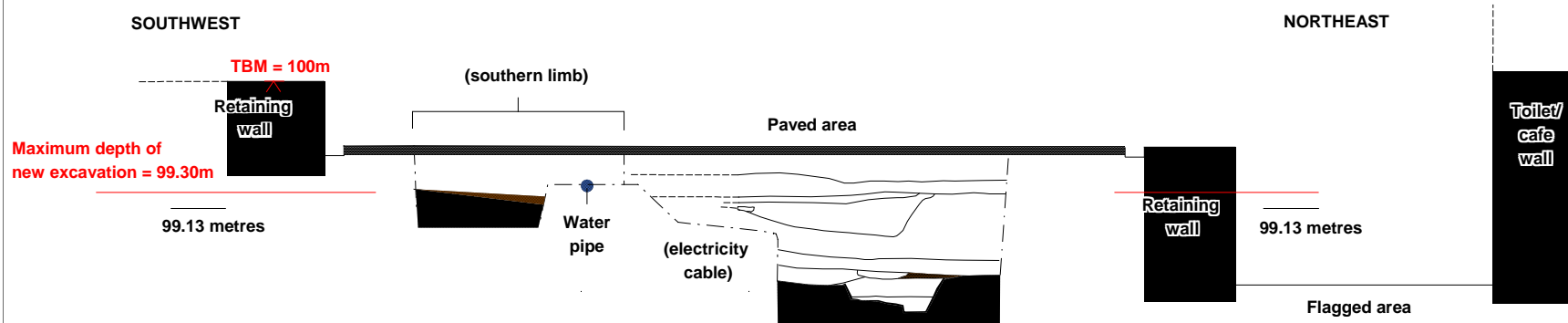
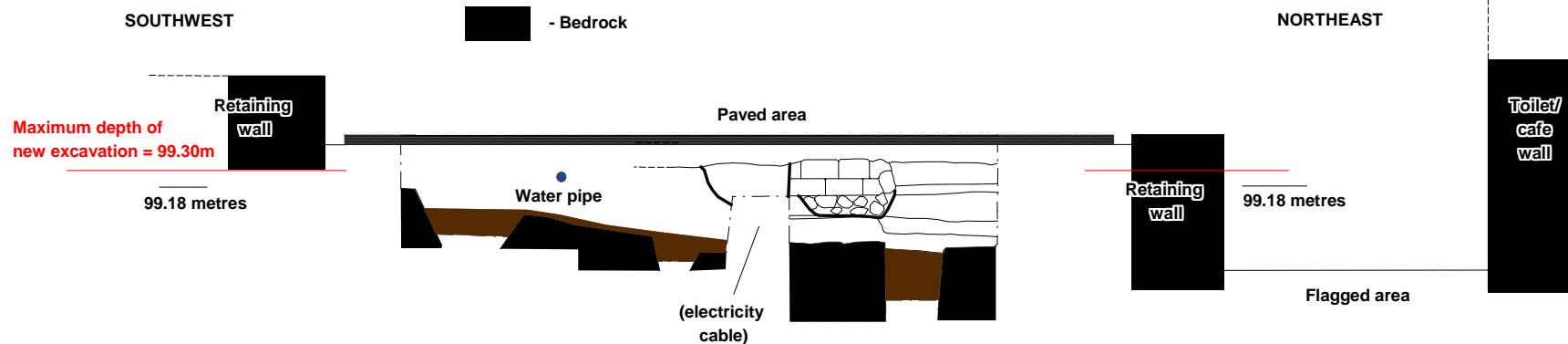


FIG. 3 - SECTIONS ACROSS SITE
(see Figs. 4 & 5 for context numbers)

TRENCH 1



TRENCH 2



Trench 1 (Figs. 2, 3 & 4)

This detailed description refers to the northeast end of T1, which was excavated to a maximum depth of 1 metre, but the sequence was similar throughout the trench.

Later contexts

Removal of the concrete revealed a 0.14 metre thickness of dark brown friable silty clay 001, with mortar fragments and some stones. The layer contained a very mixed assemblage of finds including 19th - early 20th century ceramics.

Context 001 overlay a patchy deposit, not present throughout the trench, of mortar rich, reddish-brown loamy soil 002. It was only 0.03m thick. A deep deposit beneath 002 was 0.40 metres thick and appeared to represent two separate events, though comprising very similar dark reddish-brown loamy soil with fragments of blue roofing slate, mortar fragments and stones. However, it appeared to comprise an upper, stonier deposit 003 overlying a lower, finer layer 004. These layers also contained a very mixed assemblage of finds including 19th - early 20th century ceramics.

Context 005 below was a 0.10 metre thickness of medium brown, loose gravelly soil. It overlay a small layer of red soil, only 0.04 metres thick and localized, which on close inspection appeared to be decayed brick. It overlay, or was possibly cut through a deposit 007 comprising medium brown, loose soil with mortar fragments and small stones, from which fragments of 19th – 20th century red brick were retrieved. Fragments of roofing slate were also present which appeared to be of north Pembrokeshire origin and may therefore be medieval, if residual. Thicker pieces of grayer slate, with nail-holes, were probably medieval but all the above deposits are clearly post-medieval in date and may not even be *in situ*, possibly having been imported onto the site for levelling etc.

Earlier contexts

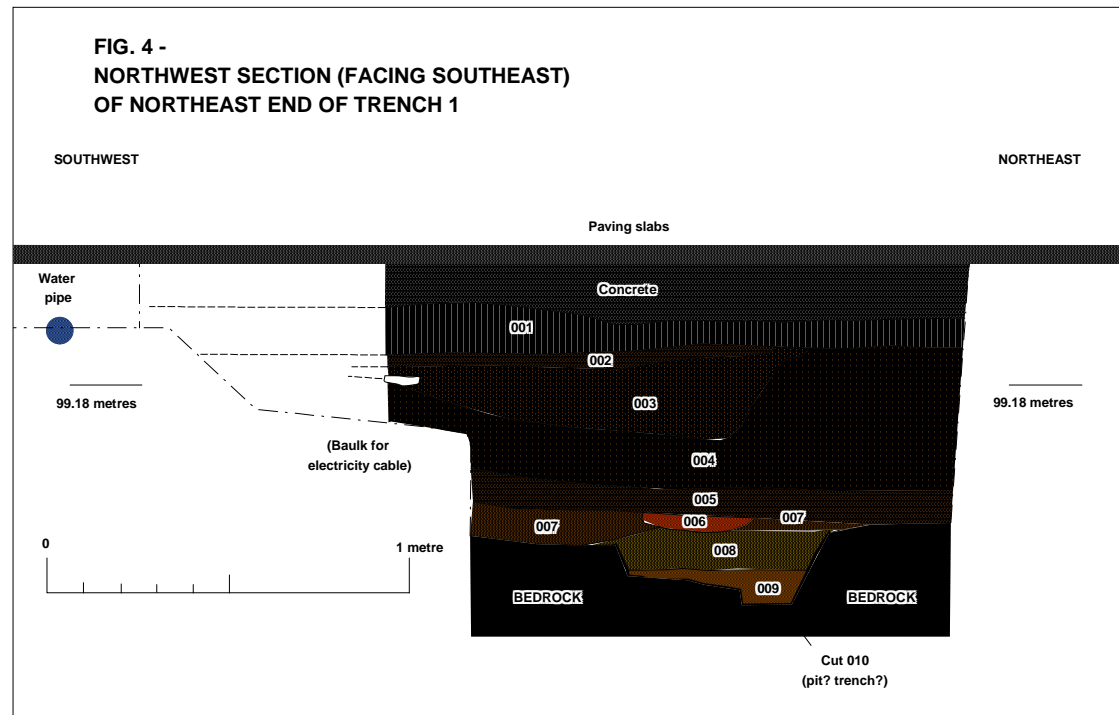
However, deposits beneath 007 at the northeast end of the trench may be earlier, apparently filling a cut feature. This feature, 010, which measured 0.80 metres northwest-southeast and 0.50 metres southwest to northeast (but ran beneath the west edge of the trench), was cut through the limestone bedrock with an irregular stepped profile; it had a maximum depth of 0.25 metres. It had two discrete fills, the lower of which 009 was a 0.10 metre depth of light brown, sandy silt/clay with densely packed, irregular stones derived from the bedrock. This was overlain by a 0.15 metre thickness of buff-coloured mortar, 008, which was convincingly medieval in appearance and which contained sherds of medieval pottery (local wares), a number of iron nails with square shanks that also appeared to be medieval, and no recognizably later finds.

Bedrock occurred at a depth of 0.85 metres at this north end of the trench. As elsewhere within the evaluation, it was deeply fissured, the fissures trending almost due north-south. However, no buried soil was present over the bedrock here.

At the other end of the trench, in the southern limb, bedrock occurred at the much shallower depth of 0.56 metres. However, through most of the central part of this limb it lay beneath a red-brown, stiff clay loam, which was entirely sterile. This clay loam also occupied the fissures in the bedrock and apparently represents a natural soil horizon. Similar soils have been observed over the limestone bedrock at the nearby Carew Castle (Richard Ramsey, Cambria

Archaeology, *pers. comm.*) and represent soils derived from the parent bedrock.

The bedrock protruded through the natural soil at the northwest end of this southern limb. Patches of mortar adhering to the bedrock suggest that it may have been used as a constructional horizon. A boss of stone in the southwest corner of this limb, at the higher level of 0.26 metres from the surface, does in fact appear to be mortared masonry rather than mortar on bedrock. However, its form and character could not be determined; neither could any interpretations be made on the nature of the possible constructional horizon.



Trench 2 (Figs. 2, 3 & 5)

As in T1, this detailed description refers to the northeast end of T2, which was excavated to a maximum depth of 1 metre, but the sequence was similar throughout the trench.

Later contexts

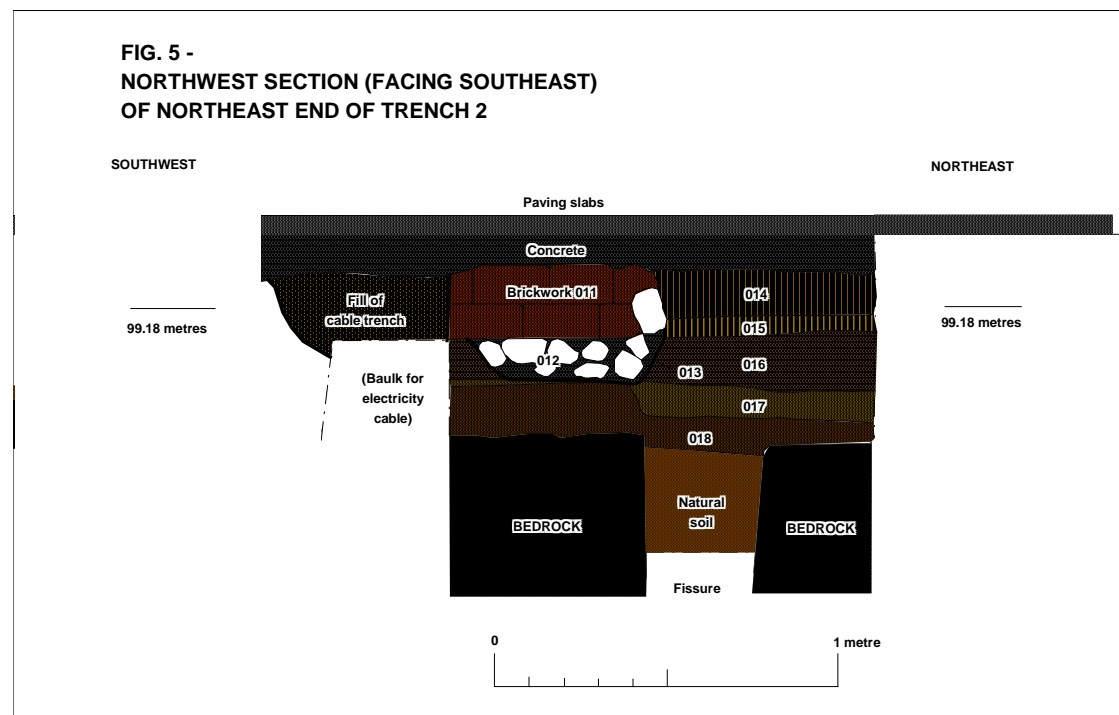
Removal of the concrete revealed a 0.15 metre thickness of very clean, mid brown friable loam 014, with very few inclusions apart from a large number of clay pipe fragments. It has the appearance of a garden soil that had been deliberately brought onto the site. However, cutting through this soil was a feature that was seen in the northwest edge of the trench, which it ran beneath. The feature comprised a 1.30 metre length of red bricks 011, set on their edges in two courses, running north-south obliquely to the trench. The bricks were of late 19th – early 20th century character and one was stamped 'Goodwick'. They lay on a foundation, 012, of stones set in concrete, which occupied a trench 013. The nature and function of this brick feature is unknown but it appears unlikely that it was a wall – it may possibly be part of a culvert or path. It appears to be truncated at its south end by the high-voltage ring-mains cable trench.

Layer 014 overlay a 0.60 metre thickness of dark brown friable silty clay 015, with mortar fragments and some stones, which was very similar to, and may be the same as, context 001 in T1. This in turn overlay an orange-brown, plastic silty clay loam 016 that did not appear to be represented in T1 and again may be an import onto the site – it was, like 014 above, very clean with few coarse components, and was thick – 0.17 metres.

Beneath 016 was a creamy-white, very clean deposit of mortar 017. It averaged 0.10 metres in thickness, though thicker to the north where it appeared to occupy a slight cut, and was at first regarded as possibly representing a medieval destruction or construction horizon, but it overlay a layer, 018, that comprised reddish-brown friable silty clay and containing mortar, slate and fragments of 19th-20th century brick, much like 007 in T1 – which may be the same layer. The same sequence was seen in the southwestern half of the trench.

Earlier contexts

Layer 018 directly overlay the same natural soil that was encountered in T1. As in T1, the soils was patchy, the underlying being exposed in a number of locations, and deeply fissured as in T1. The bedrock lay 0.60 metres beneath the paving slabs at the northeast end of the trench but rose to a depth of 0.43 metres at the southwest end. Patches of mortar were seen to adhere to the bedrock where the soil was absent at the northeast end, as in T1, and were similarly amorphous but interpreted as possibly representing a medieval building horizon.



DISCUSSION

In both trenches, contexts containing 19th-20th century material could be seen to directly overlie the natural soil and bedrock, with no intervening horizons. However, it is clear that even if there was no intervening human activity, deposits would have naturally accumulated over the natural ground profile prior to the 19th-20th century – the net tendency towards erosion in the centre of the outer ward and deposition around its periphery has been noted above.

It therefore appears that these intervening deposits have been lost, through deliberate removal. The sequence also suggests that they were removed immediately prior to the deposition of contexts 007 and 018, which contained 19th-20th century brick.

The most likely context for their removal is the reconstruction of the castle under Sir Ivor Philipps in the 1930s, and the construction of the cottage, now the café/toilet block. The pre-existing downhill slope from the outer ward was terraced, and the northern of the two retaining walls was apparently built. The contexts exposed during the evaluation apparently represent make-up that was imported into the area to act as levelling for this terrace, deposited behind the retaining wall. The southern retaining wall was apparently built somewhat later, in the 1950s (see above).

The context of the two dead waste drainage pipes is not immediately apparent. Changing rooms etc. for the tennis court had been built during the 1920s, prior to restoration, and are shown in a contemporary photo (Appendix 6). However, the pipes were clearly laid after the area had been terraced, ie. post-restoration. Nevertheless, if their line is projected further eastwards they run up to the retaining wall, by which they would be truncated – unless their fall increases considerably towards the east. The ring-main and the water pipe are fairly recent features, laid down prior to the resurfacing of the area in the 1990s.

The natural soil, which overlay the bedrock in areas and filled the fissures within it, was sterile. Its patchy nature may be natural, but equally may be the result of partial removal during the past. It may be associated with building – the amorphous areas of mortar that adhered to the bedrock have been described. These could not be rationalised into any form, but appear to include what may be a small remnant of mortared walling in T1, and may be associated with feature 010 at the northeast end of the same trench. None of these features represent the wall shown on the 1861 Ordnance Survey map, which lay further northeast, but may represent medieval walling associated with St Anne's bastion and the building(s) within it.

CONCLUSION AND SUGGESTED MITIGATION

Conclusion

St Anne's Bastion is a medieval structure that appears to have origins in the 14th century, possibly as a 'Gloriette', or private apartment(s). Its medieval form appears to have been similar to that of today, despite extensive restoration during the 1930s when the castle was restored and a cottage, now the present café/toilet block, was constructed within the bastion. This building work was accompanied by landscaping around the bastion, including the erection of a retaining wall. A second retaining wall was added during the 1950s.

The majority of deposits exposed during the evaluation appear to belong to this 1930s activity, representing make-up that was imported into the area to act as levelling, which was deposited behind the retaining wall to create a terrace. The lowest dateable context contained fragments of 19th-20th century brick. It appears that all earlier deposits were truncated during this landscaping, this late context directly overlying the native bedrock, over which were patches of natural soil. Amorphous areas of mortar adhering to the bedrock may represent the constructional level for ?medieval building(s). They appear to include what may be a small remnant of mortared walling, and may be associated with a feature cut through the bedrock.

Suggested mitigation

It is recommended that the design of the new café takes into account the possibility that medieval building horizons may be present within the development area, along with a buried soil which overlies the bedrock. It is important that constructional levels do not intrude into this level. The proposed floor of the new café lies at the same as the flagged area in front of the existing café/toilet block. However, this lies at a lower level than the bedrock. It is recommended therefore that the proposed floor level is raised – Figs. 6 and 7 show the relative levels across the site (see also Fig. 3 for running sections across the site).

The construction trenches for the new end walls should similarly not intrude into the earlier levels. The proposed walls are narrow, and the proposed elevations are low, so the building should not in fact require deep construction trenches (but they must be in line with building regulations).

Finally, it is also recommended that one of the two design options, which intruded further into the outer ward, is not adopted.

Fig. 6 – Plan of T1 showing levels

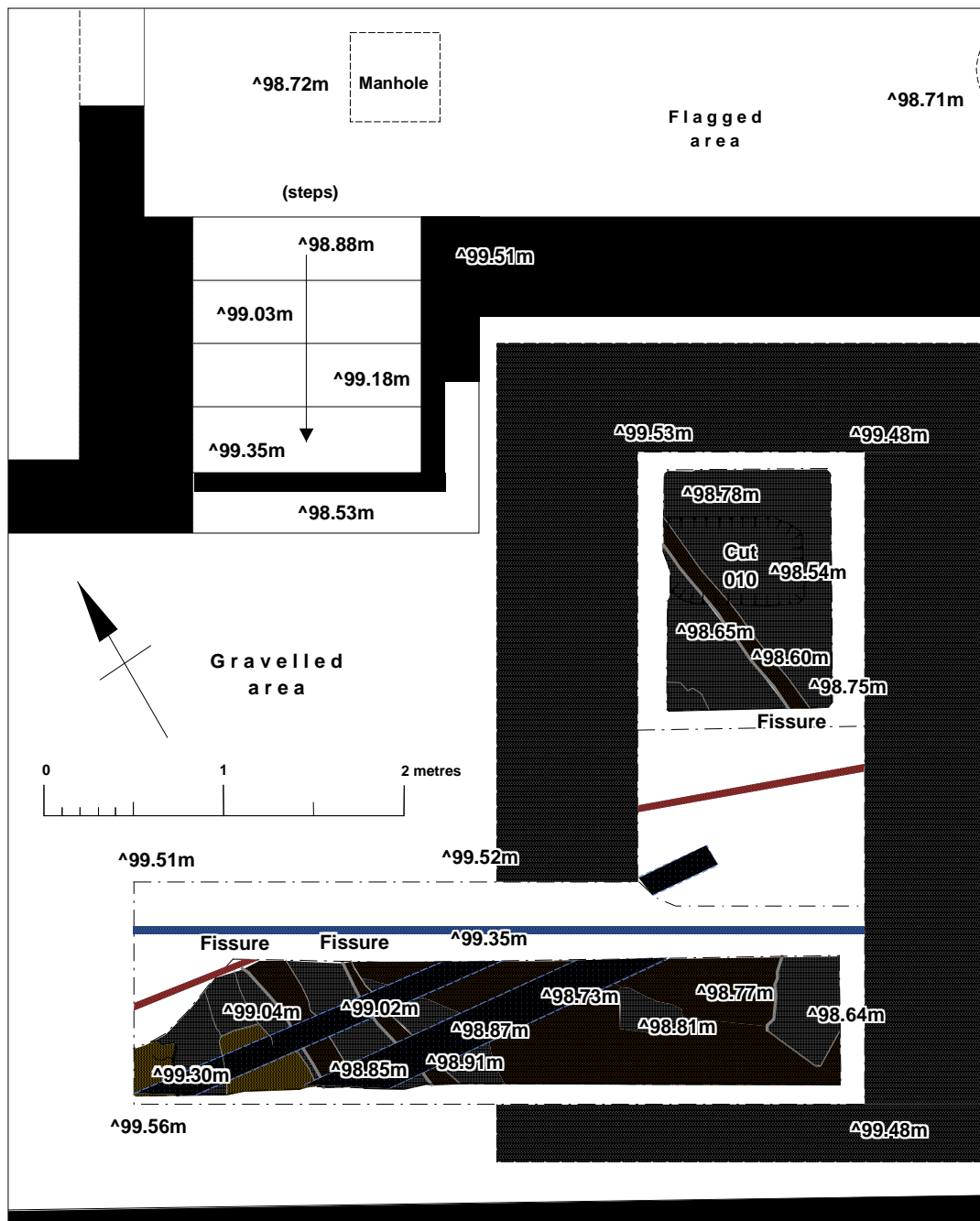
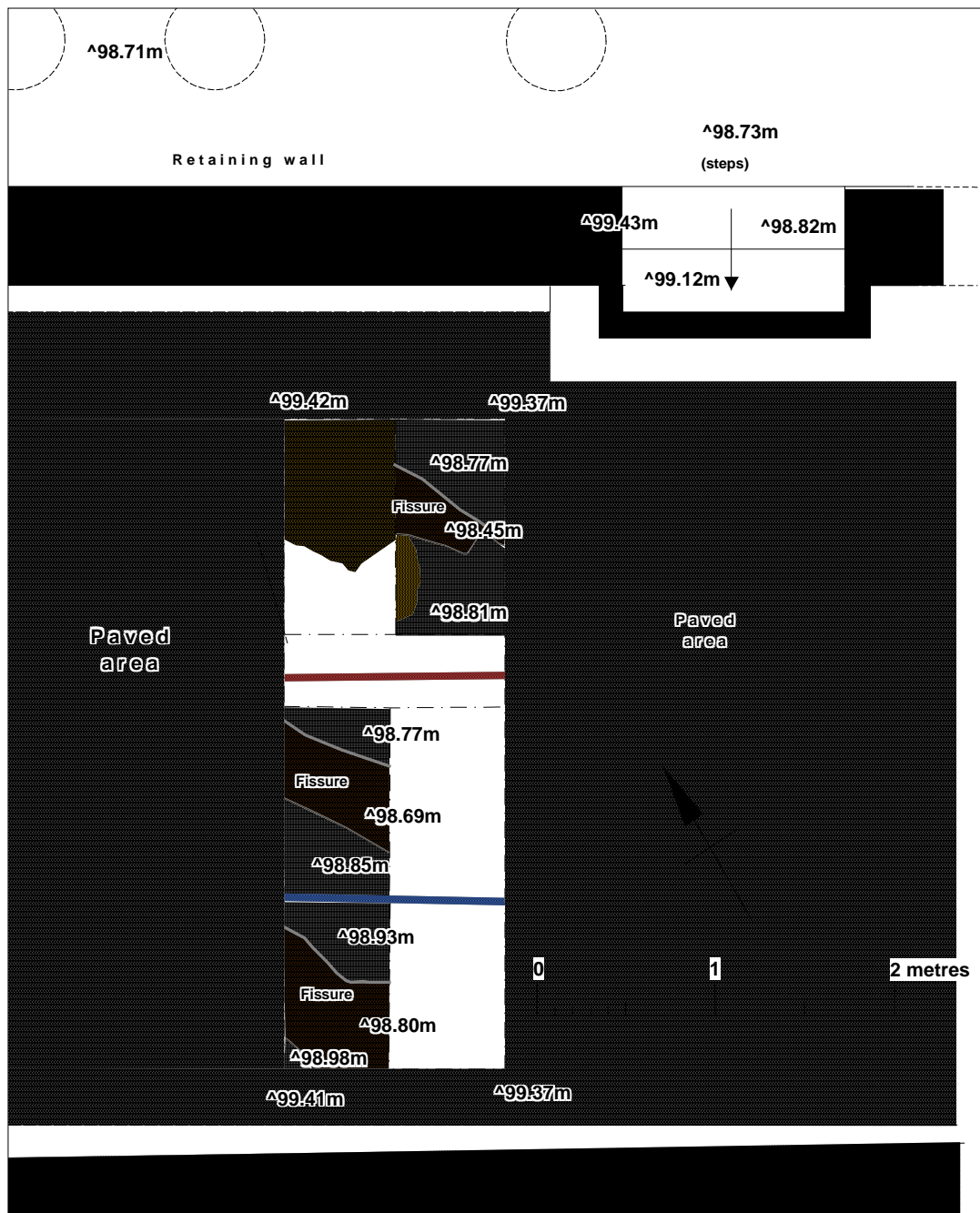


Fig. 7 – Plan of T2 showing levels



*Plate 1 – Site before excavation, looking southeast
(St Anne's Bastion and existing café/toilet block to left)*



Plate 2 – Site during excavation, looking down from northeast



Plate 3 – Northeast end of T1 during excavation, from southeast, showing section and fill 009 of feature 010



Plate 4 – Northeast end of T1 after excavation, from northwest, showing feature 010



Plate 5 – Southern limb of T1 after excavation, from southeast, showing bedrock, with fissures, the natural soil and possible mortared walling in top left corner



*Plate 6 – T2 after excavation, from southwest,
showing part-excavated sections (with mortar 017)
and fully excavated sections with fissured bedrock and natural soil*



*Plate 7 – T2 after excavation, from northeast,
showing part-excavated sections (with mortar 017)
and fully excavated sections with fissured bedrock and natural soil*

Plate 8 – T2 northeast end, after excavation, looking down from southeast, showing part-excavated section (top, with mortar 017) and fully excavated sections with fissured bedrock and natural soil (bottom)

ARCHIVE DEPOSITION

The archive, which will be indexed according to the National Monuments Record (NMR) material categories, will be deposited with the NMR, RCAHMW, Crown Buildings, Plas Crug, Aberystwyth.

ACKNOWLEDGEMENTS

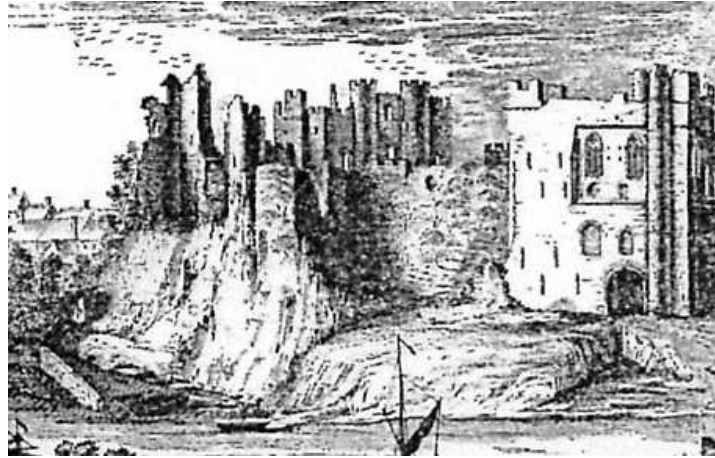
The fieldwork was undertaken by Neil Ludlow, Richard Ramsey and Hubert Wilson of Cambria Archaeology. Thanks to the Pembroke Castle Trust, to Pembroke Design (Architects) and to Ralph Kenniford for advice.

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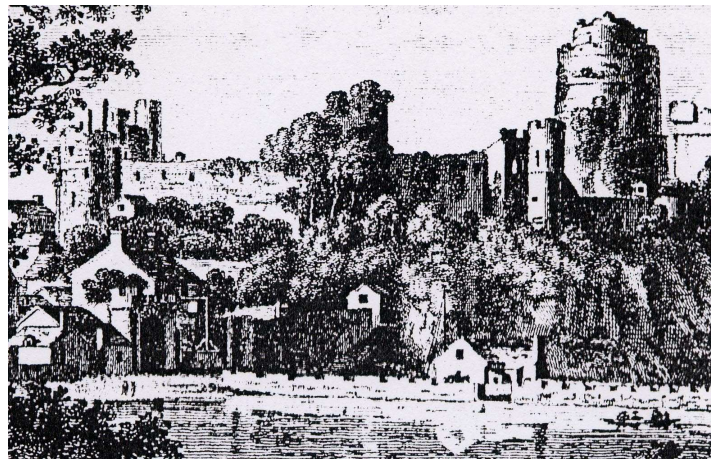
APPENDIX 1

St Anne's Bastion in 1740, external view from the northwest (left of frame), from an engraving by the Buck brothers



APPENDIX 2

St Anne's Bastion in 1778, external view from the northeast (right of frame), from an engraving by the Paul Sandby



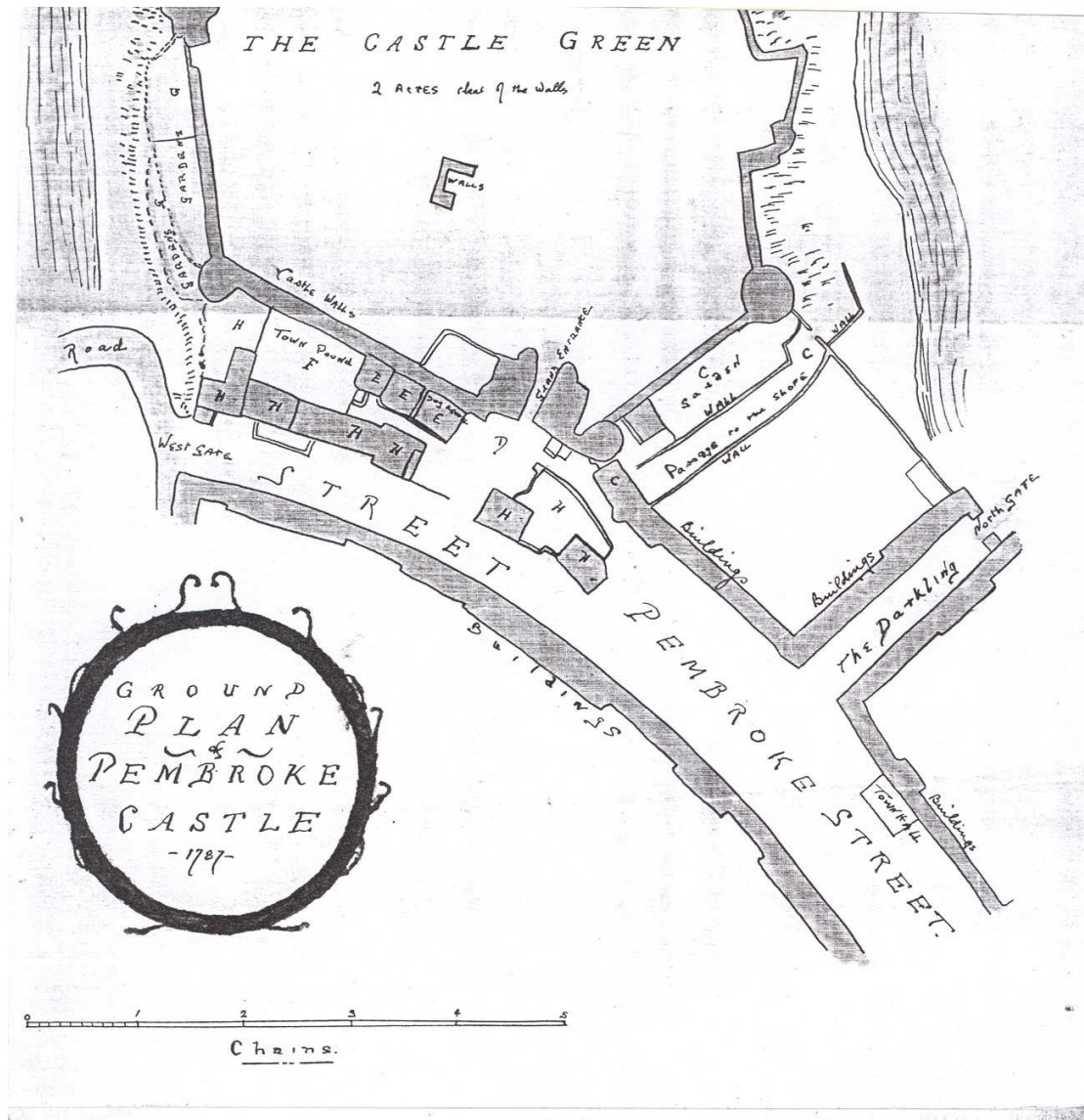
APPENDIX 3

St Anne's Bastion in 2001, external view from the northeast (centre of frame)



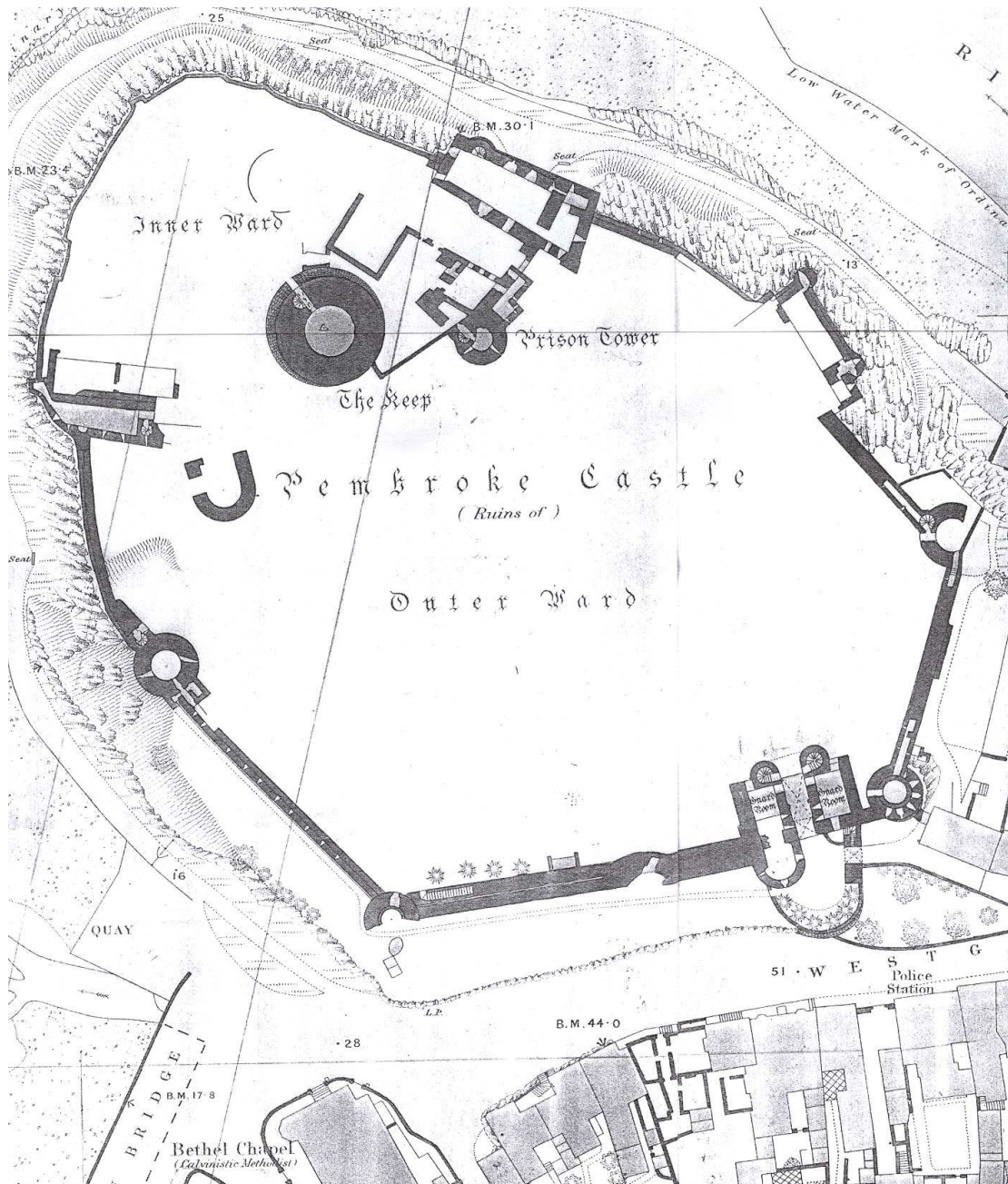
APPENDIX 4

Detail from a plan of Pembroke Castle, of 1787
 (National Library of Wales, Map Book Vol. 39, 'The Estates of Edward Lovedon Lovedon Esq., by T. Lewis, 1787', 93-4)



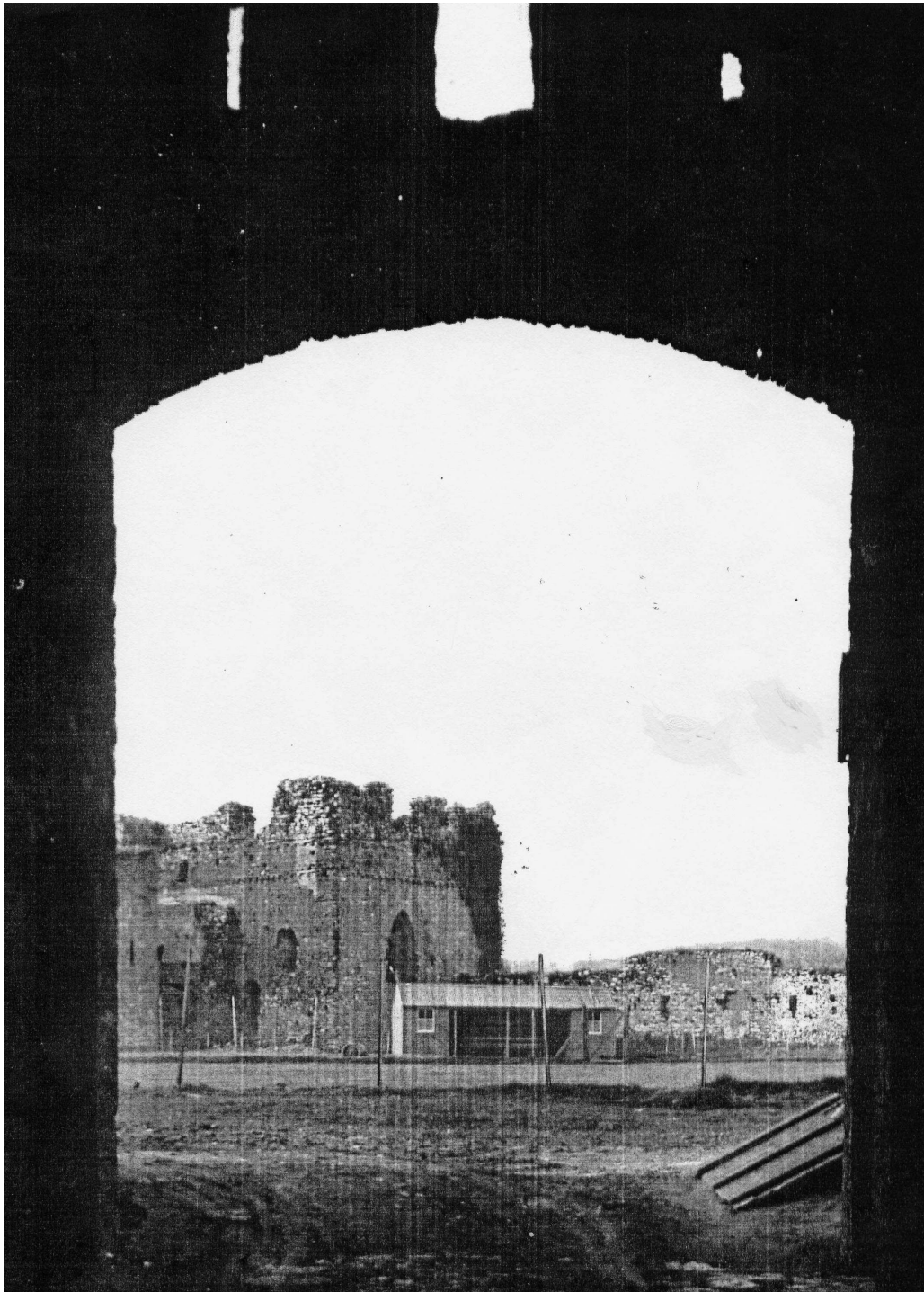
APPENDIX 5

Detail from Ordnance Survey 1:500, First Edition,
Pembrokeshire Sheet XL 9.8, 1861



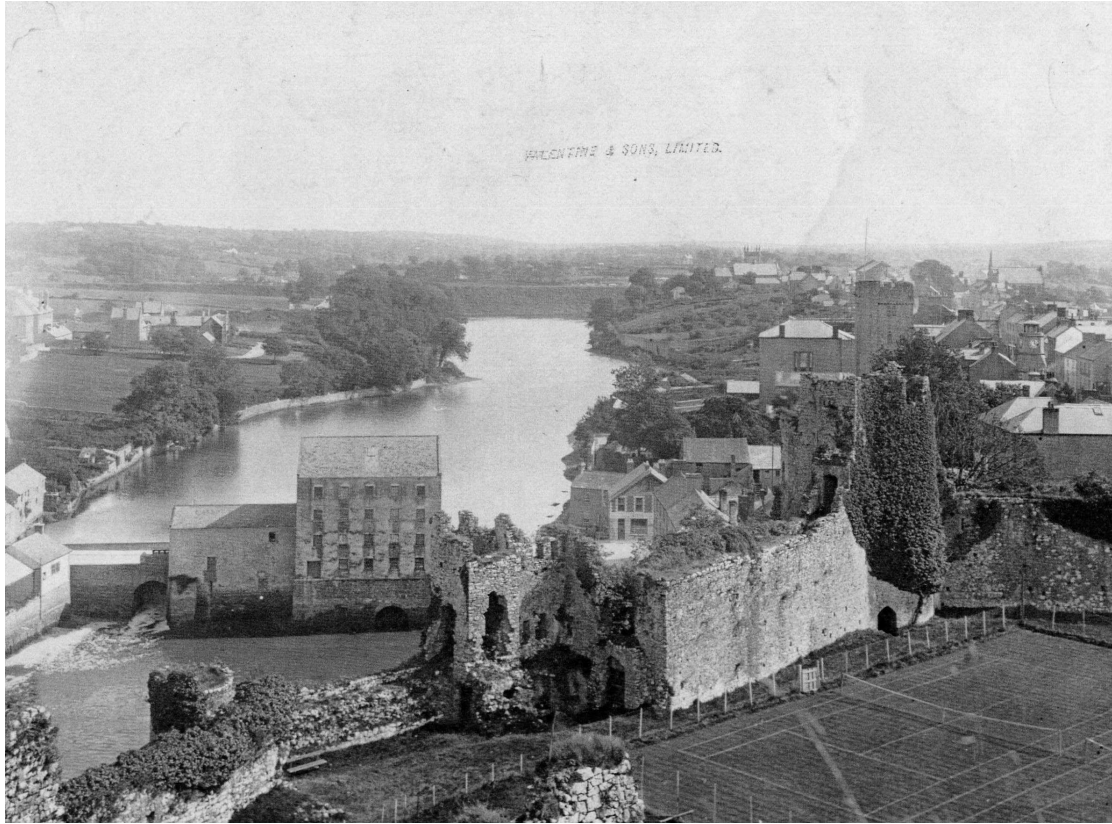
APPENDIX 6

Photo of the grass tennis court taken from the Great Gatehouse, before restoration, c.1920s (St Anne's Bastion out of frame, to right)



APPENDIX 7

Photo of St Anne's Bastion taken from the west (from the summit of the keep), before restoration, c.1920s



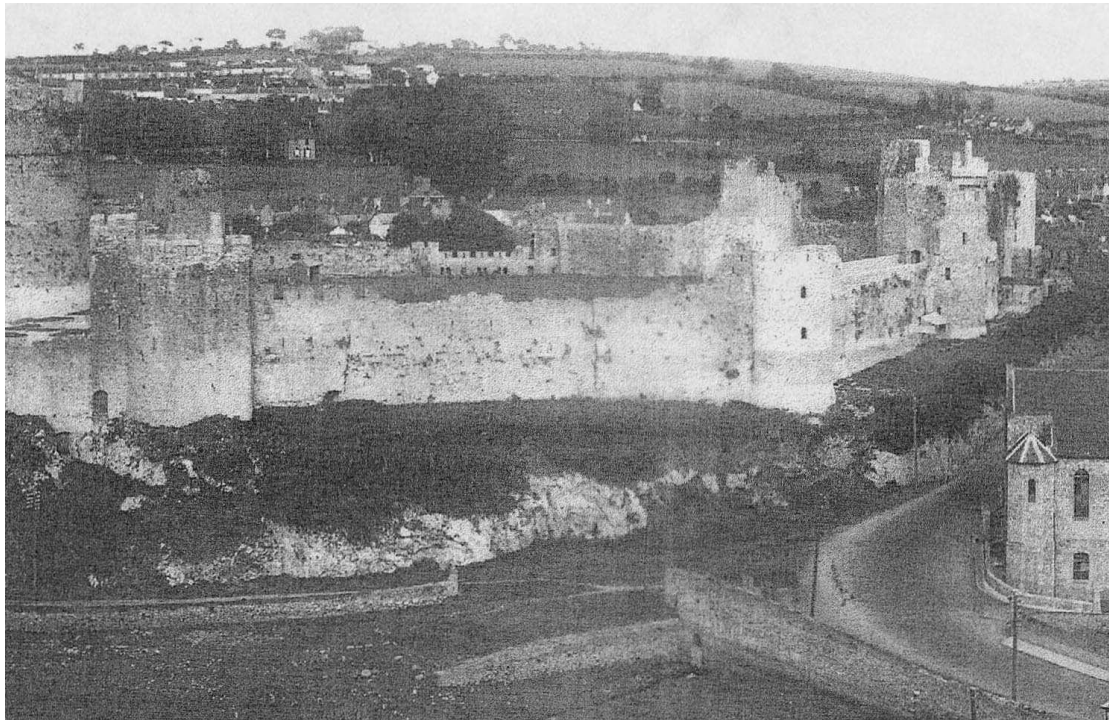
APPENDIX 8

Photo of St Anne's Bastion taken from the northwest, before restoration, c.1920s (from Oman, 1926)



APPENDIX 9

Photo of Pembroke Castle Outer Ward, from the south, on completion of restoration in 1938. St Anne's Bastion and cottage in rear centre of frame (from Cripps 1996)



APPENDIX 10

Photo of St Anne's Bastion and café/toilet block taken from the west (from the summit of the keep), before upgrading, in 1987

