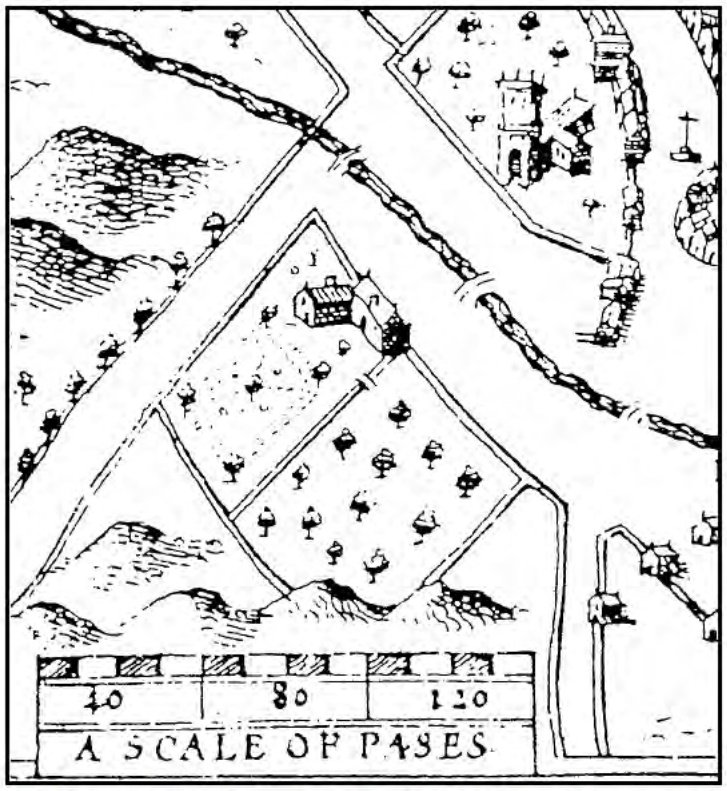
THE BISHOP'S PALACE, BANGOR

ARCHAEOLOGICAL ASSESSMENT AND EVALUATION EXCAVATION DECEMBER 2003

GAT Project No. G1785

Report No. 514



The Bishop's Palace and cathedral on Speed's map of Bangor, 1610

Prepared for Ainsley Gommon Architects
On behalf of North Wales Police

By G.H. Smith

January 2004

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SUMMARY

Desktop assessment and trial excavations were carried out on land adjoining the Bishop's Palace, Bangor (now Bangor Town Hall) in advance of a development application. The existing buildings of the palace were built in two phases in the late 15th century and early 16th century (although extended and modified in the 18th century). A map of the town by Speed in 1610 shows no other but these same buildings standing isolated at one side of a small rectangular enclosure, the north side of which appears to be a formal garden or park. However, the ecclesiastical community at Bangor was founded in the seventh century and a residence of the bishop may well have existed on the same site from about the 12th century when the cathedral is thought to have been established on its present site. There were certainly other ecclesiastical buildings elsewhere within the valley. The land investigated formed part of the grounds of the palace and had formerly contained a stable block of 18th century date. Previous work in 1996 within the same area after demolition of the stable block had located a stone structure alongside the adjoining River Adda, possibly a bridge abutment (Appendix 2 and Johnstone 1996 and 2000). Although there were no datable artefacts this structure was of shell-mortar construction, suggesting a medieval date. However, close to the structure were found three large oak timber piles, driven into the subsoil, one of which was shown by dendrochronology to have been cut down in the late summer or winter of AD 1120/1121. The present excavations showed no further evidence of medieval structures within the area but did locate a ditch that may have formed part of the eastern boundary of the palace grounds, prior to the construction of the stable block. The slope of the bank of the River Adda was also recorded further east than that recorded in 1996 but with no evidence of riverside structures, apart from the foundations of the walls of the 18th century stable block. Close to the palace buildings two large pits were identified. These were interpreted as clay-quarrying and puddling pits belonging to construction of the medieval buildings, probably of the second phase of construction since they contained some old internal plaster, mortar and two single peg roof slates. However, they could also belong to repair of the palace buildings or construction of the earlier stable buildings *c*. 1700. Other pits and construction evidence are likely to exist elsewhere around the palace buildings. Two small parallel ditches were found which predated the pits and were oriented at an angle to that of the palace buildings. They may represent a hedged boundary belonging to fields predating the buildings, although no artefactual evidence was found to provide more precise dating.

1. **INTRODUCTION**

Gwynedd Archaeological Trust was asked by Ainsley Gommon Architects, on behalf of North Wales Police, to carry out a desk-based assessment and evaluation by sample excavation in a plot of land of 1700 sq. m between Ffordd Gwynedd and Bangor Town Hall, prior to a planning application to construct a new police station (Fig. 1). The work was required because of the proximity to the Town Hall, which was formerly the residence of the Bishop of Bangor, a building dating from the late 15th century AD and listed as Grade 2 (Welsh Office 1978). The land comprising the proposed development was part of the grounds of the palace, where there had been 18th century buildings, including a stable block, belonging to the palace and where previous archaeological work has identified structural evidence dating to the 12th century (Appendix 2 and Johnstone 1996 and 2000). The land also lies within a designated Architectural Conservation Area.

2. SPECIFICATION AND PROJECT DESIGN

A design brief for the work was specified by Gwynedd Archaeological Planning Service (Appendix 1). The desk-based assessment was to be based on a full study of all relevant published, documentary, photographic and cartographic information. The archaeological field evaluation was to be fulfilled by excavation of a minimum 5% sample of the development area, equivalent to 5% of c. 1700 sq. m being *c*. 85 sq. m.

3. METHODOLOGY

The desk-based assessment was fulfilled by study of materials in the Gwynedd SMR, the University of Wales, Bangor, Archives, the Gwynedd County Archives, Caernarfon and the RCAHMW *CARN* on-line database.

The field evaluation was carried out by excavation of five trenches, each *c*. 2m wide and totalling *c*. 42m in length, 84 sq. m. in area. The position and extent of the trenches was designed first to investigate the footprint of the main wing of the proposed new building, which lies at the east side of the area and secondly to sample the remaining area, beyond that investigated in 1996 (Fig. 2).

4. ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

Bangor as a settlement has its origins in the ecclesiastical community founded around the middle of the 6th century AD by Deiniol, reputed to be a descendant of the royal family of Rheged, the ancient British kingdom around the Solway Firth (Roberts 1994, 20). The site had no previous historic significance because it was not a strategic location for communication or defence. The community established in the 6th century occupied a small enclosed valley with a stream, the Afon Adda, and this land was probably a gift of Maelgwn, the ruler of Gwynedd. The earliest settlement would have been monastic and there is a note in the Irish Annals of the sack of the monastery in AD 634. This original settlement would have been focussed on a chapel within an enclosure, from which the town takes its name – Bangor, meaning 'Wattle fence', and other settlements have derived their name similarly at Bangor-on-Dee, Cheshire and Bangor, Co. Down, Northern Ireland. White (1984) and Longley (1994), have argued that this early enclosure (Fig. 3) may have been the same as the oval area that was still the focus of the town as recorded by Speed in his map of the town in 1610. However, it is recorded that Edward 1 erected some town defences in 1283-4 and these may have had some effect on the subsequent development of the town plan (*Annales Cambriae*, 108). None the less, excavations in this same area, north of the High Street and east of the cathedral between 1981-9 (Longley 1995) identified several early boundaries, the earliest a curvilinear 'slot' dated to between the 6th to 8th centuries AD (*ibid* 56) just east of the cathedral. Numerous early graves were also recorded further east, some of which predated a rectilinear boundary ditch dated to around the mid 10th century (*ibid* 65).

There is good evidence then that this area was a centre of ecclesiastical activity prior to the establishment of the present cathedral in the early 12th century by Bishop David, who was consecrated in 1120 (Carr 1994, 28). The present stone-built cathedral was begun under David and there are some 12th century features surviving within the present building (Ralegh-Radford 1949). However, some pre-12th century buildings are recorded as having survived until at least the late 13th century before falling into decay (Soulsby 1983, 76). It had previously been thought that the early monastic community was located on the north side of the Afon Adda, on the terrace at the foot of the slopes below the main university building (RCAHMW 1960, Fig. 17), where buildings and burials

had been found in 1924 (Hughes 1924). Excavations were carried out prior to the construction of the university students' union building and on the hillside close to the 1924 discoveries (Alcock 1964) and prior to the construction of the theatre (White 1971) but no medieval remains, or other burials were found. It has been suggested therefore that the principal monastic community must have been on the south other side of the Adda Valley, in the vicinity of the present cathedral and that the remains found in 1924 were those of a subsidiary parish church, Llanfair Garth Brannan, mentioned in 1291. The position identifies it as probably the same as a church mentioned in a survey of 1721 which states – 'Besides the Cathedral-Church, which is dedicated to St. *Daniel*, here was formerly a Parish-Church of St. *Mary*, which stood on the Back-side of the Bishop's Palace, about 400 Yards distant from the Cathedral; the Ground on which it stood, together with the Church-yard, belongs to the *Vicars Choral*, who let it out, and receive the Rent of it, which is 6s. 8d. *per Ann.* …When St. *Mary's* Church was demolish'd there is no Tradition, and the very foundations of it and the old Castle, said to have been heretofore in or near this Town, are so perish'd that they can't be trac'd out with any Certainty… There have been often human Bones dug up on the Scite of St. *Mary's* Church and Church-yard.' (Browne Willis 1721, 46).

There were other ecclesiastical buildings in the valley, including another chapel, Capel Gorfyw, a friary and several houses for the clergy such as the dean, canons, vicars choral etc. Browne Willis (1721, 42) notes that several other dignitaries including the Archdeacons of Bangor, Anglesey and Merioneth probably also had houses here as '…they still have some small parcels of land here' on which rents were still then being paid. Chapel Gorfyw was close to the east end of the cathedral and the houses of the clergy were clustered around near to the cathedral, where the high street is now.

The friary was of the Dominican order and was established about 1250. It original site is unknown but was close to the mouth of the Afon Adda although its main site was later established in Hirael and its buildings there were to become a school by private bequest after its dissolution in 1538.

The secular settlement of Bangor was subsidiary to the ecclesiastical, both in terms of function and importance, and probably had its origins in the employment deriving from the services required by the ecclesiastical community. The houses of the city in fact developed on the fringes of the ecclesiastical community because the majority of the land around the cathedral belonged to one or other of the diocesan incumbents. Never the less, there were 53 burgesses or tenants named in a survey of the Bishop's lands in Bangor of 1306, although eleven of these were clerics (Carr 1994, 29).

Bangor was not a centre of secular authority, although a motte was built in the late 11th century on the ridge just north of the present town, possibly on Castle Hill above Garth (Soulsby 1983, 76). Even so the town suffered during many hostilities, probably because of the varying loyalties of the bishop. It flourished under the Welsh princes but was burned by King John in 1211. It was later damaged during Edward's campaign, possibly by the Welsh because the bishop had supported the English. It was attacked by Glyndwr in 1402 and 'the cathedral had been partly destroyed and probably the houses of the cathedral clergy had been laid waste' (Pryce 1923). The cathedral was supposed to have remained in ruins for nearly 90 years until the end of the fifteenth century, when restoration was begun under Bishop Thomas Skevington who also extended and improved the palace and will be discussed below.

The first map of Bangor is that of John Speed of 1610 (Fig. 4), which shows the cathedral, the palace, the city along a single street focussed on the market cross and the Afon Adda with a single mill at Glanrafon and three bridges. Drawings of 1740 (Fig. 5) and 1776 (Fig. 6) show the palace and city still much the same as in 1610. The population in 1801 was only 1,770 but rose rapidly during the 19th century, reaching 4,571 in 1831 and 9,564 in 1851. However, as shown on a map of 1834 (John Wood) most of the development took place away from the original centre in the vicinity of the cathedral because the land there still belonged to the church. Gradually, however, land was sold off or speculative properties built in the central area of Bangor.

It was not until the end of the 19th century that the large areas of church land to the north were sold, allowing the development of various municipal buildings. The Bishop's Palace and its extensive grounds of 16 acres were sold in 1900 by Bishop Watkin Herbert Williams to Col. Henry Platt and a group of local businessmen. They subsequently sold the buildings and part of the grounds to Bangor City Council and another part of the grounds to the University College of North Wales (Roberts 1994, 38). The Town Hall, the former Bishop's Palace, was opened in 1904, the free library in 1907, the post office in 1909 and the museum in 1910 (Ellis Jones 1973). These involved major changes in the layout of the town with the construction of two new roads through the gardens close to the Bishop's Palace, Ffordd Gwynedd, to the east and Ffordd Deiniol to the north. The area of the present study however, was not affected because the new road here, Ffordd Gwynedd, was laid

out to respect the existing stable block, which was retained, initially as a fire station, ambulance and mortuary, later as a council works depot (*ibid*).

5. THE DESKTOP ASSESSMENT

There are two aspects to the desktop assessment, firstly historical assessment of the documentary record regarding the Bishop's Palace and the ground in which it lies, secondly re-assessment of the previous archaeological excavations on the site. The latter needs to be discussed after the results of the present evaluation excavations have been described.

Historical Assessment

In looking at the potential for archaeological remains in the area being assessed there are two points to consider. First, were there any buildings or features of significance on this site before the late 15th century, the recorded date for the construction of the first part of the surviving Bishop's Palace within what is now the Town Hall? Secondly were there any other buildings or features contemporary with the use of the Bishop's Palace between the late 15th century and its 19th century abandonment of which evidence might be found?

The Bishop's Palace, which forms the present town hall, consists of two main parts, a western wing and an eastern wing. The western wing was the earliest and consisted originally of a simple single storey hall with an attached wing at the south-west to provide private rooms. The hall (later converted into two storeys) is of simple medieval type, of timbered construction. It is supposed to have been built by Henry Deane, bishop from 1496 to 1500, who was also Chancellor of Ireland and although Bangor was not his main residence was an energetic improver, rebuilding part of the cathedral and recovering lost church lands (Pryce 1923). This agrees with the assessment of the building by the Royal Commission, which identified the roof trusses as of *c.* AD 1500 in style (RCAHMW 1960, 10). The eastern wing was of similar construction to the west, although later much rebuilt in brick, and an inscription once existed over the porch door recording its construction by Thomas Skevington, bishop from 1508 until his death in 1533 (Browne Willis 1721, 41). Skevington was also an absentee as he was, in addition, the abbot of Beaulieu, Hampshire, where he resided. However, he organised the rebuilding of much of the cathedral, including the nave and tower.

The two wings of bishop's Deane and Skevington form the core of the palace although it was much altered, extended and improved over the centuries. By the mid-seventeenth century it was recorded as ' much decayed' in a survey but was altered and improved by Bishop John Evans (bishop from 1702-1715) and others and Browne Willis in 1721 records 'The Bishop's House… is in good repair. The Entrance to it is through an Arch which belongs to the stables, over which are granaries about 30 yards in length…Behind the House are Gardens and Orchards, which lie in good order' (*ibid*).

It is of greatest relevance to consider the early bishops of Bangor and whether they had residences here and if so whether these might have been in the area of the surviving palace buildings. The Diocese of Bangor in the sense that we know it today was established in the early 12th century with Bishop David, consecrated in 1120 (Carr 1994, 28) who may have begun work on the cathedral. The church grew in power and wealth under the Welsh rulers, demonstrated by the burial in the cathedral of Gruffydd ap Cynan, Owain Gwynedd and Cadwaladr (*ibid*). The bishops of this time would have had the land and the money to construct residences of some status, perhaps even to rival those of the rulers. Giraldus Cambrensis records that Archbishop Baldwin of Canterbury visited Bangor in 1188 and was 'decently entertained' by Bishop Gwion (Gir. Camb. Itin. Camb. II, vi) and Clarke suggests that this means that the bishop probably had a substantial residence. At this time it would have been little more than a large hall, perhaps with attached private rooms and service buildings, similar to the thirteenth century royal court found at Rhosyr, Newborough, Anglesey (Johnstone 1999). Like that, however, it would have been set within a walled enclosure or precinct and this would have made it easier to identify. However, there is no evidence as to where such building or precinct might have been. The houses of all the other clergy were on the south side of the river Adda, close to the cathedral but the bishop may have required something more impressive and monumental and there was simply not the space for such a structure close to the cathedral because of the sloping ground around. A separate enclosure opposite the cathedral and across the Adda would seem the obvious choice. On the other hand, the bishop also had a house at Gogarth on the Great Orme, believed to have been built at the end of the 13th century (RCAHMW 1956, 112-3) and he may have resided there, thus requiring only occasional lodging or entertaining rooms at Bangor.

All twelve bishops between 1417 and 1541 were English and absentees 'The Diocese of Bangor had not merely been neglected by its bishops… it had been virtually abandoned (Hook, *Lives of the Bishops*, quoted in Pryce 1923, x). Arthur Bulkeley, consecrated 1541 was the first bishop to reside in his parish since the 14th century (Browne Willis, 103). If there was an early Bishop's palace then it is most likely to have belonged to the period before Glyndwr and probably before Edward's campaign. The palace at Gogarth may have represented just a move away from a pre-existing site at Bangor.
The bishop was in effect a powerful lord, holding land widely and receiving tithes as well as receiving dues from the market and fair at Bangor as on most other activities, such as baking and brewing. He would have held courts much as did the rulers and had a prison and a right to try and execute transgressors if necessary. A suitable building to match the royal courts would seem to have been needed and a predecessor on or near the site of the surviving place buildings seems likely. A survey of the bishop's lands in 1306 records just a *messuage* (a dwelling house, possibly the bishop's palace, but clearly not especially grand) and garden at Bangor with an annual value of 20 pence as well as about 60 acres of arable land, 4 acres of hay-meadow, pasture, a watermill and two fish weirs (Carr 1994, 29). The royal Welsh courts were the target of demolition after Edward's campaign and the same may have been the case with the ecclesiastical properties so survival of remains may have been slight. Only archaeological evidence can therefore hope to show whether there was any earlier building here.

The area of the immediate enquiry formerly held a stable block belonging to the Bishop's Palace, mentioned by Browne Willis in 1721 and surveyed by the Royal Commission before demolition in 1996. These do not appear on Speed's map of 1610 (Fig. 4) but can be seen on drawings of mid 18th century (Figs 5-6) and in more detail on Wood's map of 1834 (Fig. 7), the Tithe map of 1841(Fig. 8) and the OS 1:2500 map of 1890 (Fig. 9). The stable block consisted of two parallel ranges, a northern and a southern, separated by yards. The northern was an extension from the south-east wing of the palace and is likely therefore be the earliest and its size, on the earlier maps, before truncation in the early 20th century, matches the '30 yards length' of Browne Willis' description. Thus, the Royal Commission's comment that the stables may belong to the work of Bishop Majendrie (1809-30) is not entirely correct although the southern range, consisting of three coach houses and adjoining L-shaped cottage may be of his time.

The stables connected to more outbuildings and yards or paddocks to the east, leading into a small road that once led towards Garth on the north side of the Afon Adda, across the hill slope, the original start of Love Lane. There was also a connection to the road via a track from the front of the palace and around its north side. It is shown on the John Wood map of 1834, on which is also shown a new 'Proposed Road' to the east, taking the same line but leading directly from Tan y Fynwent to Love lane and to a new lower road to Garth. The old road seems to have been the Bishop's private road, replaced by a larger, more direct road when the settlement of Bangor expanded. By the time of the Tithe Survey of 1841 the old road was no more, its position indicated only by one field boundary. However, all the land on the north side was bishop's land and in the Tithe Schedule recorded as 'The Bishop's Park', including the main block at the north side of the palace and a narrow strip all along the north side of the Afon Adda to the ferry at Garth. This is of interest for this strip was not the route of the road, unless there were an earlier route. It may have been a way of ensuring access to the sea at least in symbolic terms. The Adda was once tidal at least as far as Dean Street, and there was once a 'lake' or pool (Brochllyn) below Glynne Street, close to the Friary (Price Davies 1939). Price Davies also reported that 'during the last half century a ship in a gale was driven up as far as the electricity works (i.e. at Dean Street) and a photo taken'.

The stable block was originally more extensive as can be seen when the maps of 1834, 1841 and 1890 are compared to that of 1914 (Figs 7-10). The buildings extended further east and further south. They included a yard with a mock castellated enclosure wall on the south-west, seen on the drawing of 1776 (Fig. 6), which probably identifies it as of the same build as the castellated walled yard that existed on the north-east side until recent times and recorded on photographs of the stables prior to demolition. These further stable buildings were truncated at the east when the new road, Ffordd Gwynedd was built about the time of the opening of the town hall in 1904. The yard at the south was also truncated to provide a new access road to the town hall. At the time of the 1890 map and the 1914 map the line of the culverted Adda is shown following approximately its original (open) route, as shown on Wood's map of 1834 (Fig. 7). The Adda was then to the south of this southern yard and some way away from the area of the present proposed development. This is relevant to the re-assessment of the evidence from the 1996 excavations, discussed below.

Prior to these changes Bishop Watkin Williams (1899-1925) was unhappy with the palace, selling the land and moved to a new house Glyngarth on the Menai Straits possibly partly because of the state of the Adda (Clarke 1969, 93). However, although the Adda is certainly shown as open most of the way past the palace on John

Wood's map it appears to have already been culverted and buried along the line of the Bishop's Walk (where it still is) as far as the east end of the stables by the time of the 1841 Tithe map. This is probably why Price Davies (1939) does not mention this part of the river whereas he says that in 1906 the Adda was culverted into the carriageway (along Sackville Road) and in 1936 was straightened and culverted from Ffordd Gwynedd to the police station. The latter appears to refer also to the stretch from Bishop's Walk, across the south-east end of the current development area, where it was located during excavation and on across Ffordd Gwynedd. The early culverting was started because by the mid 19th century the great increase in the population of Bangor, the lack of a sewage system and the presence of smithies, slaughter houses and dye works in the Sackville Road area had turned the river into an open sewer, made worse by its tendency to flood (the name Adda is thought to be derived from the name *Tarannon* derived from the Celtic *Trisantona* meaning 'the trespasser', i.e. the river that overflows its banks (Roberts, *c.* 1990).

6. THE EVALUATION EXCAVATION

Five trenches were excavated as described above, to sample the development area, concentrating on the area of the main proposed building (Figs 2 and 11). The subsoil was mainly a yellow-buff clayey silt with varying amounts of small stones, and presumably a fluvio-glacial deposit. It lay at between 0.6m to 0.8m below the modern surface in trenches 1, 2 and 3 and 4, sloping down to a maximum of -1.5m at the south of Trench 5, approaching the former Afon Adda.

The features and general layers encountered can be put into six general phases of activity and for clarity will be described in those groups, rather than trench by trench:

Phase 6. Recent features belonging to the landscaping of the area subsequent to the demolition of the council depot/stable block in 1996.

Phase 5. 20th century features belonging to re-use of the palace stable block subsequent to its acquisition by the Town Council in 1904 and service trenches such as drains and electricity.

Phase 4. The foundations of the stable block, its associated floors and soil levels contemporary with the stable block.

Phase 3. Soil layers predating the construction of the stable block and features associated with those layers.

Phase 2. Features sealed by these soil layers and belonging to either construction of the earliest wing of the stables or to the construction of the east wing of the Bishop's Palace in the early 16th century or to repair or rebuilding of the east wing of the Bishop's Palace in the 17th or early 18th century.

Phase 1. Features predating those of Phase 2 and predating the construction of the earliest wing of the stables in the 17th or early 18th century and probably also predating the construction of the east wing of the Bishop's Palace in the early 16th century.

Phase 1

The earliest features identified were two small parallel ditches, 12 and 20 in Trench 1cut into the subsoil surface at a depth of 0.75m below the modern surface. These were each about 0.90m wide and 0.40m apart. A (Fig. 12) segment of 12 excavated showed it to be V-shaped in profile and round-bottomed, 0.27m deep, filled with a mid-dark grey clayey silt with scattered charcoal fragments. The ditches ran in a south-west to north-east direction. There was no artefactual dating evidence but ditch 12 and its fill was cut by pit 11 of Phase 2 and the fill of both was overlaid by a soil layer (14) of phase 3.

Phase 2

Two large pits, 4 and 11 were identified in Trench 1. These were only partly exposed in plan, both continuing beyond the trench. They were cut into the subsoil surface which here lay at 0.75m below the modern ground surface.

Pit 11 was up to 3.2m dia. was not excavated to its full depth but was over 0.50m deep, below the subsoil surface (Fig. 11). Pit 4, if circular would be *c*. 2.3m dia. and 0.80m deep below the level of the subsoil surface (Fig. 11). It was filled with three grey clayey layers in which contained occasional lime mortar fragments, slate fragments, animal bone fragments and a variety of shells, including oyster, winkle and mussel. The lowest layer was the most shell-rich, containing about 30% shells by volume. There was no pottery or other artefactual dating evidence but the slate fragments included two long narrow, rather oval, thick roofing slates with single peg-holes, similar to those found on the 15th century house at Llys Euryn, Llandrillo (Smith 1999).

In the east side of Trenches 2 and 3 the west side of a large linear feature, 24, was exposed in plan, cut into the subsoil surface which was about 0.9m below the modern ground surface. This was a ditch, *c*. 0.60m deep below the subsoil surface. It may have been about 1m wide when constructed, and with a flat base, but its side had eroded out considerably leaving a very wide, low profile, into which the more general layers had tipped from the west (Fig. 12). This suggests that it was drainage ditch, left open and perhaps cleaned out over a long period. The lowest layer, filling the base of the ditch and continuing over its gently sloping side was a dark grey humic loam, 44, a probable topsoil layer contemporary with the ditch's last use. The ditch seems generally to belong to the same phase as the occupation of the Bishop's Palace when this area was a garden but as the ditch runs towards the line of stable buildings to the south, was probably superseded by them although there was no artefactual dating evidence. However, the next higher layers in the ditch, layers 43 and 42, although tipping into the top of the silted-in ditch appeared to be a soil that predated the stable yard .

Phase 3

Layer 43 in Trench 2 (Fig. 12))was a thick deposit of mottled lighter coloured material than 44, below and probably represents a dump of mixed soil and subsoil to fill in and level up ditch 24 when it was no longer required and probably to level up or raise the level of the area generally since probably the same layer was found in Trench 3, beyond the limits of ditch 24. Above 43, layer 42 was dark brown loam with scattered charcoal fragments, which were concentrated towards the base. This was an extensive soil layer, found in Trenches 2 and 3. It represents old topsoil, probably a garden soil in the area north of the stable block. There was a garden here before and after construction of the stables and the soil partly predates and is contemporary with the stable block.

There was no stratigraphic link between Trenches 3 and 4. Trench 4 was within the area of the former stable block and of the yard that existed there immediately prior to its demolition while Trench 3 was in what was a garden area beyond. The lowest layer in Trench 3, above the subsoil was layer 43, while the lowest layer in Trench 4, north end was layer 50, a dark loam with scattered charcoal fragments, and similar to layer 42, possibly the same but here it was sealed beneath a layer of cobbles forming the surface of the yard of the stables (see Phase 4). In the southern half of Trench 4, as far as the north wall of the south-east stable block, the pre-stable soil level had been removed by 20th century construction work.

Trench 5 was offset from Trench 4 to avoid the north-south line of the south-east stable block (Fig. 11). The section at the east side of the trench, which was recorded therefore mainly showed the foundations of this wall (Fig. 12a). Within the trench the subsoil, after having been at about 0.60m below the present surface began to dip gradually getting deeper to the south, showing its proximity to the course of the Afon Adda. However, the layers above this slope were not river silts although dark and organic and probably affected by waterlogging. The lowest layer was an old topsoil layer, but dark grey and humic with occasional small boulders. Into this had been cut a shallow ditch, 23, oriented approximately north-west to south-east (Fig. 12b). This was a drain that was in operation before the stable block was built. The ground level then seems to have been built up with a thick layer of mixed gravely clay to level up the surface for the stable block. South of the south wall of the south-east stable block the subsoil surface was at about 1.5m below the present surface and the lowest level was only exposed in a small trial area because it was beyond a safe working depth. The ground level had been raised about 0.8m here during construction of the stable block and at the south end of the trench all layers had been truncated by construction of the modern culvert for the Afon Adda.

Phase 4

The north-east yard of the stable block was surfaced with sub-rounded large cobbles laid in sand. This neatly cobbled surface was still in use during the 20th century and was partly exposed during the demolition of the stables in 1996. At its north side a gap had been re-laid with broken building bricks. This gap was where there had been a long narrow building, probably a lean-to shed (it had no wall footings at the south side), shown on maps between 1834 and 1890 (Figs 7-9), but which had been demolished by the time of the 1914 map (Fig. 10).

Towards the south of Trench 4, as far as the north wall of the stable block the cobbled yard surface, and the pre-stable soil level had been removed where a large concrete plinth had been inserted during the 20th century re-use of the stables.

The walls of the stable block were of brick, but these had been removed during the 1996 demolition, leaving the foundations which were built of roughly squared and roughly coursed limestone blocks built slightly wider than the wall above and set on the subsoil surface (Fig. 12a). The north-south wall of the stable had to cope with the deepening level of the subsoil and where exposed the foundations were laid on a deeper level of casually laid subangular boulders. The south wall of the stable block had an even more massive foundation because of the greater depth of the subsoil surface and in fact was built slightly above it. The foundation was again of roughly squared limestone blocks but 1m wide with an offset on the south, outer side and 0.75m deep overall. Although not certain it looked probable that the general ground surface had been raised by dumping before the foundations had been built as there was a probable construction trench cut through the made ground for the foundation of the south wall (Fig. 12a).

Phase 5

These modern features will not be described in detail but comprised the following. In Trench 3 - a concrete plinth or foundation, a deep post-hole, a steel-trunked electricity cable and clay-pipe trunked telephone cable. In Trench 4 - a large deep service trench, possibly for a sewer, a large concrete foundation with a circular steel fitting and an adjoining mortar-lined pit or access chamber. At the south end of Trench 5 the north edge of the cut for the modern culvert for the Afon Adda was uncovered, as shown on existing Water Board plans. In the upper part of the fill was laid another modern minor foul-water pipe, following the same line. Lower down at the very edge of the culvert cut incorporated in the backfill was a large, thick plank. The plank was longer than the 1.8m width of the trench. It appeared to be ancient because its surface was deeply fissured and weathered, and one surface had clear adze or axe marks. This suggests a medieval rather than post-medieval date. Considering the discovery of *in situ* 12th century timbers further to the west during the 1996 excavations this plank seems likely to be the remains of some structure destroyed during the excavation of the Afon Adda culvert cutting in 1936 and re-incorporated in the backfill. A sample of the plank was taken for possible identification and dating.

Phase 6

After demolition of the stable buildings in 1996 some of the area to the south had a layer of a hardcore demolition rubble spread and then a layer of mid-brown clayey loam (Layer 39) had been imported and laid over the whole area for landscaping purposes and then covered with topsoil. One of the 1996 archaeological trial trenches was also recorded where it was cut by Trench 5. Trenches 2 and 3 were also cut by modern flowerbeds.

7. INTERPRETATION INCORPORATING REASSESSMENT OF EVIDENCE FROM THE 1996 EXCAVATIONS

The excavations produced no good artefactual dating evidence, largely because as a rapid evaluation the majority of the excavation was carried out by machine. However, even subsequent cleaning and sample excavation did not produce any pottery. This may be explained because the gardens of the palace were private and would not be used for the kind of rubbish deposition, even in pits, that might be found with domestic medieval housing. Interpretation of the date of the structures here therefore depends mainly on stratigraphy.

The earliest features were the two small parallel ditches in Trench 1. Pairs of parallel ditches found during excavations have been shown to represent hedged field boundaries. The examples here are too close together to have bordered a *clawdd* field bank but may have been a smaller hedged boundary, possibly even just a garden feature. Their profile and fill suggests they were not drains. The orientation of the ditches is at odds with the lie of the land and with the orientation of the palace buildings. They may therefore predate the buildings. However, Speed's map show's a symmetric semi-formal garden layout in the area north of the palace and there may have been other garden features in the area under investigation.

Close to the palace buildings in Trench 1 two large pits were also identified. These contained some old internal plaster, mortar and two single peg roof slates. They also contained quantities of seashell, including oyster, cockle and limpet. The presence of the latter suggests that the seashells were not just food debris but associated

with mortar manufacture. The pits have been interpreted as clay-quarrying and puddling pits belonging to construction of the medieval buildings, which were of timber construction with wattle and daub infill. If so the pits are probably of the second phase of construction since they contained some old building debris. However, they could also belong to repair of the palace buildings or construction of the earlier stable buildings *c*. 1700. The closest palace wall, on the east side was identified by the RCAHMW as having been originally of timber and situated further east, but replaced in brick on the inside, *c*. 1800. However, no brick debris occurs in the fill of these pits or in the layer sealing them, so a medieval date is still possible. More pits and other construction evidence are likely to exist elsewhere around the palace buildings to the south of Trench 1.

The remains of the south-east wing of the stable block revealed in Trenches 4 and 5 showed that their walls were of brick construction on limestone foundations with the north-east yard having a cobbled surface. This part, a three bay coach-house is one of the later additions to the complex possibly of the early 19th century. However, the RCAHMW (1960, 10) states that the north-west range of the stables was the latest, added by Bishop Majendie, *c*. 1810. The grounds for this statement are not known but this does not accord with the fact that extensive outbuildings appear on the etchings of 1740 and 1776. Also one range of stables is described by Browne Willis in 1721, its measurements matching well with those of the northern range, as they are shown on Wood's map of 1834 (Fig. 7). The area of the north-west range of the stables is therefore of interest because it could produce evidence as to the date of their construction as well as possibly producing evidence relating to construction or pre-construction phase of the palace buildings themselves.

Excavation at the south end of the site in Trench 5 was of particular interest because it was close to the area excavated in 1996, which had located a stone structure of uncertain function and date, but interpreted as possibly a bridge abutment (Structure A Fig. 2) and two adjoining structures, a tank or cellar (Structure C) and a culverted drain (Structure B) (Appendix 2 and Johnstone 1996 and 2000). Although there were no closely datable artefacts Structure A was of shelly-mortar construction, suggesting a medieval date. However, close to the structure on the north side were found three large oak timbers, driven into the subsoil, which were shown by dendrochronology to have been cut down in the late summer or winter of AD 1120/1121 (Appendix 2, Fig. 3).

The present excavations were some 15m to the east of the structures located in 1996 (Trench 5). The only structure visible there was the deep foundations for the south wall of the south-east wing of the former stable block. It was however, fairly neatly built and with an offset on the south side similar to the wall found in 1996. However, the foundation appeared to have been built especially for the construction of the stable block and was not a re-used earlier structure. The foundation had been built on what was a gentle slope with a dark humic topsoil and probably within an area quite close to the Afon Adda and regularly waterlogged.

The excavation in 1996 suggested that this area, at the south end of Trench 5 should be the Afon Adda river bank but the slope recorded in 2003 could be more correctly described as a flood terrace as there were no actual river silts. The previous excavation suggested that the substantial stone structure found might be a bridge abutment and river silts were found on the south side of the stone structure. However, no similar silts were found in 2003 despite the proximity of the two excavations. To account for this it must be assumed that the Afon Adda was turning on a wide meander here and that to the west it was curving back southwards again (Fig. 7).

The earlier excavations in interpreting the stone structure 'A' as a possible bridge abutment referred to the depiction of two bridges in this general area, across the Afon Adda on Speed's map. However, comparison with the layout shown on Wood's map shows that one bridge would have been at the north side of the palace buildings, directly between the approach to the palace door and the path to the cathedral and the other would have been further to the east, beyond the south-east corner of the palace grounds. The stable block had used the structure found in 1996 as a foundation but this fairly clearly predated the stable block. It was much wider and of rather different construction to the stable block foundation found in Trench 5 in 2003 which did not have a lime mortar rubble core like that found in 1996.

A number of layers were recorded in 1996 as building up behind Structure A which appeared to have been built as a free-standing structure, not in a foundation trench. Two of the lowermost layers behind structure A each contained a single sherd of pottery dated to between 13th to 15th century AD. These layers probably post-dated the 12th century AD timbers. This shows that Structure A was no earlier than 13th century and possibly no earlier than 15th century. It was assumed that the timbers must belong to some structure that pre-dated Structure A. However, the position of the three timber piles or post-butts seems to be related spatially to the plan of Structure A and no others were found outside it. One of the timbers was trimmed off with an axe, suggesting it may have been deliberately levelled when Structure A was built but this could have been a just a stone replacement for an earlier timber structure. Another significant possibility is that the timber piles or posts could have been re-used timbers since one of them had been trimmed to a square section and this would have been

unlikely for the butt of a pile or post. The dendrochronological date for the felling of the timbers matches exactly the date for consecration of Bishop David, when construction of the first cathedral may have begun. If the timbers were re-used then they could been removed during a period when the cathedral had been in ruins and re-roofed, such as after the Glyndwr wars. This could place the timber construction closer to the date of construction of the first phase of the existing palace and the stone Structure A could then have resulted from further improvements in the second phase under Bishop Skevington. Other possible evidence of re-used building materials from the cathedral comes from the finding during the 1996 work of the spandrel or central part of a two-arched mullioned window or screen. A further single piece of pottery was found at a late stage in the excavations in 1996 but was not identified. This came from a dark organic layer to the north of Structure C, and one of the lowest stratified layers recorded. This has now been identified as of probable 13th century date as follows, and this provides good evidence that there was domestic activity and probably structure on this side of the Adda at this date.

SHERD FROM THE BISHOP'S PALACE, BANGOR, G1383, CONTEXT 51
By Julie Edwards, Chester Archaeology

The sherd is comparable in fabric and decoration to pottery commonly found in Chester, western Cheshire and at various sites along the North Wales coast. In Chester this type of pottery is classified as a red/grey ware. The sandy oxidised fabric is comparable to wares produced from the Boulder clays of Cheshire and the West Midlands. Similar pottery has been found at the kiln site close to Brereton Park Farm and in the Huxley/Hargrave area about 10 miles east of Chester.

The sherd is probably from a jug or jar. It has been decorated with an applied and finger/thumb-pinched strip. It has a clear lead glaze which the oxidising atmosphere has given a golden-brown colour. The handling marks on the back of the sherd suggest that the vessel was at least partly hand-built – this is common in this type of ware.

The principal dating evidence for these wares comes from North Wales castle sites, particularly Dyserth and Deganwy. Vessels in this type of ware, i.e. style of decoration and manufacture were found stratified in deposits dated by structural and historical evidence to c. 1250 and later.

This type of ware was in use at least as early as the mid-13th century and seems to have continued into the 14th, but the date at which production ceased is unclear. Further well-stratified and independently dated deposits are needed before a date at which these wares first came into use can be determined.

Structure A at least edged the flooded channel of the Afon Adda and seems most likely to have been built as a revetment to the edge of a terrace for the palace garden, raising it above flood level, rather than as a bridge. It may be significant that its corner is almost in line with the second (eastern) phase of the palace. The Adda must have continued to flood the area further to the east, where the 2003 Trench 5 was excavated.

Later in the life of the palace, when the full complex of stables and other outbuildings had been added in the 18th century, as shown in the earliest sketch of 1740 (Fig. 5), the Afon Adda seems to have been further canalised. What may have been a broad meander to the north, close to the palace, was put into a straight narrow channel along the line now taken by the Bishop's Walk, where it still was in 1834, as shown on Wood's map (Fig. 7).

8. SUMMARY RECOMMENDATIONS

- The eastern part of the development area contains only one feature relating to the palace, a ditch (Ditch 24), possibly an early boundary to the palace grounds. **Part of this feature lies within the footprint of the proposed building and some of it should be excavated to retrieve dating evidence and to record its fill.**

- The southern part of the development area occupies ground sloping down into the flood channel of the Afon Adda and the modern river culvert, which will be avoided by the new building. Only one feature, a drainage ditch (Ditch 23) was found there, which must belong to some time between *c*. 1500 and 1800. **This ditch needs investigation for dating evidence.**

- The area close to the east side of the palace buildings contained two large pits (Pits 4 and 11) of possible late medieval date. **Other pits and construction features are likely to be found in this area and need recording.**

- The same area contained two ditches (Ditches 12 and 20) that may pre-date the second phase of the palace. **These need further excavation to produce dating evidence.**

- The area at the east side of the palace buildings, in the are of the west wing of the proposed new building formerly contained a stable outbuilding that was physically attached to the south-east palace range. **This area needs excavation because the outbuilding has not been satisfactorily dated and may have already been in existence in 1721 and may seal and give stratigraphic evidence for construction features relating to this part of the palace.**

- The south-west part of the proposed development area was partly excavated in 1996 but the rest of it may have additional early structures associated with Structure A or features such as construction pits and drains belonging the palace buildings or outbuildings. **The area not excavated in 1996 therefore needs full excavation and recording.**

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APPENDIX 1

BISHOP'S PALACE, BANGOR, 2003, G1785

DESIGN BRIEF

DESIGN BRIEF FOR ARCHAEOLOGICAL MITIGATION

Gwynedd Archaeological Planning Service

Site: Plot adjacent to Bangor Town Hall, Ffordd Gwynedd, Bangor

Applicant: North Wales Police

Agent: Ainsley Gommon Architects

Date: 7 April 2004

Planning reference: C03A/0703/11/R4

National Grid Reference: 258047 372157

This design brief is only valid for six months after the above date. After this period Gwynedd Archaeological Planning Service should be contacted.

It is recommended that the contractor appointed to carry out this programme of archaeological works visits the site of the proposed development and consults the Regional Sites and Monuments Record (SMR) for north-west Wales before completing their specification. Gwynedd Archaeological Planning Service cannot guarantee the inclusion of all relevant information in the design brief.

Key elements specific to this design brief have been highlighted.

1.0 Site Location and Description

1.1 For the purposes of this brief the site comprises land adjacent to the Town Hall, Bangor, as shown on the site plan C560.102 accompanying planning application C03A/0703/11/R4.

1.2 This plot of land comprises an area of approximately 2,000 square metres, currently an area of public gardens on the east side of the Town Hall.

1.3 Bangor is located on the north coast of Gwynedd, within the valley of the Afon Adda, and is the largest commercial centre in Gwynedd.

2.0 Archaeological Background

2.1 Two small-scale excavations have taken place within the development plot. The first excavation was carried out in 1995/6 following the granting of planning permission for the demolition of a number of buildings on the site in the south-west part of the proposed development area (Johnstone n.d.; 2000). The second was carried out in December 2003, and comprised the excavation of five trial trenches in the east and north parts of the development plot; it was supplemented by a desk-based assessment (Smith 2004).

2.2 This work forms the basis for this programme to mitigate the impact of the proposed development. Briefly summarised, archaeological and historical evidence strongly suggests that the 12th century residence of the Bishop of

Bangor lay within the bounds the proposed development site. Relatively little is known about the layout or fortunes of this early house and garden, later known as the Bishop's Palace. By the 15th century the palace building was situated on the site of the present Town Hall: parts of this late 15th century timbered hall survive in the fabric of the standing building.

2.3 For a full summary of the archaeological and historical background the original studies need to be consulted.

2.4 Documentation

Longley, D. 1994. Bangor Fawr yn Arfon. In S.I. White (ed.) *Bangor: From a Cell to a City*. The Friends of Bangor Museum and Art Gallery.

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3.0 The nature of the development and archaeological requirements

3.1 The proposed development is a full application for the erection of a two-storey police station, with new floor space totalling 560 square metres and associated parking and external works.

3.2 This is a design brief for a programme of archaeological works to be undertaken following planning consent, according to guidelines set out in Welsh national planning guidance (*Planning Policy Guidance Wales 2002*) and Welsh Office Circular 60/96 (*Planning and the Historic Environment: Archaeology*).

3.3 This will comprise a programme of archaeological works to ensure **preservation by record** (archaeological excavation in advance of construction and archaeological watching brief during construction) and **preservation *in situ***.

3.4 The object of this programme of archaeological works is to mitigate the impact of the development on archaeological remains.

3.5 This *design brief* should be used by the archaeological contractor as the basis for the preparation of a detailed written archaeological *specification*. The specification must be submitted to the Gwynedd Archaeological Planning Service for approval before the work commences.

3.6 The *specification* should contain, as a minimum, the following elements:

- Non-technical summary.
- Details of the proposed works as precisely as is reasonably possible, indicating clearly on a plan their location and extent.
- A research design which sets out the site specific objectives of the archaeological works.
- Reference to the relevant legislation.

- Health and Safety considerations.
- Monitoring procedures.
- Field methodology.
- Methods of recording, including the collection and disposal strategy for artefacts and ecofacts.
- Arrangement for immediate conservation of artefacts.
- Post-fieldwork methodology.
- The level and grade of all key project staff.
- Details of all specialists.
- A timetable for the proposed works including contingency costs (if appropriate).
- The intended method of publication.
- Archive deposition.

4.0 Programme of archaeological works (detail)

4.1 The programme of archaeological works to **mitigate** the impact of the development will consist of two phases. The first phase must be carried out in advance of any development and will comprise open-area excavation of the new building footprint. The second phase must be carried out during site preparation and construction and will comprise a watching brief and monitoring to ensure preservation *in situ* of known archaeological remains.

4.2 **Mitigation phase 1: excavation detail**
The object of excavation is to create an archive record (preservation by record) of archaeological deposits or structures. It will comprise the following:

- New building footprint: open-area excavation must be carried out in advance of any development. Although the building avoids the area of greatest archaeological potential, to the south-west, it will destroy known archaeological remains, including the foundations for the post-medieval extension to the Bishop's Palace (thought to date to the early eighteenth century) and palace boundary ditch. It may impact on hitherto unknown archaeological remains.
- Northern car parking area: significant archaeological deposits lie approximately 0.75m below the present ground level. Excavation will only be required if the construction of the car park involves below-ground disturbance to this depth.
- Southern car parking area: significant archaeological deposits lie below the present ground level. The depth of overburden is not known. Excavation will be required if the construction of the car park entails any ground disturbance.

4.3 Excavation methodology should be in accordance with Institute of Field Archaeologists guidance (see general requirements below). The use of metal detectors on site to aid the recovery of artefacts is encouraged. Recording will comprise appropriate plans, elevation and photographs.

4.4 **Mitigation phase 2: watching brief detail**
The object of the watching brief is to create an archive record of any

archaeological deposits or structures that may be revealed through general on-site construction activity. It will consist of the following:

- Monitoring of site preparation and removal of existing surfaces.
- Examination of the formation level for archaeological information.
- A drawn, written and photographic record of any archaeological structures and deposits that may be revealed.
- Preparation of full archive report.

4.5 The monitoring of level reduction and groundworks is to be undertaken in a manner that allows for the immediate cessation of development for the recording of archaeological evidence. Agreement must be reached between the archaeologist and developer in order that this is achieved.

4.6 Excavation methodology should be in accordance with Institute of Field Archaeologists guidance (see general requirements below). The use of metal detectors on site to aid the recovery of artefacts is encouraged. Recording will comprise appropriate plans, elevation and photographs.

4.7 **Mitigation phase 2: Preservation *in situ***
Action should be taken to ensure that archaeological deposits surviving at depth below the proposed car park in the south-west part of the site are preserved *in situ*.

5.0 Results

5.1 The archaeological contractor must ensure that sufficient resource is made available for a post-excavation programme to result in an archive report.

5.2 The results must be presented in a report and should be detailed and laid out in such a way that data and supporting text are readily cross-referenced.

5.3 **The SMR Officer should be contacted to ensure that any sites or monuments not previously recorded in the SMR are given a Primary Recognition Number (PRN) and that data structure is compatible with the SMR**.

5.4 A deposit model should be presented graphically in plan and, where appropriate, in profile and at a scale that is commensurate with subsequent use as a working document.

5.5 The archaeological report should specifically include the following:

a) a copy of the design brief and agreed specification,

b) a location plan,

c) all located sites plotted on an appropriately scaled plan of the development,

d) a gazetteer of all located sites, including full dimensional and descriptive detail,

e) a full bibliography of sources consulted.

6.0 General requirements

6.1 The archaeological assessment must be undertaken by an appropriately qualified individual or organisation, fully experienced in work of this character.

Details, including the name, qualifications and experience of the project director and all other key project personnel (including specialist staff) should be communicated to the development control archaeologist and all written work attributed to an author (s).

6.2 Contractors and subcontractors are expected to conform to standard professional guidelines, including the following:-

- English Heritage's 1991 Management of Archaeological Projects (MAP2).
- The Institute of Field Archaeologists 1985 (revised 1997) Code of Conduct.
- The Institute of Field Archaeologists 1990 (revised 1997) Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology.
- The Institute of Field Archaeologists 1994 (revised 1999) Standard and Guidance for Archaeological Desk-Based Assessment.
- The Institute of Field Archaeologists 1994 (revised 1999) Standard and Guidance for Archaeological Watching Briefs.
- The Institute of Field Archaeologists 1994 (revised 1999) Standard and Guidance for Archaeological Field Evaluation.
- The Institute of Field Archaeologists 1995 (revised 1999) Standard and Guidance for Archaeological Excavation.
- The Institute of Field Archaeologists 1996 (revised 1999) Standard and Guidance for the Archaeological Investigation and Recording of Standing Buildings or Structures.
- The Institute of Field Archaeologists 1999 Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials.
- Museum and Galleries Commission 1994 Standards in the Museum Care of Archaeological Collections.
- United Kingdom Institute for Conservation 1990 Guidelines for the Preparation of Excavation Archives for long-term storage.

6.3 Many people in North Wales speak Welsh as their first language, and many of the archive and documentary references are in Welsh. Contractors should therefore give due consideration to their ability to understand and converse in Welsh.

6.4 Where relevant, specialist studies of environmental, economic and historical data must include a *statement of potential*. All specialist reports used in the preparation of this study must be reproduced **in full** in the desk-based study.

6.5 A full archive including plans, photographs, written material and any other material resulting from the project should be prepared. All plans, photographs and descriptions should be labelled, cross-referenced and lodged in an appropriate place (to be agreed with the archaeological curator) within six months of the completion of the project.

6.6 Two copies of the bound report must be sent to the address below, one copy marked for the attention of the Development Control Archaeologist, the other for attention of the SMR Officer, who will deposit the copy in the SMR.

6.7 The involvement of Gwynedd Archaeological Planning Service should be acknowledged in any report or publication generated by this project.

7.0 Glossary of terms

7.1 *Archaeological Contractor*
A professionally qualified individual or an organisation containing professionally qualified archaeological staff, able to offer an appropriate and satisfactory treatment of the archaeological resource, retained by the developer to carry out archaeological work either prior to the submission of a planning application or as a requirement of the planning process.

7.2 *Archaeological Curator*
A person, or organisation, responsible for the conservation and management of archaeological evidence by virtue of official or statutory duties. In north-west Wales the archaeological advisor to the Local Planning Authorities is the development control archaeologist, who works to the Welsh Archaeological Trust's Curators' Code of Practice.

7.3 *Archive*
An ordered collection of all documents and artefacts from an archaeological project, which at the conclusion of the work should be deposited at a public repository, such as the local museum.

7.4 *Assessment*
A desk-based archaeological assessment (also known as a *desk-top assessment*) is a detailed consideration of the known or potential archaeological resource within a specified area or site (land-based, intertidal or underwater), consisting of a collation of existing written and graphic information in order to identify the likely character, extent, quality and worth of the known or potential archaeological resource in a local, regional or national context as appropriate.

7.5 *Brief*
The Association of County Archaeological Officers (1993) defines a *brief* as an outline framework of the planning and archaeological situation which has to be addressed, together with an indication of the scope of works that will be required.

7.6 *Evaluation*
A limited programme of non-intrusive and/or intrusive fieldwork which determines the presence or absence of archaeological features, structures, deposits, artefacts or ecofacts within a specified area or site; and, if present, defines their character and extent, and relative quality. It enables an assessment of their worth in a local, regional, national or international context, as appropriate. The programme of work will result in the preparation of a report and archive.

7.7 *Sites and Monuments Record (SMR)*
A documentary record of known sites in a given area. In north-west Wales the SMR is curated by the curatorial division of the Gwynedd Archaeological Trust.

7.8 *Specification*
The Association of County Archaeological Officers (1993) defines a *specification* as a schedule of works outlined in sufficient detail to be quantifiable, implemented and monitored.

7.9 *Watching brief*
A formal programme of observation during non-archaeological excavation works in order to identity, investigate and record any Archaeological Remains which may be present, in accordance with the Archaeological Standards.

8.0 Further information

8.1 This document outlines best practice expected of an archaeological assessment but cannot fully anticipate the conditions that will be encountered as work progresses. If requirements of the brief cannot be met they should only be excluded or altered after gaining written approval of the Gwynedd Archaeological Planning Service.

8.2 Further details or clarification of any aspects of the brief may be obtained from the Development Control Archaeologist at the address below.

Emily La Trobe-Bateman
Development Control Archaeologist

Gwynedd Archaeological Planning Service, Craig Beuno, Ffordd Y Garth, Bangor, Gwynedd L57 2RT
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APPENDIX 2

BISHOP'S PALACE, BANGOR 2003, G1785

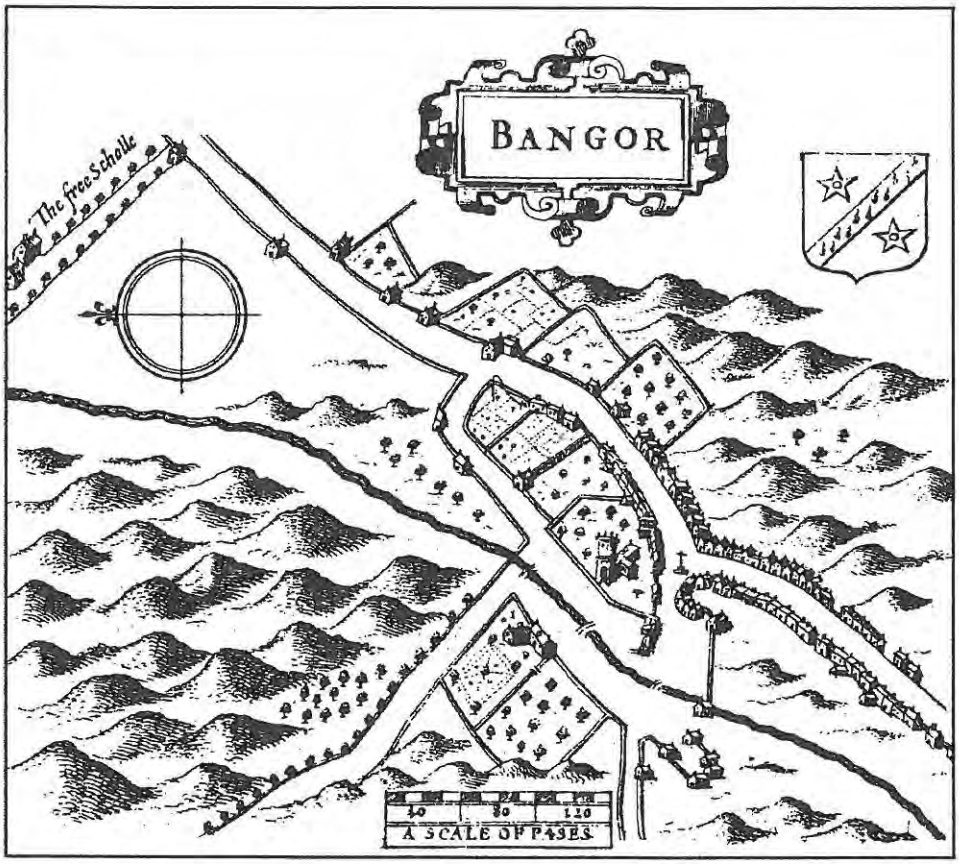
EXCAVATIONS AT THE BISHOP'S PALACE, BANGOR 1996

By Neil Johnstone

SMR COPY

EXCAVATIONS AT THE BISHOP'S PALACE, BANGOR 1996

by
Neil Johnstone



REPORT 370

prepared for
Cyngor Gwynedd Council

Project G1376

Ymddiriedolaeth Archaeolegol Gwynedd
Gwynedd Archaeological Trust

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Appendix 3
Report on Pottery from Bishop's Palace by Julie Edwards, Chester Archaeology.

Excavations at the Bishop's Palace Bangor
By Neil Johnstone

In January 1996 Gwynedd Archaeological Trust were commissioned by Gwynedd County Council on behalf of the North Wales Magistrates Court to undertake an archaeological evaluation of the site of the former council works depot on the north-east side of Bangor Town Hall, formerly the palace of the Bishop of Bangor (Fig 1). The evaluation identified the remains of a number of structures below the outbuildings and as a result a fuller excavation was conducted in February and March. The results of both excavations are presented in this report.

Summary

Driven timber posts dating from 1121 AD have been identified on the former bank of the river Adda. The piles, which may have been structural elements of a wharf or possibly a timber bridge spanning the Adda, were subsequently superseded by a mortared stone abutment of uncertain, but probable medieval date.

A stone basin or tank was subsequently constructed against the east side of the abutment, which was filled by a culvert with an overflow outlet that discharged into the river. The purpose of the tank or basin is uncertain, it may have been used to store freshwater fish for the Bishops palace although this is by no means certain. Against the east side of the tank a number of drains discharged water and effluent from the palace. No dating evidence was available for this phase although the tank and drains were probably in use until the river was culverted and the outbuildings adjacent to the Bishop's palace were constructed, possibly in the early eighteenth century.

Introduction

The council works depot utilized some of the former outbuildings of the Bishop of Bangor's palace; the palace is located on the north bank of the river Adda, directly opposite the cathedral and now houses Bangor's Town Hall. The river has been culverted and now runs along the line of the Bishop's walk path.

The Bishops Palace

Bangor Town Hall is a grade II listed building consisting of a central block on an east-west axis with wings at each end projecting southwards. The earliest phase, an L-plan structure of *circa* 1500 was doubled in size around 1600. Additional alterations were made in the eighteenth and nineteenth centuries. The outbuildings, formerly the service buildings of the palace, consisted of two ranges. The southern range comprised a nineteenth century L- shaped cottage on the south-west and a two-storey coach house wing of circa 1800, which adjoined the cottage on the north-east. The northern range originally included an east and west wing, the latter was attached to the south-east end of the town hall (RCAHMW 1996). Listed building consent was obtained by Gwynedd County Council to demolish the outbuildings in advance of the construction of a new Magistrates court. Prior to their demolition the outbuildings were fully recorded by the Royal Commission of Ancient and Historical Monuments Wales (Fig 2).

The Excavations

Following the demolition of the outbuildings, two trial trenches each measuring 30m long by 2m wide were opened across the site from north to south and from east to west in order to investigate the archaeological potential of the site (Fig 2). As a result of the information gained from the initial assessment a larger excavation was undertaken and a 14m x 12m trench was excavated on the south west corner of the site. Recent demolition material and extensive deposits of made-up ground were removed by machine and the site subsequently cleaned by hand.

Timber Posts

The excavations identified the former course of the river Adda and proved that the river originally ran much closer to the Bishops palace. The riverbank was located on the north side of the excavation trench and was revealed in the main site section. Three large timber posts (Fig 3) were located near the riverbank, the northernmost post had been driven into the riverbank while the remaining two posts were 1.5m to the south, forward of the bank and within the river. The posts had been sunk approximately 0.5m into the natural clay. A dark brown/black soil with organic material had accumulated on the river's edge, below which were spreads of river gravel and silt, all of which had been buried below made-up ground.

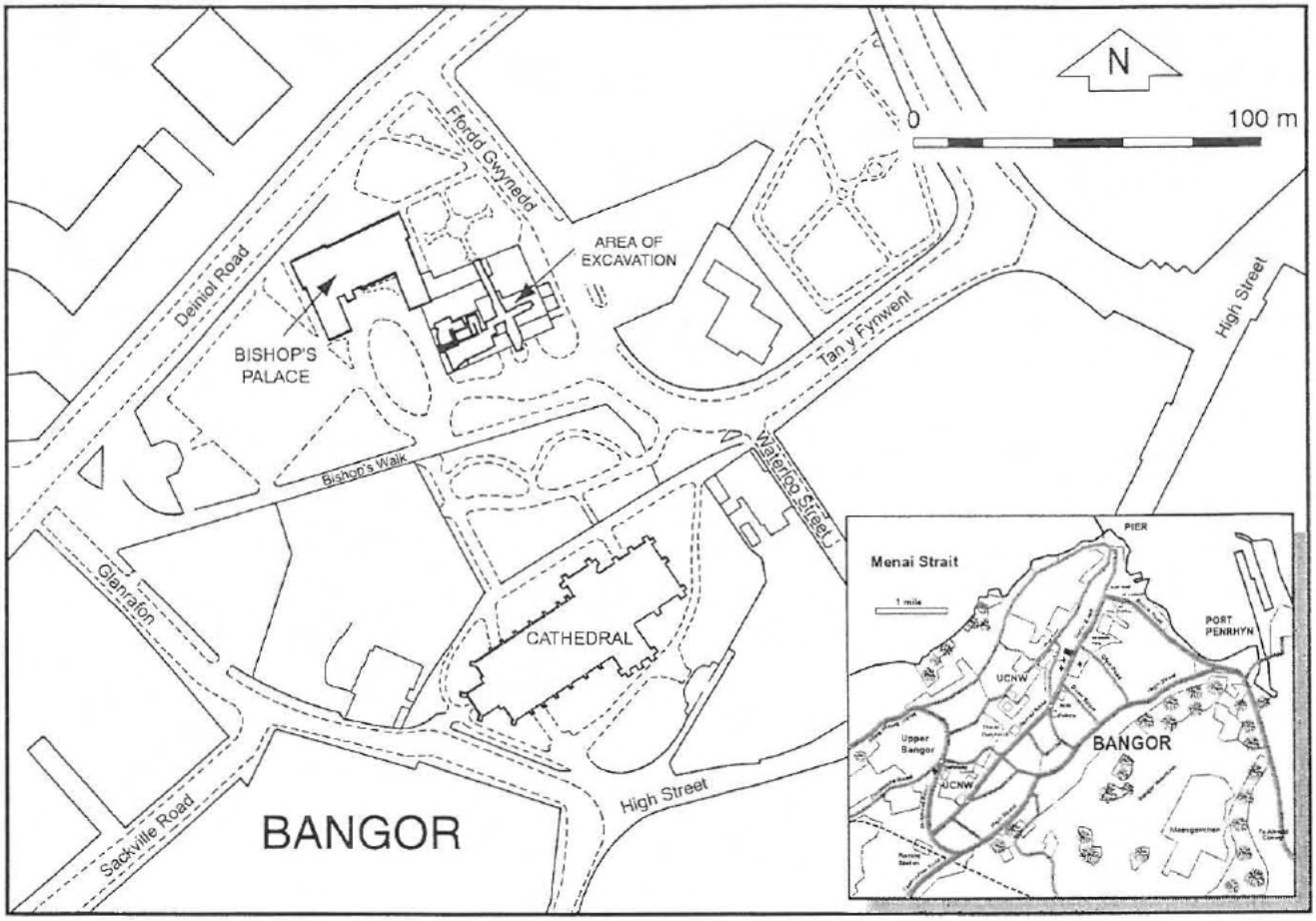

Fig. 1 : Bishop's Palace, Bangor - site location plan.

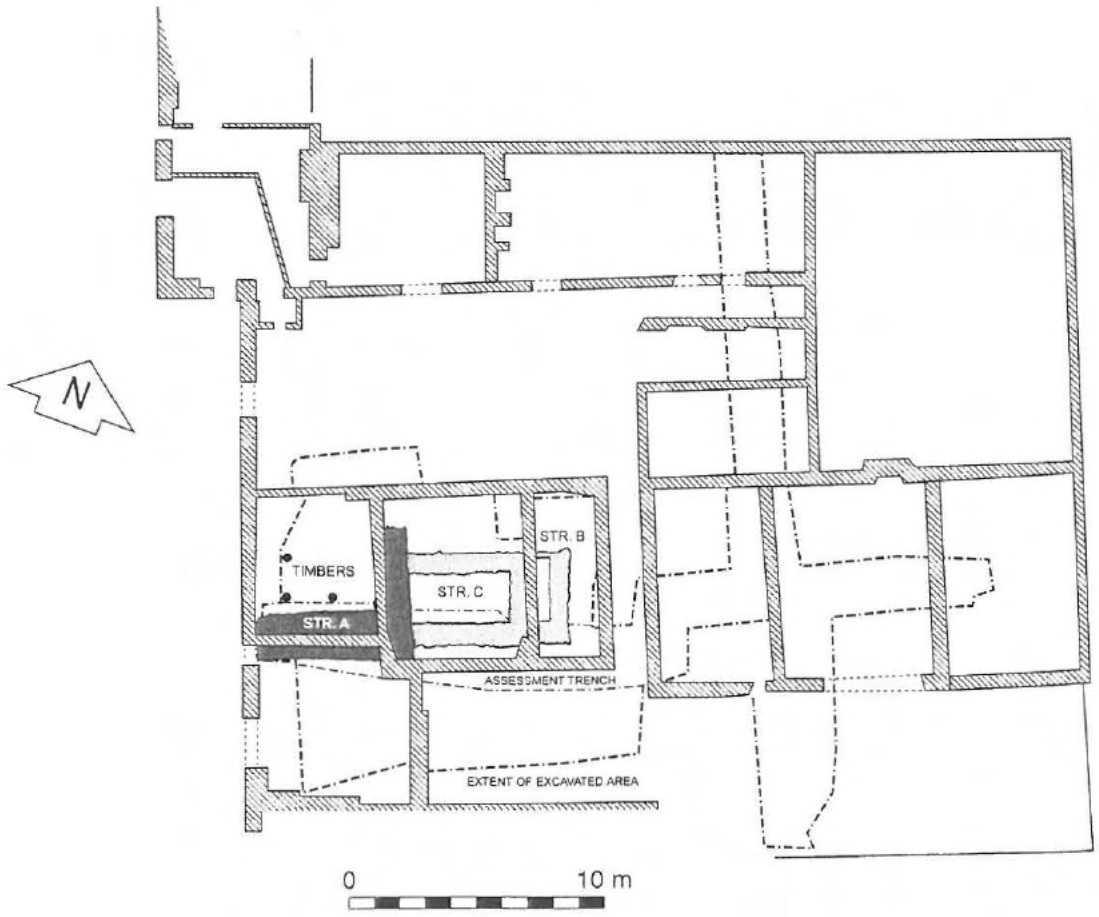

Fig. 2 : Bishop's Palace, Bangor - trench location plan showing outline of Council Depot buildings and excavation trenches

Two of the posts were removed and retained for sampling and a report was prepared by Dr Caroline Earwood (Appendix A). The posts have also been dated by dendrochronological analysis; the samples submitted have produced a valuable new set of data for north Wales, and the tree ring chronology spans the period AD973-1120. The two trees represented by the samples were felled in the late summer/winter of AD1120/21 (Fig 5 and Appendix B).

Structure A

A substantial mortared structure had been constructed on the riverbank (Fig 3), enclosing the remains of the earlier timbers. The structure comprised a large wall which had been built forward of the riverbank; the wall continued beyond the edge of the excavation and its full plan was not recovered. Some care had been taken over the appearance of the external south face of the wall, flat and square stone slabs were used to create neat coursing. The wall became gradually wider from west to east, expanding from 1.2m wide on the west to 1.5m wide on the east. It stood to a height of 1.5m. The upper 0.8m of the external facing was missing exposing a mortared rubble core, and the mortar contained a high proportion of crushed shell. The wall was supported on a 0.3m high foundation plinth, which projected 0.50m beyond the wall coursing to the south. The structure was keyed into the riverbank by a short stretch of wall on the east, which was battered on the internal west face, whereas the external face was constructed on a foundation plinth that projected 0.20m beyond the wall coursing.

The interior of the structure had been in-filled with a succession of soil layers, commencing with a brown clay layer with inclusions of blue clay which sealed the original brown/black soil horizon (above). A modern brick lined sump had been cut through the in-fill material (Fig 4). Two sherds of pottery were recovered from the deposits in filling structure A (Appendix C).

Structure C

A rectangular stone tank or basin (Fig 3) had been built against the east side of structure A, and the west wall of structure C was therefore formed by the external east wall of structure A. The walls of the tank were of mortared rubble, The tank had a flagged slate floor and the interior walls were rendered; the interior dimensions of the tank were 4.0m long from east to west by 1.9m wide. A stone culvert which cut across the east wall of structure A fed into the tank. The culvert was continued through the south wall of the tank where it appeared to be built as part of the original design of the wall, it was therefore always intended that the contents of the tank could be discharged into the river. The function of the tank is difficult to determine with any certainty (however see below).

Structure B

On the east side of structure C a stone lined drain discharged into the river (Fig 3). The southern terminal of the drain had been provided with an elaborate stone structure built forward of the riverbank. The north and south ends of the structure had stone lintels and the roof of the drain passage was lined with slate slabs, which continued beyond the elaborate stone structure to the north. The south and north walls of structure C were keyed into the west side of structure B which forms one end of the tank. The two structures are therefore contemporary. The drain was probably designed as part of a drainage or sewage disposal system for the Bishop's palace. The silted fill of the drain consisted of an organic silty sediment.

Another open drain was located immediately to the east of structure B. Large granite blocks formed the east side of the drain, whilst the west side was built of smaller rubble. In this instance the outflow had not been carried forward of the riverbank and the drain discharged level with the north side of structure B. Given the nature of surviving accounts of the river it should come as no surprise that the palace drains were discharged into the river.

Other Deposits

The stone structures on the riverbank, and the riverbed, were buried below deposits of made up ground on which the outbuildings of the Bishops Palace had been built. Where the foundations of the outbuildings projected beyond the riverbank they had to be very substantial. The foundations of the L shaped cottage were established on a grey brown soil, which had been buried below over a metre of made-up ground. These in-fill deposits can be seen in the main site section (Fig 4). A line of timber stakes set into the grey brown soil and

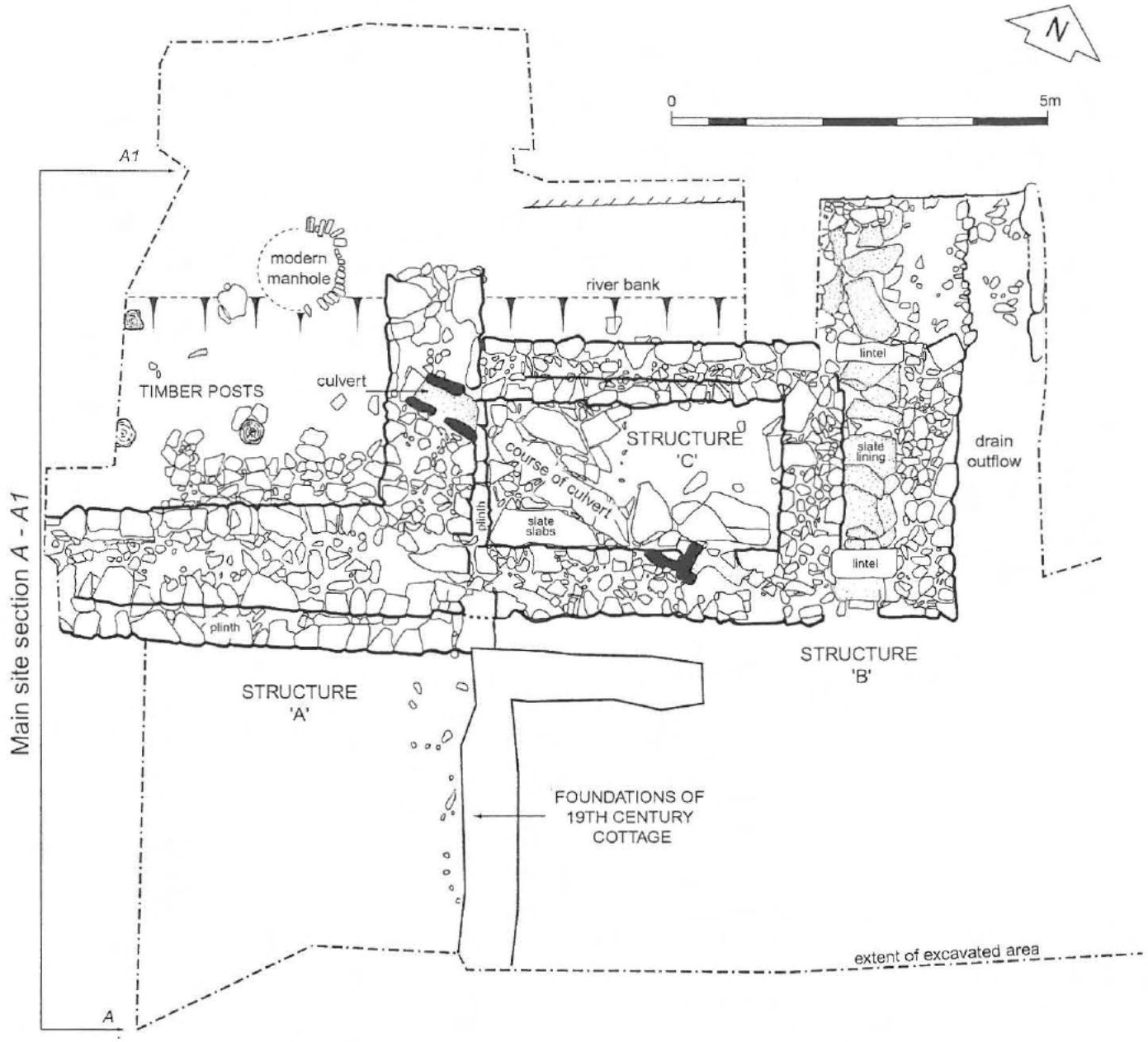

Fig. 3 : Bishop's Palace, Bangor - plan of structures A,B & C and associated features.

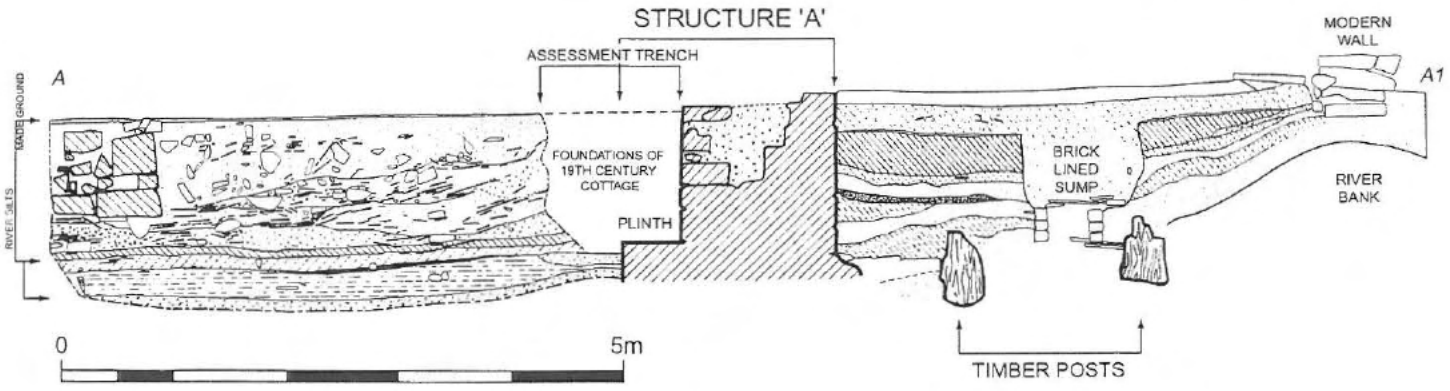

Fig. 4 : Bishop's Palace, Bangor - main section, west facing.

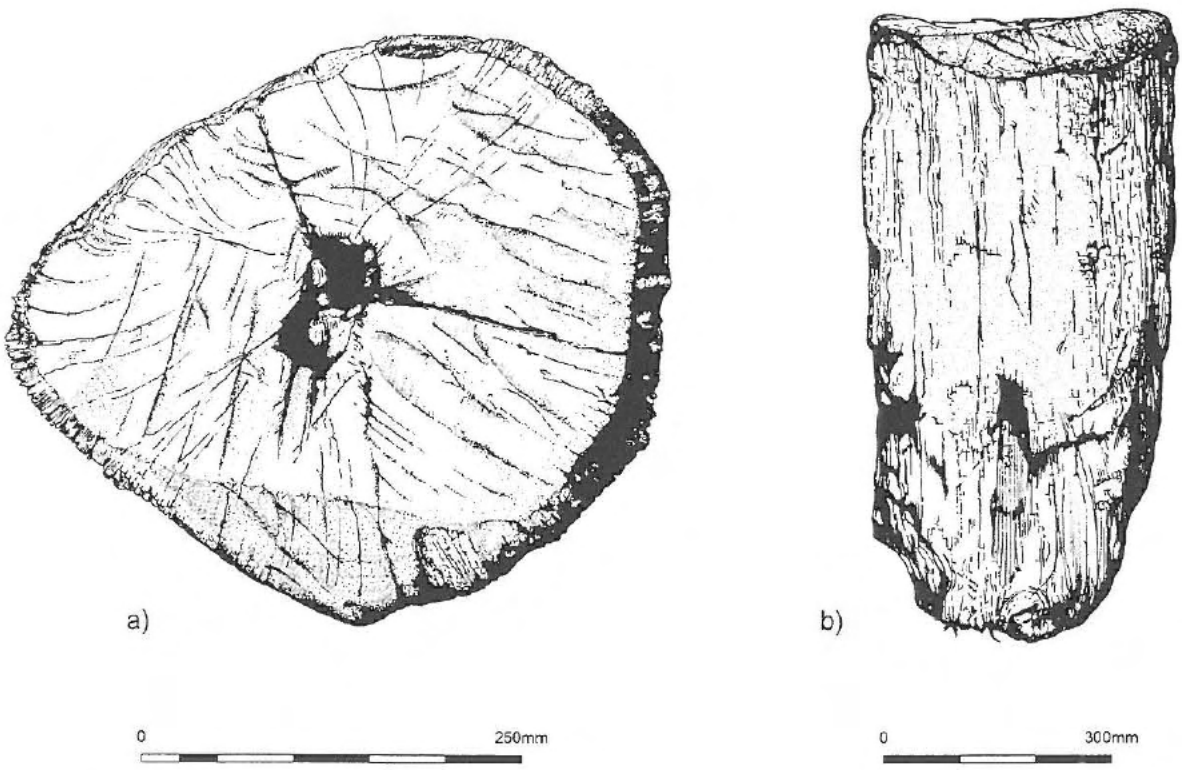

Fig. 5 : Bishop's Palace, Bangor - oak pile : a. uppersurface showing tool marks, scale 1:4. and b) elevation of same scale 1:8.

parallel with the foundations of the cottage may have been the remains of scaffolding used in the construction of the foundations.

At the east of the excavation a section of a wall was recorded in the initial assessment excavation. The wall butted against the external south face of structure A and may have provided the necessary revetments for the in fill/made up ground on which some of the outbuildings had been set.

Artefact

Wooden Bowl

To the south of the river bank extensive deposits of river gravel's were overlaid by deposits of grey brown clayey soil containing inclusions of stone and slate. A wooden bowl was recovered from this layer, (Appendix A). The bowl is of a typical medieval shape with a flat base and slightly sloping sides.

Discussion

Date and Function

There are a number of possible interpretations for the function of the timber posts and structure A, although at present there is insufficient evidence to establish with any certainty which, if any, are correct. There is little evidence for the character of the Adda which might inform any theories although it was apparently tidal as far as Dean street, some 350 metres to the east of the palace, until fairly recently. The timber posts may have been part of a wharf or may even have supported the superstructure of a small bridge. The mortared walls of structure A may have had a similar function or they may have been river walls designed to protect the area to the north from periodic flooding. The size of the foundation plinth suggests something more elaborate than a river wall although there is no evidence for the form of any superstructure if it was a bridge abutment. It is known, however, that a bridge did link the Bishops Palace with the Cathedral in the post medieval period. Several bridges are shown on Speed's plan of 1610 and a bridge adjacent to the palace is also shown on eighteenth century maps and drawings (Fig 6).

The dating evidence for the timber posts are based on the dendrochronological dates of the timbers (AD973-1120). The evidence for structure A is based on two stratified pottery sherds. The pottery sherds recovered from the in-fill of the structure have been tentatively dated to the fourteenth century (report by J Edwards). These deposits may not however provide an accurate date for the structure itself as they may have come from redeposited soils which originated elsewhere. It seems reasonable to suggest that structure A replaced an earlier timber structure, which was constructed in the first half of the twelfth century and that it is therefore of medieval date. One cannot, however, rule-out the possibility that structure A and the other structures were all relatively modern and built shortly before the outbuildings were constructed.

The RCAHMW survey suggests that the recently demolished outbuildings were built in *circa* 1800. However, they may have been buildings there at an earlier date. A view of the palace in Sandby's painting of 1776 shows a number of buildings on the south side of the palace; outbuildings are also referred to in 1721 (Browne Willis, 1721

The function of the tank or basin (structure C) has not been satisfactorily explained and the date of its construction is also problematic. The tank may have been used to hold freshwater fish for the palace or alternatively if the tank was filled from a culvert serving the palace toilets then some small-scale leather tanning may have been undertaken. There is no direct dating evidence for the remaining stone structures B and C. They must, however, have been abandoned when the river was culverted and the outbuildings were then built on the reclaimed land.

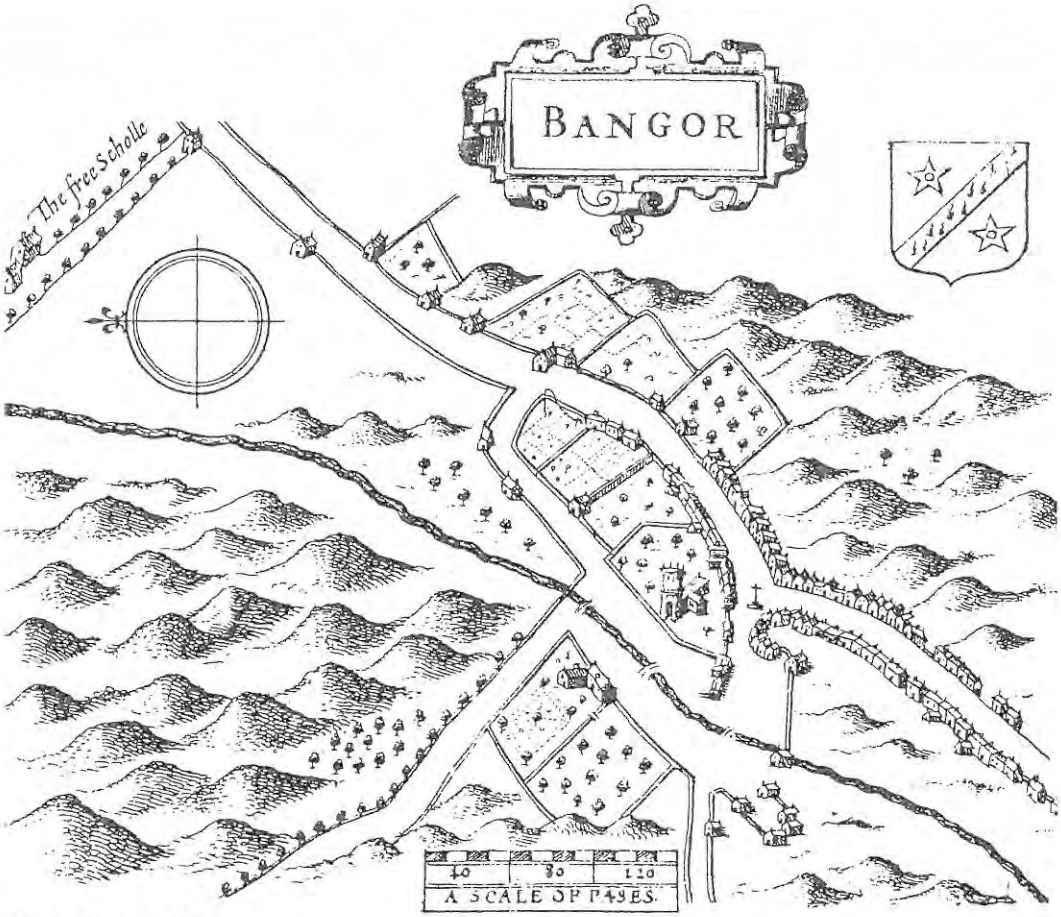

Fig 6. Speed's Map

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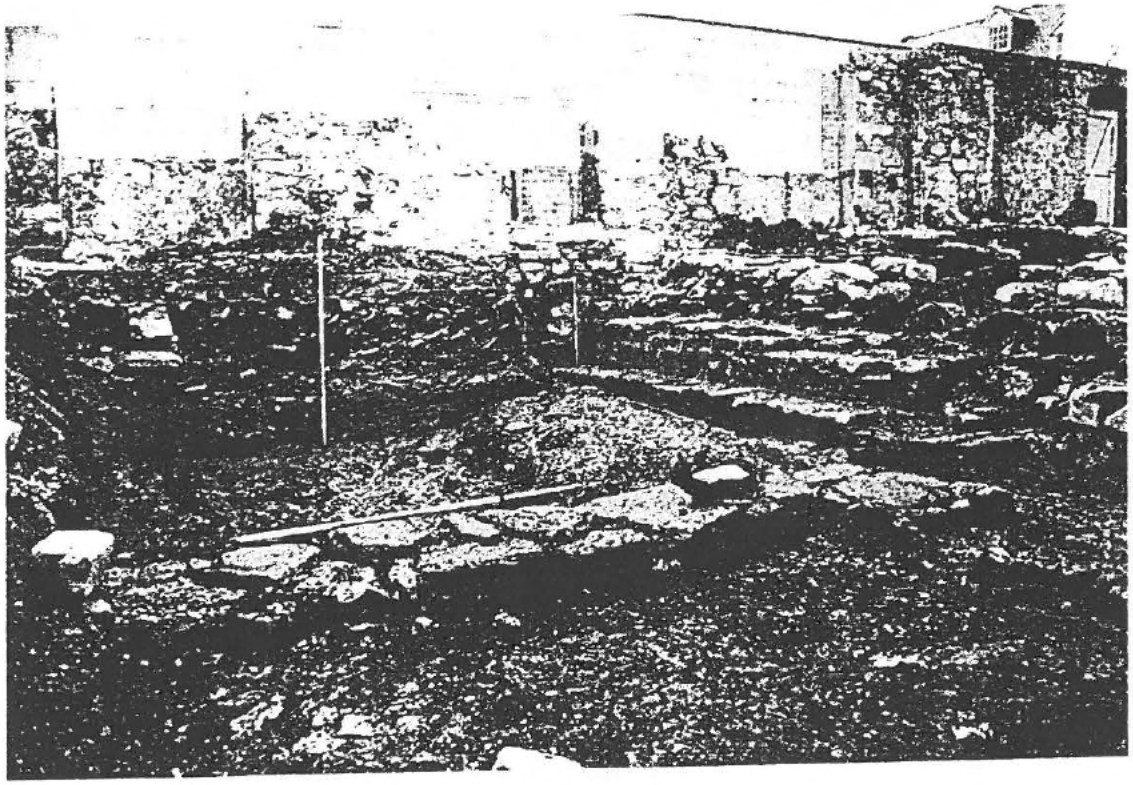
RCAHMW 1996 Plans of Bishop's Palace Outbuildings

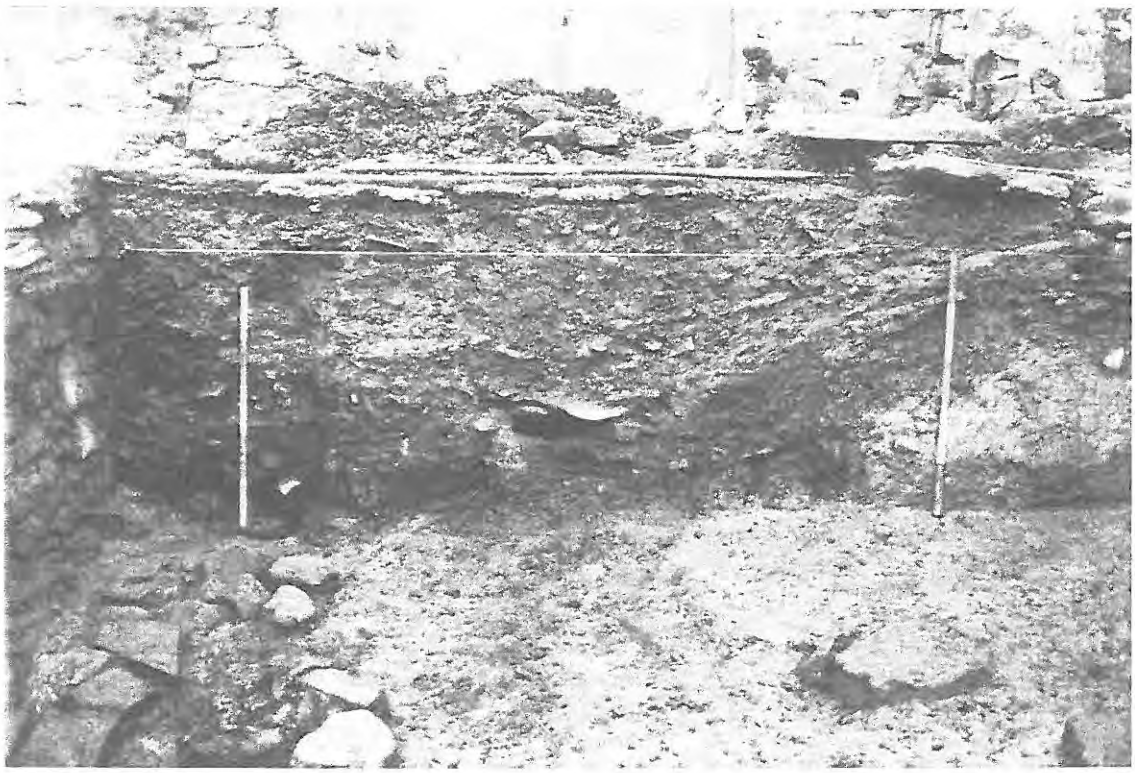
Sandby, P 1776 Bangor in the County of Caernarfon (County Archives)

Bishop's Palace, Bangor . Plate 1 - general view of excavations viewed from the south.



Bishop's Palace, Bangor . Plate 2 - Structure 'A', wall and plinth to right centre. The footings of later outbuildings occupy the foreground. View from the south.

Bishop's Palace, Bangor . Plate 3 - west facing view along structure 'B', with 'C' and 'A' to the rear, respectively.



Bishop's Palace, Bangor . Plate 4 - north end of main section showing river bank, timber piles (foreground) and structure 'A' wall face.

Appendix 1

ARCHAEOLOGICAL RESEARCH & CONSULTANCY AT THE UNIVERSITY OF SHEFFIELD

DEINDROCHRONOLOGICAL ANALYSIS OF TIMBERS FROM BISHOP'S PALACE, BANGOR, GWYNEDD

ARCUS 273
July 1996

Report by
Gretel Boswijk

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Dendrochronological analysis of three oak samples from Bishops Palace. Bangor, Gwynedd

Summary
Tree ring analysis was carried out on three samples from two timber piles from the Bishops Palace, Bangor, Gwynedd. A site chronology, Bangor BP, was established from the three samples and was dated to AD973 - 1120 against medieval master chronologies. Sample la was complete to bark edge, giving a felling date of AD 1120/1121 for the timber piles.

Introduction
Three samples from two oak *(Quercus spp.)* piles from the Bishops Palace, Bangor, Gwynedd, were submitted for tree ring analysis at the Sheffield Dendrochronology Laboratory. Samples I a and I b were taken from the same untrimmed pile below the stone abutment. The pile was formed from a whole trunk. Sample 2 was also from a pile below the stone abutment. The trunk had been squared before use.

Method
The three samples were frozen for a minimum of 48 hours before being cleaned with a surform blade and knifed along the edge to clearly reveal the ring sequence. The prepared samples were then measured to an accuracy of 0.01mm, using a travelling stage linked to a computer. The ring width measurements are recorded automatically in a data capture program run on the computer (Tyers, *pers comm.).* Once measured, the individual tree-ring sequences are plotted using semi-log paper, The tree-ring sequences are then crossmatched against each other visually, using the graphs, and statistically using the crossmatching programs, Cros73 and Cross84 (Baillie and Pilcher, 1973; Munro, 1984) to compare the sequences and identify samples which are contemporary. The crossdating programmes test the correlation between samples using the Students t-value method. Matches over t=3.5 are considered significant providing that the usual match between samples is good and the match is replicated against a number of independent chronologies (Baillie, 1982).

Samples which crossmatch are combined to form the site master curve which is used where possible, to obtain absolute dates for a phase or site as it enhances the main climatic signal and reduces the effects of local growth conditions on the ring sequence (Baillie, 1982). Unmatched samples are tested against the site master. Any additional samples which crossmatch are combined with the site master curve. The remaining unmatched sequences and the site master curve are then compared with reference chronologies to obtain an absolute date.Once a date span has been established for the site master, it is possible to date the individual ring sequences incorporated in that master. To achieve a precise felling date the timber must have the bark edge present which marks the final year of growth. The season of felling can sometimes be identified based on the presence or absence of late spring/summer cell growth in the final ring. This will indicate whether the tree was felled during the growing period (incomplete ring), or in winter after the main growing season is over (complete ring). If a tree has incomplete sapwood it is possible to establish a felling date range using a 10-55 sapwood estimate. These are the 95% confidence limits for British oaks over 10 years old (Hillam *et al,* 1987). The maximum felling range will be 45 years, decreasing relative to the number of sapwood rings remaining on the sample (Hillam *et al.* 1987). The sapwood estimate will provide a date range for the felling of the timber. Where a sample does not have any sapwood an extra 10 rings are added to the date of the last measured ring. These represent the minimum number of sapwood rings expected. A probable *terminus post quem* for felling is obtained but, because an unknown number of outer rings have been removed through timber conversion, the actual felling date may be much later.

The sapwood estimates provide a date range for the felling of the timbers and, by association, the building of the structure. Consideration should be given. however, to the delayed use of timber caused by seasoning, stockpiling or the reuse of timber within a structure as these factors may affect the interpretation of the tree-ring results. In general, timber was used while still green and easily worked, so that structures using primary timbers would have been built soon after felling (Rackham, 1990). The possibility of repairs being made to the structure should also be taken into account. Tree-ring dating provides precise dates for the tree ring sequences and is a completely independent process but the interpretation of the results may be refined through study of other archaeological and documentary evidence.

Results

Details of the samples are given in Table 1. All three samples were suitable for dendrochronological dating as they had long clear ring sequences, including sapwood. Samples need to have at least 50 rings to be certain the sequence is unique (Baillie, 1982). The two timbers crossmatched to form a site master chronology, Bangor BP, which is 148 years long. The t values obtained between each sample are given in Table 2. The very high t value obtained between I a and I b are because the two sequences came from the same timber. These two samples were combined to form a mean sequence, sample 1, prior to inclusion in the site master chronology. Table 3 gives the ring width for Bangor BP. Figure I illustrates the relative positions of the individual sequences in site master chronology. Comparison of Bangor BP with various medieval master curves dated the site master to AD973 - 1120 (Table4).

All three samples had sapwood and 1a was complete to bark edge. The final ring has both spring and summer wood cells indicating that the tree was felled in the late summer or winter of .AD 1120/1121. Although sample 2 did not have sapwood complete to bark edge, the comparison of the two separate timbers would suggest that this tree was felled in the same year.

Conclusion

The tree ring chronology from Bishops Palace, Bangor, spans the period AD973 - 1120, with the two trees being felled in late summer/winter of AD 1120/21. This has provided a valuable new set of data for north west Wales, as chronological coverage from the medieval period is currently quite sparse from this region. The Bangor site master matches well against other chronologies from the Welsh borders, as well as sites in south east England, east Anglia and across to Dublin, Ireland. If further oak timbers are found at the site, it is strongly recommended that dendrochronological analysis be carried out. This may not only improve the interpretation of this site, but also provide long term benefits to the use of dendrochronology in north west Wales.

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Table 1: Details of the samples analysed from Bishops Palace, Bangor.

Sample	Location	Dimensions (mm)	Total No. Rings	Sapwood	Pith	AGR (mm/yr)	Comment	Date
1a	below stone revetment	420 x 360	146	35	V	1.4	Bark edge	AD975-1120
1b	Below stone Revetment	420 x 360	147	33	C	1.3		AD973-1119
2	Below stone revetment	370 x 340	121	13	F	1.9	Pith rotted	AD991-1112

Table 2: t value matrix for timbers from Bishops Palace, Bangor.

Key: \ = overlap < 15 years: =t-values less than 3.00; * = empty triangle

Sample	Sample 1b	2
1a	25.61	8.03
1b	*	8.18

Table 3: Summary of Tree-ring widths for Bishops Palace, Bangor, site master chronology, (Bangor BP), AD973 to AD1120

Year	Ring Width Data										No. of trees per year
AD973			84	19	100	101	156	123	288	443	1 1 1 1 1 1 1 1
-	95	373	266	252	238	270	234	210	306	195	1 1 1 1 1 1 1 1 1 1
-	95	168	212	234	191	246	199	199	179	309	1 2 2 2 2 2 2 2 2 2

AD1001	207	250	181	187	75	118	196	216	207	158	2 2 2 2 2 2 2 2 2 2
-	153	180	211	143	174	173	270	227	213	204	2 2 2 2 2 2 2 2 2 2
-	254	253	228	133	127	203	190	176	181	179	2 2 2 2 2 2 2 2 2 2
-	147	164	159	159	105	81	138	302	219	269	2 2 2 2 2 2 2 2 2 2
AD1051	174	125	129	61	182	165	163	153	149	193	2 2 2 2 2 2 2 2 2 2
-	204	176	204	182	88	121	139	159	175	189	2 2 2 2 2 2 2 2 2 2
-	138	193	187	166	160	175	145	146	134	113	2 2 2 2 2 2 2 2 2 2
-	76	66	81	69	95	116	109	90	147	96	2 2 2 2 2 2 2 2 2 2
-	106	114	154	90	148	151	193	142	130	85	2 2 2 2 2 2 2 2 2 2
AD1101	55	146	138	68	114	124	90	64	51	69	2 2 2 2 2 2 2 2 2 2
-	73	68	45	72	51	64	62	76	153	70	2 2 1 1 1 1 1 1 1 1

Table 4: Dating the Bishops Palace site master chronology, AD 973 -1120. t-values with dated reference chronologies. All the reference curves are independent.

Key: SDL - Sheffield Dendrochronology Laboratory

Reference chronologies		*T* Values
Carlisle:	Carlisle Medieval (Baillie, *pers comm*)	6.74
Beverly:	Eastgate, Beverly (Groves, 1992)	4.55
Montgomery:	Hen Domen, Montgomery (SDL, *unpubl.*)	4.24
Bristol:	Dundas Wharf, Bristol (SDL, *unpubl.*)	5.97
Norwich:	Whitefriars, Norwich (Hillam, 1983)	4.96
	Quayside, Norwich (SDL, *unpubl.*)	4.93
London:	New Fresh wharf (SDL, *unpubl.*)	6.08
	Billingsgate (SDL, *unpubl.*)	4.73
Scotland:	Scotland (Baillie, 1977)	5.38
Ireland:	Dublin 1 (Baillie, 1977)	3.61

Figure 1: Bar chart showing the relative positions in the samples included in the site chronology, Bangor BP.

Key: White bars - heartwood rings; Hatched area - sapwood rings; C - pith; B - bark edge

Appendix 2

Wood from site at Bishop's Palace, Bangor
By Dr Caroline Earwood

Wood from below the stone abutment (Structure A)

Timber Posts

1. Length of untrimmed trunk wood 0.83m long x 0.38m maximum diameter. The upper surface of the trunk (presumably a pile) has been cut off nearly flat using an axe: there are remains of toolmarks across the surface, mainly slight ridges. The lower end of the trunk has been roughly pointed but is damaged, probably from being driven into the river bed, and has suffered some decay. No toolmarks are apparent on the lower end of sides of the pile.

Species: Quercus sp.

I would recommend that the pile be drawn (1:4) and that the top surface is drawn at 1:1 to show the toolmarks. Before drawing the wood should be thoroughly cleaned with water. No brushes or tools should be used as this will damage the surface of the wood. Sampling for dendrochronology should be carried out using a chain saw. The cut should be about 5-6cm side depending on the stability of the wood. Take care to retain the sapwood which is soft and will easily fall off. The sample should be double wrapped in plastic bags excluding as much air as possible.

2. Length of squared timber cut from a whole tree trunk, presumably the bottom of a pile. The top end has been cut to remove it from excavation the lower end has been roughly pointed but is damaged and decayed. There are no surviving toolmarks on the wood although it has been clearly squared on either side removing much of the sapwood. Length remaining 0.55m, dimensions of top 0.37m x 0.41m.

Species: Quercus sp.

I would recommend that a dendro sample be taken from this piece having first removed the top part of the pile to below the heartrot (ie. About 15cm from top). Before sampling the pile should be drawn.

If the third pile, not seen by myself, can be located it should also be sampled for dendrochronology.

Dendro samples should be submitted to Jennifer Hillam, Department of Archaeology and Prehistory, West Court, Mappin Street, Sheffield, S14 4DT Tel: 0114 2763146, having first checked that they are acceptable and ascertained the charge for a spot date.

3. Various pieces of worked and unworked wood from modern context 040

A variety of ends of piles and stakes of split and roundwood were noted. The condition of the wood confirms that these are relatively modern.

a. Saw cut timber with rectangular section and wedge shaped end. 0.66m x 0.08m x 0.04m. Species: Quercus sp.
b. End of pile with wedge shaped point cut with axe and pointed top. 0.7m long x 0.09m x 0.09m. Species: Quercus sp.
c. Fragment of wood, probably end of stake 0.31m x 0.07m x 0.05m. Non oak species.
d. Two fragments of birch roundwood (Betula sp.) with intact bark, one piece cut to a point with an axe. 0.17m c.0.2m and maximum diameter of 0.45m.
e. Eroded roundwood with bark cut to pencil point with an axe. 0.71m long x 0.21m in diameter. Porbably birch (Betual sp.)
f. End of pile with rectangular section cut to wedge shaped point with an axe. In poor condition. 0.4m long x 0.06m x 0.07m.

In view of the context in which this wood was found I would not recommend any further work.

4. Wood from "black organic layer"

a. Two fragments of roundwood, unworked. Diameter c.0.015m, maximum length 0.02m. Non oak species.
b. Three very badly damaged pieces of oak, one at least being the remains of a stake with pointed end. Maximum length 0.41m.
c. Substantial remains of wooden bowl now in three pieces.

The bowl is a typical medieval shape with a flat base and slightly sloping sides. Maximum diameter 0.017m, diameter of base c.0.01m, height of bowl 0.04m. It was not possible to identify the species as the bowl requires cleaning.

I would strongly recommend that the bowl be kept totally immersed in water in a rigid plastic box which is stored in a cool room. The bowl should ideally be cleaned in laboratory conditions and I suggest that the National Museum of Wales should be contacted to ascertain if they are willing to receive this find. The bowl is highly fragile and should be treated with care. A radiocarbon accelerator date should be obtained. The typology of the bowl indicates a medieval date is likely although it could be of post medieval date. Finds such as this are extremely rare, particularly so from Wales, and the bowl should be identified for species, radiocarbon dated and conserved.

If you are able to place the bowl in the care of the National Museum of Wales I would be willing to examine it further after it has been cleaned to identify the wood species and give you a fuller report.

Appendix 3

REPORT ON POTTERY FROM GAT 1383, BANGOR

By Julie Edwards, Chester Archaeology

Two sherds were retrieved from stratified contexts, (07) and (010), within structure A. Both sherds are made in the same hard, whitish grey firing fabric and are glazed on the exterior. Sherd 01 is thicker that 02 and has a pale yellowish green glaze whilst 02 has a dark yellow glaze. Both appear to have been wheelthrown. Sherd 01 has very small fragments (<2mm) of pink fired clay sticking to the glaze which may indicate different clay types being fired within the same kiln.

It is difficult to closely date the sherds as the fabric type is not one which has yet been studied or defined closely, although recently it has been noted in assemblages in North Wales (eg Ty'n Twr, Bethesda) and Chester (notably at 5-7 Foregate Street). The fabric has some similarity to but is not the same as the pink/white wares found in wasted material near Ewloe, Flintshire thought to date from sometime in the fourteenth century. A vessel in this pink/white ware was found in Chester containing coins dating to c.1361 (Rutter, 1977). The ware occurs in forms which generally date to the fourteenth and fifteenth centuries, however it has been suggested that these Ewloe type wares first appear at the end of the thirteenth century (Papazian and Campbell 1992, 59).

The large assemblage from 5-7 Foregate St, Chester is currently being studied. Pottery in a fabric similar to the Bangor sherds has been found in contexts with thirteenth/fourteenth century red/grey wares but not pink/white, it is therefore possible that this type pre-dates or at least comes into use earlier that the pink/white wares. Further work on the 5-7 Foregate St material is needed to confirm this and is in progress.

In conclusion it would seem that the Bangor sherds are likely to be fourteenth century in date but may be from the early part of the century with a possibility of a late thirteenth century date. At the moment a lack of well dated assemblages hinders close dating of the ware.

Fabric description

Terms are those used in the DUA Pottery Archive Users Handbook, 1984.

Colour – greyish white (Munsell, white 10YR 8/1) throughout, the unglazed interiors are discoloured but appear a dirty buff colour.

The fabric is hard, has a harsh feel and an irregular to hackly texture.

Inclusions – moderate clear and grey, ill-sorted quartz which varies from very fine to medium in size (<0.5mm) and is sub-angular in shape. Moderate quantities of an unidentified dense white inclusion which is opaque, ill-sorted, varying in size from very fine to medium (<0.5mm); angular and sub-angular in shape. Flecks of a red and black material, possibly iron compound, varying from very fine to fine in size (up to 0.25mm); sub-angular, irregular and flat in shape.

Glaze – finish varies from slightly lustrous to glossy. Crazed. Colour from dark yellow (10YR 6/8 to 2.5Y 6/8) to pale green (5Y 5/4 to 6/4).

Sherd weight

Find 01 Structure A (07) – 1 sherd 15g.
Find 02 Structure A (010) – 1 sherd 4g.

Bibliography

Rutter J.A. 1977, Upper Northgate Street hoard pot. In: Davey P.J. ed Medieval pottery from excavations in the north west. 22-23. Liverpool University.

Papazian C. & Campbell E. 1992 Medieval pottery and floor tiles in Wales AD100-1600. Bulletin of the Welsh Medieval Pottery Research Group 13.

APPENDIX 3

BISHOP'S PALACE, BANGOR, 2003, G1785

CATALOGUE OF ARCHIVE CONTENTS

Description	***No. Items***
Context sheet	79
Context index sheet	3
Photograph record sheet	3
Drawing record sheet	2
Drawing sheet A2	5
Photographic film, colour negative	3
Photographic film, colour transparency	3
General Finds: Pottery, building materials etc	6 bags
Recorded finds	Nil
Soil samples	2 bags

APPENDIX 4
BISHOPS PALACE, BANGOR 2004, G1785
CATALOGUE OF EXCAVATED CONTEXTS

Conte	Sitesubd	Phase:	Category	Interpretation
1	4	2	Hollow/Ditch	Possibly a fragment of the edge of ditch 24 but may be just an irregularity in the subsoil surface, similar to hollow 7.
2	4	5	Modern service trench	Modern service trench,a sewer marked on the service search plan. Appears to be sealed by the cobbled yard surface 47 but some irregularity in this surface suggests the service trench may have been dug through the cobbles, which were then
3	4	5	Modern concrete foundation	Function unknown. Too small to be a man-hole. Within the yard of the council depot/fire station so may have some unusual function.
4	1	2	Pit	Clay quarrying and puddling pit associated with the construction or repair of the Bishop's Palace
5	1	2	Layer, pit-fill	A fairly uniform grey clay layer, containing stones from 0.05 to 0.5m across.
6	1	2	Layer, pit-fill	Shell-rich lower fill of pit 4.
7	4	3	Hollow	Although visible on first cleaning it proved to be no more than an undulation in the subsoil surface. The fill the same as overlying layer 50.
8	4	3	layer, fill	Fill the same and continuous with the general overlying layer 50.
9	4	5	Layer, fill	
10	4	5	Layer, fill	
11	1	2	Pit	Clay quarry/puddling pit similar to pit 4.
12	1	1	Ditch	Possible hedge boundary ditch along with ditch 20. Cut by pit 11 and therefore possibly pre-dating the second phase of the palace, which is possibly supported because the ditches are oriented differently to the palace buildings.
13	1	2	Layer, pit-fill	A thin layer of grey silt and shells - some intact oyster, winkle and mussel shells and occasionally lumps of lime mortar, and a sheep bone.
14	1	3	Layer	Possibly old topsoil predating the construction of the 18th century stables or the re-use of the stables in the 20th century.
15	1	4	Layer	Imported levelling material, very mixed. 19th C or
16	1	2	Layer, pit-fill	Upper fill of pit 11.
17	1	2	Layer, pit-fill	Shell-rich fill of pit 11. Shells mainly intact cockles, and some oyster and occasional limpet. One oval, single peg-hole slate in top of layer.

Conte	Sitesubd	Phase:	Category	Interpretation
18	1	2	Layer, pit-fill	Lower fill of pit 11, not excavated to base of pit
19	1	1	Layer, ditch-fill	Clean fill, occasional charcoal frags.
20	1	1	Ditch	Possible field boundary ditch in a pair with ditch
21	3	3	Post-hole	Not bottomed at depth of -0.60m below subsoil. A hole for a large post. Telegraph or electric pole? Lower fill contained a large coke cinder.
22	3	3	Layer, post-hole fill	Contained a large coke cinder.
23	5	1	Ditch	Drain? contained clay, probably re-cut. pre-dates the 18th C stable block, probably contemporary with the soil level over which the stables were built, rather than predating it. No artefactual
24	2	2	Ditch	Large linear feature. Only partly exposed in plan. Cut as a steep-sided, flat-bottomed ditch which then eroded into a much wider and shallower profile. Possibly part of an eastern boundary assoc. with a drive shown on Wood's 1834 map.
25	2	6	Modern electric cable	
26	3	6	Modern concrete foundation	
27	3	6	Modern flower bed	
28	3	6	Modern telephone cable pipe	Telephone cable in clay pipe conduit.
29	3	6	Modern pipe trench	Modern pipe trench, containing tarmac frags.
30	4	5	Modern feature	Associated with concrete foundation 3 and post-dates the cobbled stable yard surface 47.
31	4	5	Modern pit	Assoc. with concrete foundation 3.
32	4	4	Wall foundation	
33	4 and 5	4	Wall foundation	At its north end built upon the subsoil but to the south it was placed on a rough boulder foundation 58 which was built up on the sloping bank of the former course of the Afon Adda.
34	5	4	Wall foundation	A substantial foundation c. 1m wide for the south stable wall where it had to be built over the sloping and boggy river bank. Even so it does not appear to have been built on the subsoil but a
35	5	5	Sewer cut	The modern sewer alongside the line of the culverted Afon Adda.
36	5	5	Sewer pipe	
37	5	2	Timber plank	Appears to be an ancient timber although in the fill of a modern cut. Axe or adze marked and deeply fissured from deterioration. Longer than the width of the trench. Sampled for possible identification and dating. Possibly part of a medieval structure such as river bank revetting destroyed during the
38	1,2,3,4	6	Modern topsoil	

Conte	Sitesubd	Phase:	Category	Interpretation
39	2	5	Layer	A layer of possibly redeposited subsoil - a levelling layer after demolition of the stables in
40	2	4	Layer	A humic soil layer that seems to have accumulated only within the upper dip into the top of ditch 24 although not actually part of the ditch fill.
41	2	6	Layer	A late 19th C or 20th C construction horizon.
42	2,3	4	Layer	A thick garden? soil predating modern landscaping as part of the town hall. Similar to and possibly equivalent to layer 50 under yard
43	2,3	4	Layer	A deep clayey layer, not humic probably representing a levelling up of the ditch.
44	2	3	Layer, ditch-fill	A humic soil layer representing a garden soil contemporary with the latest open phase of the ditch up to about the mid-19th C, perhaps earlier.
45	4	5	Layer, yard-floor	Thin recent 20th C surface of yard.
46	4	4	Layer, yard-floor	Late brick cobbling of yard extending cobbled surface 47 where there had formerly been a lean-to
47	4	4	Layer, yard-surface	Cobbled yard surface. neatly laid oval cobbles set in fine sand.
48	4	5	Modern service trench	Modern service trench cutting cobbled yard
49	4	4	Layer	Same as cobbling 47 disturbed and redeposited.
50	4	3	Layer	A mixed humic soil possibly representing the garden soil at the time the 18th C stables were built. The layer is continuous into hollows 1 and 2. Charcoal frags suggest manuring and
51	4	5	Layer, yard-surface	Casual resurfacing of yard equivalent to 45 but after construction of 3, 48 and 31.
52	4	5	Layer	20th C redeposited layer within yard of former
53	4	5	Layer	
54	4	6	Layer	Rubble from 1996 demolition of stables.
55	4	6	Layer	Spread of modern rubble deriving from 1996 demolition of stables.
56	4	3	Layer	Buried soil layer representing soil that existed at time the stables were built and probably contemporary with layers 50 and 42.
57	4,5	4	Wall buttress	The offset is probably the base for a doorway as shown on the 1977 survey of the stables by the
58	5	4	Wall foundation	Rough foundation only present where the wall 33 was built over much deeper subsoil towards the
59	5	6	1996 Trial Trench	E-W trench cut by machine during 1996 evaluation by N. Johnstone. Cut down to subsoil level except where it encountered the stable wall
60	5	6	Layer	Modern demolition horizon.

Conte	Sitesubd	Phase:	Category	Interpretation
61	5	4	Wall foundation trench	Foundation trench cut for stable wall.
62	5	4	Layer	
63	5	3	Layer	Possibly the garden soil as it existed at the time of construction of the stables or a make-up layer at the time of construction.
64	5	3	Layer	A ground make-up layer possibly associated with construction of the stables or earlier landscaping
65	5	3	Layer	Early soil horizon predating the construction of the stables.
66	5	6	Layer	Spread of modern demolition debris.
67	5	5	Modern cut	Modern cut for local sewer pipe.
68	5	5	Modern layer	Fill of modern sewer trench 67.
69	5	6	Modern layer	Top fill of modern sewer trench 35.
70	5	6	Modern layer	Main fill of sewer trench 35.
71	5	6	Modern pit/cut	Recent demolition rubble pit, stone, brick and slate fill. Possibly a soakaway.
72	5	6	Layer, pit-fill	
73	5	5	Layer	Thin humic lens directly under modern demolition horizon but may represent a remnant of external surface assoc. with the stables.
74	5	4	Layer	Redeposited subsoil make-up layer at time of construction of the stables.
75	5	3	Layer	Equivalent to and probably a continuation of Layer 65 although more stony, possibly because it is an old river deposit, getting deeper down the
76	5	4	Layer, ditch-fill	Top fill of drainage ditch 23 and probably this is part of layer 64, a ground-make-up layer assoc. with construction of the stables.
77	5	1	Layer, ditch-fill	Only present at one side of the ditch, possibly filling a re-cut. Water-laid?
78	5	1	Layer, ditch-fill	Water-laid deposit?
79	5	1	Layer ditch-fill	Water-laid deposit.
101	6	4	Building	19th C single storey scullery
102	6	4	Room	W. room of scullery
103	6	4	Room	W. central room of scullery
104	6	4	Room	E. central room of scullery
105	6	4	Room	E. room of scullery
106	6	4	Sewer	Modern sewer

Conte	Sitesubd	Phase:	Category	Interpretation
107	6	4	Sewer	Modern sewer
108	6	7	Not used	Not used
109	6	7	Not used	Not used
110	6	7	Not used	Not used
111	6	4	Wall	Brick wall forming N. side of building 101
112	6	4	Wall foundations	The foundations seem to be largely or entirely of re-used stone. Most have one or more flat faces, some are tapering, possible arch stones and a few have architectural mouldings and rebates. One has carved decoration, and is part of a small trilobate window heading.
113	6	7	Layer	Mixed general machining layer.
114	6	5	Layer	Recent old topsoil layer
115	6	4	Layer	Old garden soil
116	6	3	Culvert cut	Only firmly identified at the east side, where it cut through solid clay. At the west side it cut through the fills of a pre-existing ditch or channel 162 and the cut edge was not clear and extended beyond the actual edges of the culvert construction because of the need to stabilise the loose material.
117	6	3	Layer	Fill showed as a slightly darker linear feature within the general old soil layer 136 indicating that it had been cut through it and not
118	6	3	Layer	Wall robbing debris. Showed as N-S linear feature just E of culvert cut 116
119	6	3	Culvert	Culvert, contemporary with or predating the building 101 and probably the continuation of a similar drain found in 1996, further to the S.
120	6	4	Layer	Same as 115 but at NE of trench, N of wall 111
121	6	4		Same as 115?
122	6	3	Wall	S. of stable wall 111 only the robbing trench survives, with a scatter of angular rubble.
123	6	4	Wall footings	Contains slate slab feature 171. Footings of S. wall of building 101
124	6	3	Layer	Old cultivation soil within 101 and beneath its floors, so predating the construction.
125	6	3	Layer	Part of 124
126	6	3	Layer	Part of 124
127	6	3	Wall robbing cut	The visible trench may be just the robbing trench rather than the wall cut.
128	6	3	Layer	
129	6	4	Layer	

Conte	Sitesubd	Phase:	Category	Interpretation
130	6	2	Layer	
131	6	1	Layer	
132	6	1	Layer	
133	6	7	Not used	
134	6	1	Layer	Possible trampled yard or rubbish horizon.
135	6	4	Layer	Post med cultivation soil . Well mixed fragments of charcoal, mortar, oyster shell, slate. Natural inclusions = small rounded and sub angular stones. Butting wall 11 and cut by pipe trench
136	6	3	Layer	Possibly demolition layer = larger amount of angular flat stones possibly from earlier wall too stony to be cultivation soil.
137	6	2	Layer	Appears to be deposit of clay overlying and possibly deliberately capping N. end of 138. Does not extend to wall.
138	6	1	Layer	Appeared as layer of packed stones in matrix of greenish soil with occasional mortar. As this overlies 140 which is a dark brown/black layer of peat it might be an attempt to seal a wet area. Greenish hue to soil might be cess from animals. NB also on south of wall but below iron pan layer (132) which was as deep as section dug. Possibly continues under wall footings. Trampled external yard surface.
139	6	2	Layer	Deposit falls away from a side of wall to north similar/same deposit 130 falls away from S. of wall to south implying it has been built up against base of current wall. To north deposit overlays/butts 137 which is lens of clay overlying N. end of deposit 138. Very stony,
140	6	1	Layer	Underlies packed stone layer 138 and overlying 141 a blue grey clay. Possibly peat formed in boggy area over clay and later sealed by 138. Similar stratigraphy seen at west side of culvert 116. Not seen in section south of wall (Drg no 35)
141	6	1	Layer	A very blue clay found below peat 140. Does not appear in general section, only seen when sondage cut through peat. Not bottomed but 0.5m deep as excavated. Similar stratigraphy seen west of culvert 116 and similar/same material seen in bottom of earlier test trench see SH 17 drgs 37,38.
142	6	1	Pit/gully	Contained only animal bone frags. Possibly the same as gully 303 in trench 8. The fill of the pit /gully was sealed by the old garden soil 124 which lay below the floors of the scullery block
143	6	1	Layer	Water-laid gully fill?
144	6	2	Layer interface	Not identified in section drawing. Possibly same as 134?
145	6	2	Layer	Not identified on sec drawing
146	6	3	Layer, culvert-fill	Water-laid silt

Conte	Sitesubd	Phase:	Category	Interpretation
147	6	3	Layer, culvert-fill	Water-laid silt
148	6	6	Modern cut	20th C drain pipe cut
149	6	6	Layer, modern	
150	6	6	Modern pipe	20th C drain pipe
151	6	6	Layer	Backfill of 1996 Trial trench
152	6	6	Layer modern	Backfill of 1996 trial trench
153	6	1	Layer	Trampled yard surface?
154	6	1	Layer	Exposed in N side of re-excavated 1996 trial trench. Probably the same and continuous with layer 160 in W side of culvert 116 cutting
155	6	1	Layer	Appears to butt or be overlaid by clay layer 156. Not fully exposed.
156	6	1	Layer	Water-laid?
157	6	6	Layer modern	Backfill of 1996 trial trench
158	6	3	Culvert cut	Culvert cut
159	6	3	Culvert cut	Part of culvert cut 158
160	6	1	Layer	Backfill? Probably 2 separate layers - see drg 57. The lower part of the layer includes numerous largish stones plus discrete lumps of pure clay - these all seem likely to have been deliberately introduced although the higher clay is purer and
161	6	1	Layer	Naturally developed organic layer but containing rubbish material, including bone fragments. Contained one rectangular piece of ashlar but this has probably subsided into 161 from layer 160 above. Sampled for possible analysis for fish/bird bones and macrobotanical remains.
162	6	1	Ditch/channel	Assumed to be a linear feature but this could not be proved because only one cut was made across it. However, a layer of peat found to the NW, layer 140, may well be a continuation of layer 169, the top layer in 162. At west cuts or formed in a deep layer of clayey organic silt 167 which contains animal bones so is not a subsoil layer of natural
163	6	1	Layer	Possibly same as 161. Contained wood and bone
164	6	1	Layer	Possibly lower fill of 162 or an earlier layer
165	6	2	Gully/slot	Not identified as a separate feature during original excavation of N-S trial trench. Contains an area of fairly pure burnt clay/silt and some small slate fragments, some on edge. Possible construction or demolition feature relating to late 15th / early 16th C buildings.
166		2	Layer	Construction debris?

Conte	Sitesubd	Phase:	Category	Interpretation
167	6	1	Layer	Contains animal bone and very decayed sea? Shell. Water laid? Probably also somewhat
168	6	1	Layer	The same layer as the upper part in the W side of the culvert cutting 116 - surfaces actually shown to be continuous. At the west the peat thins out and disappears at just the point where it meets gully/slot 165 and the peat does not reappear to the west of 105, although only a very limited area
169	6	1	Layer	Seems to be a naturally developed peaty soil forming the topmost fill of channel/ditch 162. However, where very carefully cleaned at W end of trial trench it showed that the peat had been broken up into fragments within a more disaggregated loam suggesting a period of light
170	6	2	Layer	Redeposited made ground
171	6	4	Drain?	Floor of a drain that must have connected with the culvert 116 to the E. A considerable collection of pieces of cream table ware were found on top of this slab. Probably dumped in the drain when the building was last used. It seems to have been a scullery. Pieces of another pot were found directly sealed by the slab - in layer 172.
172	6	4	Layer	
173	6	4	Drain	External drain of building 101.
201	7	4	Layer	Old garden soil contemporary with 18th and19th use of palace and stable blocks
202	7	6	Mixed layer	Mixed cleaning layer.
203	7	3	Layer	Cultivated garden soil predating the 18th-19th century renovations. The relationship with most features in Trench 7 is unclear because their fill was quite similar to 203. However, 203 clearly overlay the top fill of 218 and of 212, 215 & 217.
204	7	4	Wall	Presumed to mark garden perimeter, possibly the same as the castellated wall seen on 18th engraving although it is not marked on 19th C maps so presumably demolished by then.
205	7	2	Ditch cut	Extensive ditch cut originally in region of 2.5 to 3m wide. The top edge gently grades out showing it was exposed for a long period. When largely silted it was cut to build a stone wall approx. on the same line. The west side then being backfilled to the contemporary ground level the east side being left open to provide an outer ditch to the wall. Pottery in the lowest ditch layer suggested it is of 16th-17th century date the wall probably of 17-18th century date.
206	7	6	Electric cable trench	20th century electric cable trench.
207	7	6	Telephone cable and trench	20th century telephone cable trench.
208	7	6	water pipe and trench	20th century water pipe trench.
209	7	3	Layer ditch fill	Backfill layer - at this point the ditch 205 (24) was filled in and level with the garden soil to the

Conte	Sitesubd	Phase:	Category	Interpretation
210	7	3	Layer pit fill	This fill had small pieces of burnt stone throughout, with some tiny fragments of burnt bone. Also found at the bottom of this fill, were two small pieces of slag. This could indicate that burning has taken place, or this burnt deposit is
211	7	3	Pit/post hole	A large pit 1.14 x 0.50m which had a black burnt fill (210) with small flakes of charcoal throughout this fill. Also burnt stones and small fragments of burnt bone and also two small pieces of slag. Fill included one coke-type cinder so the pit is probably post-med. The pointed base suggests it
212	7	2	Layer, pit fill	Deliberate backfill. Not topsoil type material because it is quite clayey. Possibly construction
213	7	2	Pit	Quarry pit? Associated with one phase of palace construction. No artefactual evidence. The fill sealed by 203. A small possible stakehole 252 was found in the base of the pit.
214	7	2	Layer	Secondary fill of 215 containing charcoal, burnt stones and sub rounded stones, burnt clay overlying 260 a clean clay silt containing no
215	7	2	Pit	Large circular pit with no obvious function i.e. not rubbish pit.
216	7	3	Deposit	Extensive deposit of Post-medieval date; seals a number of sub-circular features, cut in turn by a curvilinear feature. Bio-turbation throughout
217	7	3	Fill	Fill of a shallow curvilinear feature of Post-medieval date (confirmed by context 216 which [256] cuts, which contained a sherd of Post-
218	7	3	Ditch?	Possible drainage ditch contemporary with ditch 205. Located in plan in Trial Trench 2, but feature was hidden by balk left to protect electricity cable 206. Top fill sealed by 203.
219	7	3	Layer	Fill of possible post hole although no post pad or packing present. No finds. Archaeological inclusions = charcoal throughout fill. Small <1cm rounded pebbles and sub angular stones <5cm.
220	7	3	Pit/post hole	Possible post hole. Single fill, section not drawn.
221	7	3	Pit/Post hole?	Not excavated
222	7	5	Layer	20th century demolition/tipping layer which may have been used as levelling prior to laying of 267 and 268 (latter being a grano-concrete platform; former being a levelling/aggregate)
223	7	5	Layer	1996 demolition layer
224	7	6	Layer	Widespread layer laid down to level the area prior to turfing for the existing gardens.
225	7	5	Layer	Modern levelling cultivation layer, preceding late 20th century landscaping.
226	7	5	Layer	20th century garden soil contemporary with last use of stables as council depot.

Conte	Sitesubd	Phase:	Category	Interpretation
227	7	3	Post-hole?	Possible post hole.
228	7	7	Layer, subsoil	Yellow-buff silty clay subsoil.
229	7	3	Layer, post-hole fill	Possible post-hole fill; no datable finds
230	7	3	Post-hole?	Probable post-hole; no datable finds recovered; cuts natural subsoil.
231	7	3	Layer	Primary fill of curvilinear feature 256
232	7	3	Layer, pit fill	This dark brown silty clay had tiny inclusions of charcoal throughout the fill. Also small pebbles 1-2cm, and occasional angular stones 5-7cm. See drawing on context sheet 211.
233	7	3	Pit/post hole	Slightly irregular in plan but clearly defined fill no packing stones so perhaps more likely to be a small pit rather than a post hole. The fill is similar in colour but less stony than the overlying soil layer. Contained one fragment of sandy, hand-made possible prehistoric pot. The feature and its
234	7	3	Layer/pit fill	Sealed by 203
235	7	2	Layer, subsoil	Contained or rather embedded in the top of it was a sherd of 13-14th C pottery. Probably just a lens of variant subsoil.
236	7	3	Layer, post-hole	Fill of a suspected post hole - feature; no datable finds recovered.
237	7	3	Pit/post-hole	Suspected post hole.
238	7	3	Layer, post-hole fill	Fill of a suspected post hole feature, sealed by a Post medieval spread 216; no datable material
239	7	3	Cut	Suspected post hole feature; no datable material recovered from fill
240	7	3	Layer	Fill of a shallow sub-circular cut. No datable material recovered but sealed by a Post medieval
241	7	3	Cut	Sub-circular feature of uncertain date; sealed by a Post medieval deposit.
242	7	3	Layer	Possible 18th-19th century garden soil
243	7	3	Layer	Post medieval tipping layer.
244	7	2	Layer, ditch-fill	Ditch fill containing fragmented slate.
245	7	2	Layer, ditch-fill	Ditch fill
246	7	2	Layer, ditch-fill	Ditch fill
247	7	4	Fill	Fill of foundation cut 263
248	7	3	Post hole	This post hole had one fill which had stones in it, which may have been used as packing. Their sizes were between 10-17cm. There were fragments of charcoal throughout the fill, but no dating evidence. This post hole was next to another post hole 250 and cut 213.

Conte	Sitesubd	Phase:	Category	Interpretation
249	7	3	Layer, post-hole fill	This sandy clay was dark brown with fragments of charcoal throughout. This was a secondary fill from gradual deposition from the surrounding area. There were no signs of burning in the post hole, and the small fragments of charcoal appear to have come from the surrounding area.
250	7	3	Post hole	A small post hole with one fill. No dating evidence. Unlike post hole 248 this post hole had a very flat bottom. There was some tiny fragments of charcoal within the fill, but no signs
251	7	3	Layer, post-hole fill	This was a secondary fill with small amount of charcoal blown in over time. There were no signs of burning in situ, a stony bottom, but no dating evidence found.
252	7	2	Stake-hole?	Located in base of pit 213 after removal of inner fills. The fill of 250 was clearly softer than the hard clayey subsoil and the fill was more or less the same as the lower pit fill. Function unknown.
253	7	2	Layer	Same as 262
254	7	3	Layer	Fill of small pit dug into 260 flat stones in bottom appeared at first to be post pad but after removal of 260 it was clear that stones continued into 260. Darker in colour than 214. This fill looser and wetter than 260 and 214
255	7	3	Pit	Small pit dug into 260 - no obvious function.
256	7	3	Cut	Shallow curvilinear cut of Post medieval date; possible garden feature; cuts a post-hole 230 and a deposit 216 with the latter containing Post-med
257	7	3	Pit/post hole	Possibly the edge of a larger pit.
258	7	3	Layer, pit fill	
259	7	6	Layer	Modern
260	7	2	Layer, pit fill	Primary fill of cut 215 later cut by small pit/ph?
261	7	3	Layer	Top seems to merge with 203.
262	7	2	Layer, pit fill	Possibly a layer of puddled material on base of pit.
263	7	4	Cut	Foundation cut for structure 247 - Wall 204
264	7	4	Structure	Partially robbed wall foundation repaired as 204, associated with foundation cut 263; sealed by Post med layer 17th-18th C?
265	7	4	Layer	Garden soil sealed by 19th-20th C deposit.
266	7	2	Layer, ditch fill	Ditch fills; secondary. Contained small finds 3 & 4 - 16th-17th C stoneware sherds
267	7	5	Layer	Probable early 20th C garden soil / landscaping
268	7	5	Layer concrete	Early 20th century grano-concrete.
269	7	4	Layer	Rubble backfill of a partially robbed out wall 204.

Conte	Sitesubd	Phase:	Category	Interpretation
270	7	4	Structure	Stone-built revetment.
271	7	4	Layer	Garden soil; could have been sealed by 265 before the deposition of 222. Removed before section was recorded so does not appear in it
272	7	4	Layer	Thin spread of mortar possibly associated with building of wall 204.
273	7	4	Structure	Foundation course for 270 revetment.
274	7	2	Deposit/fill	Possible fill of ditch 205; beyond limit of
275	7	2	Fill	Tipping layer within ditch
276	7	2	Layer ditch-fill	Tipping layer within ditch 205
277	7	2	Layer ditch-fill	
278	7	3	Linear segment	Additional segment excavated to collect fill for charcoal for possible C14 dating sample. Also contained numerous burnt stone fragments - also collected. Section not drawn. Depth see photo
279	7	3	Layer	
280	7	3	Layer, pit fill	
281	7	3	Pit / Post hole	Not excavated
282	7	3	Layer, pit/post-hole fill	
283	7	3	Layer, pit/post-hole fill	Not excavated
284	7	3	Pit / post hole	Part excavated in December 2003. Section see 2003 drawing. Modern? Section not drawn
285	7	3	Layer, pit/post-hole fill	
286	7	3	Pit / hollow	Fill contained one piece of burnt shattered stone
287	7	3	Layer. pit/hollow fill	
288	7	2	Layer, ditch fill	After further excavating N-S ditch 205; what was described as primary silting 277 proved to be the top of a ditch fill now 288 wet clay silt with large rounded stones throughout overlying a grey/blue clay which appears to be primary fill.
289	7	2	Layer, ditch fill	Stony clay containing wood and bone probably primary silting. NB Find 5 projecting vertically from this layer to interface of layer above.
290	7	7	Layer, subsoil	
301	8	5	Layer, floor	Internal floor of building 330. Well worn from use.
302	8	5	Layer, yard floor	External yard surface of stable block
303	8	1	Gully	Drainage gully predating stables and outbuildings. First thought to a shallow linear gully but through excavation it was found that it sat on/in a much deeper gully which was a bit

Conte	Sitesubd	Phase:	Category	Interpretation
304	8	1	Layer, gully - fill	The fill contained a large amount of animal bones.
305	8	2	Ditch segment	Not excavated except for uppermost 18th C backfill
306	8	4	Wall	Garden boundary wall contemporary with the 'cow shed' at the N side of yard 302.
307	8	5	Sewer cut	Modern sewer cut
308	8	6	Layer, topsoil	
309	8	6	Layer	Recent landscaping layer
310	8	5	Layer	Buried topsoil contemporary with late 20th century occupation of stable buildings.
311	8	5	Layer	Made ground - landscaping layer?
312	8	5	Layer	Early 20th C demolition layer
313	8	5	Layer	From demolition phase probably belonging to 1906 redevelopment
314	8	4	Layer	Buried land surface immediately predating demolition phase of c. 1906.
315	8	4	Layer	Backfill of ditch at east side of wall 306
316	8	5	Layer	Made-ground, levelling-up layer from redevelopment in 1906.
317	8	4	Layer	Possibly indicating a road surface nearby to the east as this is very different to any other subsoil
318	8	4	Building	3 bay coach house of 18th or early 19th C date
319	8	5	Sewer trench	Early 20th century sewer trench. Overlaid by the cobbled surface 302 which has subsided slightly into it and possibly was taken up and relaid over it. Part of 1906 redevelopment. It was laid to avoid disturbance to the buildings, and was routed through the gateway at the east of yard
320	8	4	Wall	S wall of lean-to shed 330
321	8	4	Wall	E-W North wall of coach-house 318
322	8	3	Wall	N-S length of wall. Discontinuous showing below removed area of courtyard - cobbling 302 at SE side of yard 332. Its appearance and design - faced on the east of its position suggests it was a continuation of wall 204/306, but must have been a phase before the yard wall 331 was constructed and possibly before the coach-house 318 since it seems to have been cut by the north wall 321 of the coach-house.
323	8	4	Wall footings	Footings for a N-S wall, within area of coach-house 318, but not forming part of its 3 bay main structure. Possibly a low internal wall supporting joists. Although on a similar line to wall 322 Its construction is quite different, mainly its use of slate and lack of mortar and appears to be bonded with footings 324 of wall 321.

Conte	Sitesubd	Phase:	Category	Interpretation
324	8	4	Wall footings	The footings had to be of a considerable depth here to raise the floor of the coach house 318 to the same level as the ground to the north. The footings also had to be even deeper where the coach house crossed the line of the infilled ditch 204/305/333 and were there underlaid by an
325	8	5	Concrete plinth	Function unknown. Possibly a hydraulic lift associated with the use of the stable buildings as a fire station in the 20th century.
326	8	5	Pit	Possibly a demolition pit associated with concrete plinth 325, but which was subsequently abandoned. However, part of pit exposed in 2003 although not faced with brick was plastered or mortared over so may have been some kind of
327	8	5	Sewer trench	Early 20th century sewer providing drainage from coach house 318 into main sewer 319.
328	8	4	Wall	N-S wall, internal division of coach-house 318.
329	8	4	Wall	N-S internal division of stable shed 330.
330	8	4	Building	Site of former lean-to stable? shed at N side of yard 332, described by RCAHMW as a 'cowshed'.
331	8	4	Wall	Forming N side of yard 332 and of building 330.
332	8	4	Yard	Cobbled courtyard at NE of stable complex.
333	8	2	Ditch segment	Drain or boundary ditch
334	8	4	Layer ditch-fill	Upper backfill of ditch 333
335	8	4	Wall footings	Footings of 18th C coach-house
336	8	4	Wall	N-S wall at W side of 301. Internal partition of lean-to shed 330
401	7	2	Ditch	Ditch continuation of ditch 24, seen in cross sectio during machining of foundation trenches
402	7	7	Layer	Unstratified finds recovered from spoil during machining of foundation trenches in area of Trench
403	8	5	Structure	Structure observed during watching brief. Brick-built tank or chamber. Probably a drainage feature connected to a drain from the stable yard. Backfill (404) around the structure included many fragments of 19th C tableware and kitchenware, suggesting they derived from the change of use from palace to council offices
404	8	5	Layer	Backfill dating from construction of 403.

APPENDIX 5

BISHOP'S PALACE, BANGOR, 2003, G1785

CATALOGUE OF EXCAVATED ARTEFACTS

Context	***Description***
05	Roofing slate frag. Sheep bone. Mortar frag.
06	Oyster. Cockle. Mortar frag.
10	Cream-ware. Bottle glass. Animal bone. Slate object frag. Brick frag.
17	Roofing slate medieval? Iron nail. Oyster. Cockle. Winkle. Plaster/render frag.
18	Cow bone. Sheep bone.
06	Soil sample. For shells.
19	Soil sample. For charcoal.

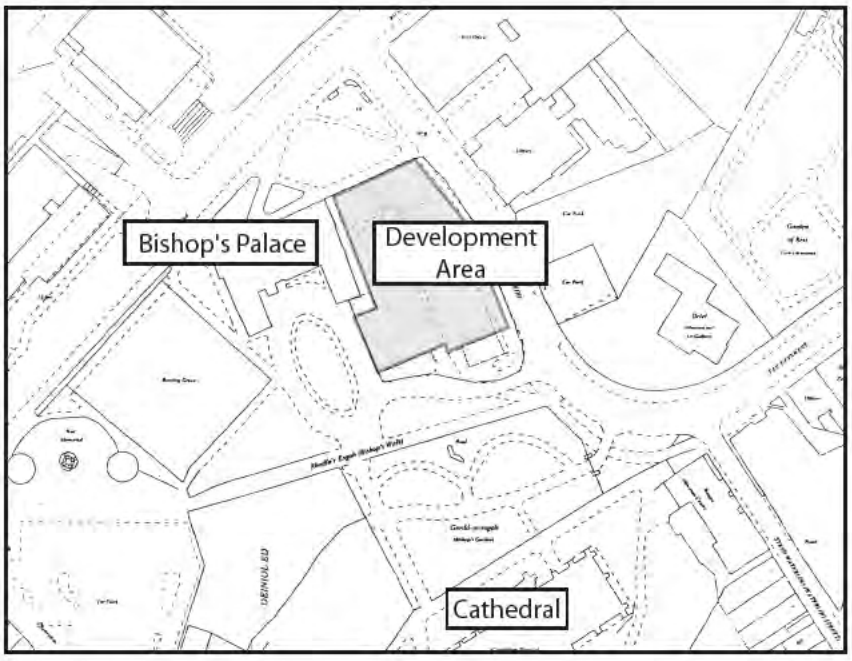

Fig. 1 Bishop's Palace, Bangor: Location of the development area

Fig. 2 Bishop's Palace, Bangor: Excavation areas in relation to the proposed buildings and former palace outbuildings. Scale 1:400, approx.

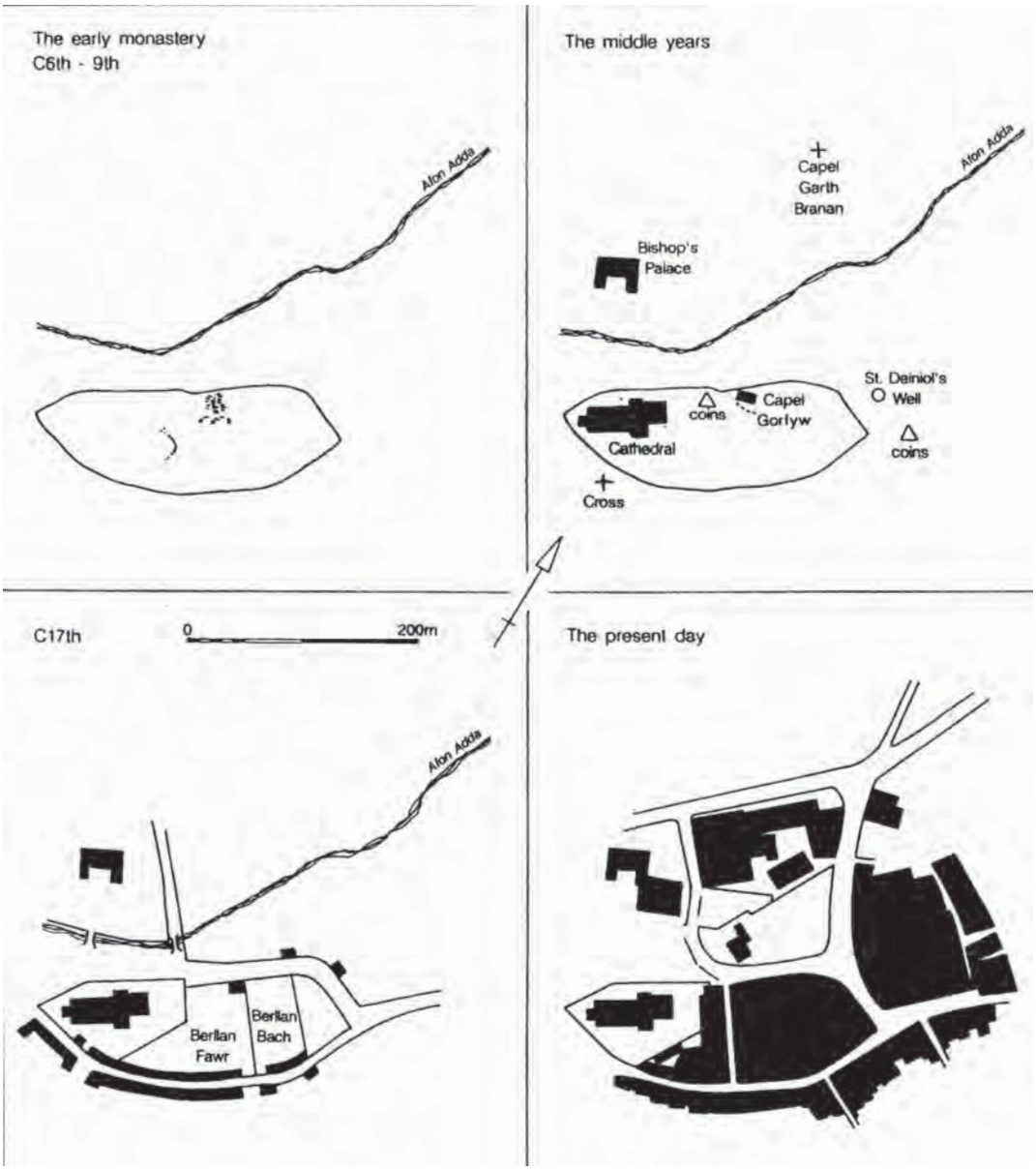

Fig. 3 Bishop's Palace, Bangor: Plan showing the historical development of Bangor (Longley 1994)

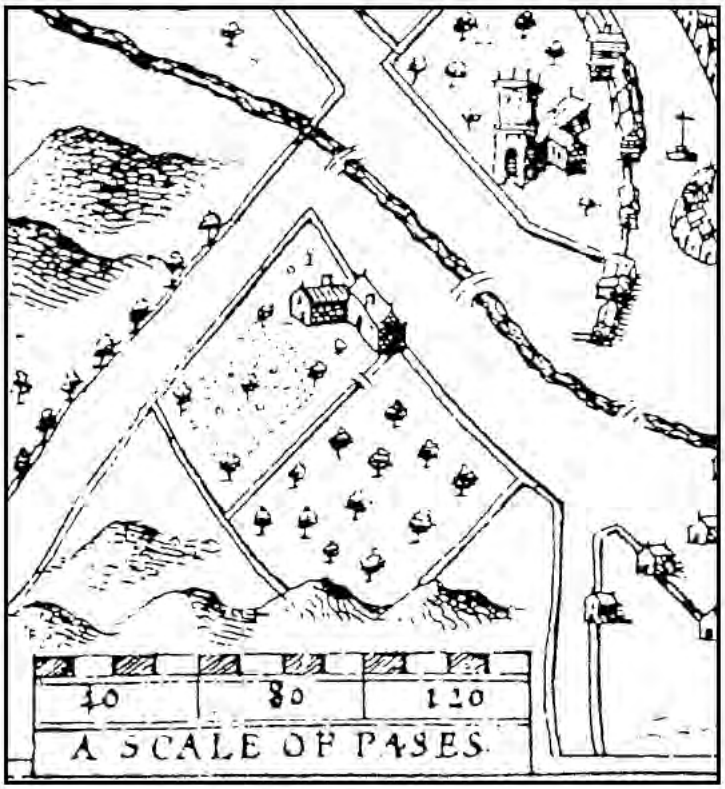

Fig. 4 Bishop's Palace, Bangor: The palace on Speed's map of Bangor, 1610, showing the formal gardens and the bridges over the Afon Adda

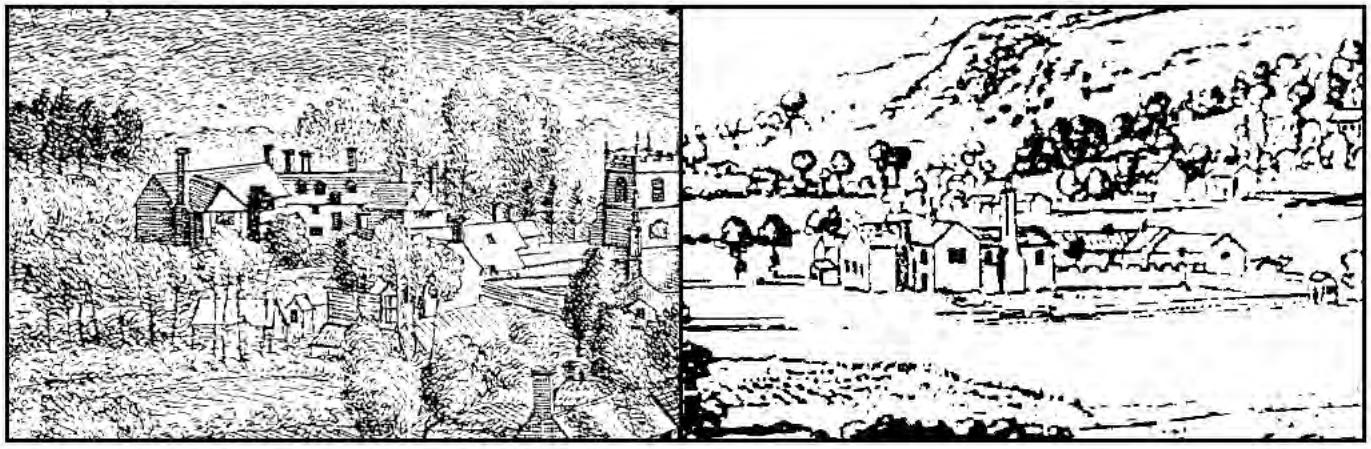

Fig. 5 Bishop's Palace, Bangor: View from the south-west by J. Lewis 1740, showing the outbuildings.

Fig. 6 Bishop's Palace, Bangor: View from the north-west by P. Sandby 1776, showing the outbuildings and enclosing wall.

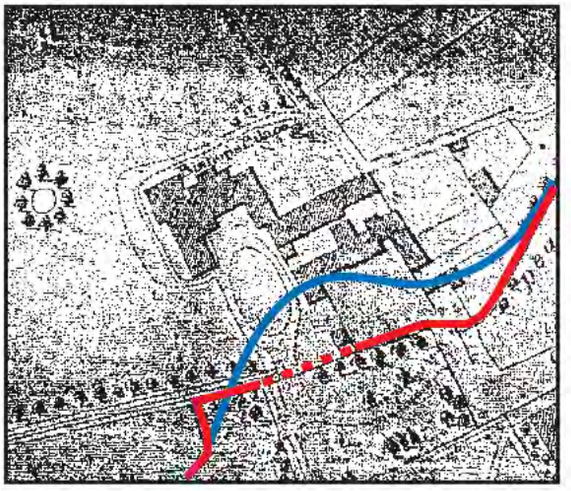

Fig. 7 Bishop's Palace, Bangor, 1834, J. Wood

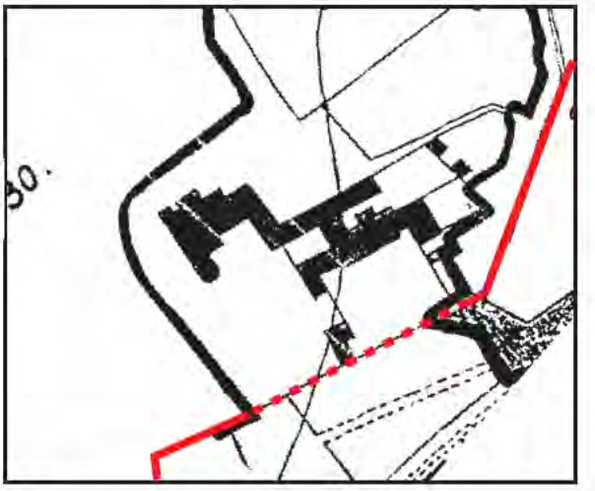

Fig. 8 Bishop's Palace, Bangor, Tithe Map, 1841

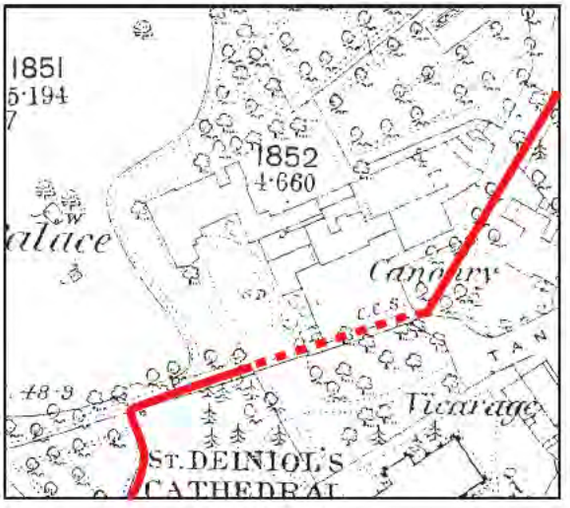

Fig. 9 Bishop's Palace, Bangor,
Ordnance Survey 1:2500, 1890

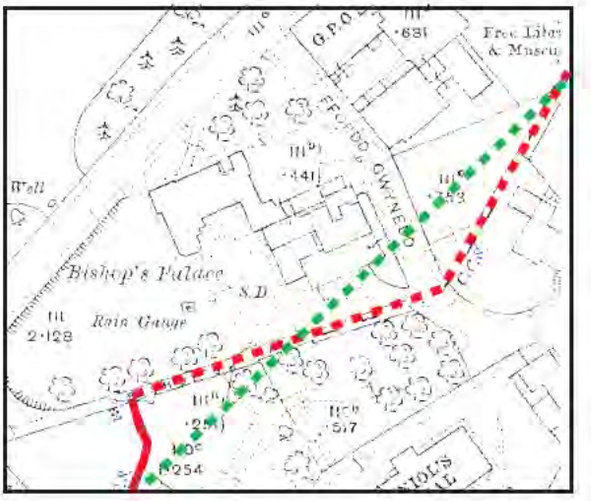

Fig. 10 Bishop's Palace, Bangor,
Ordnance Survey 1:2500, 1914

Figs 7-10 Bishop's Palace, Bangor: Historical development of the buildings as shown on maps, with the line of the Afon Adda shown in red solid line - open channel , red broken line - probable culvert, blue solid line - suggested natural course of the river prior to 18th century canalisation, green broken line - culvert extended and realigned 1936.

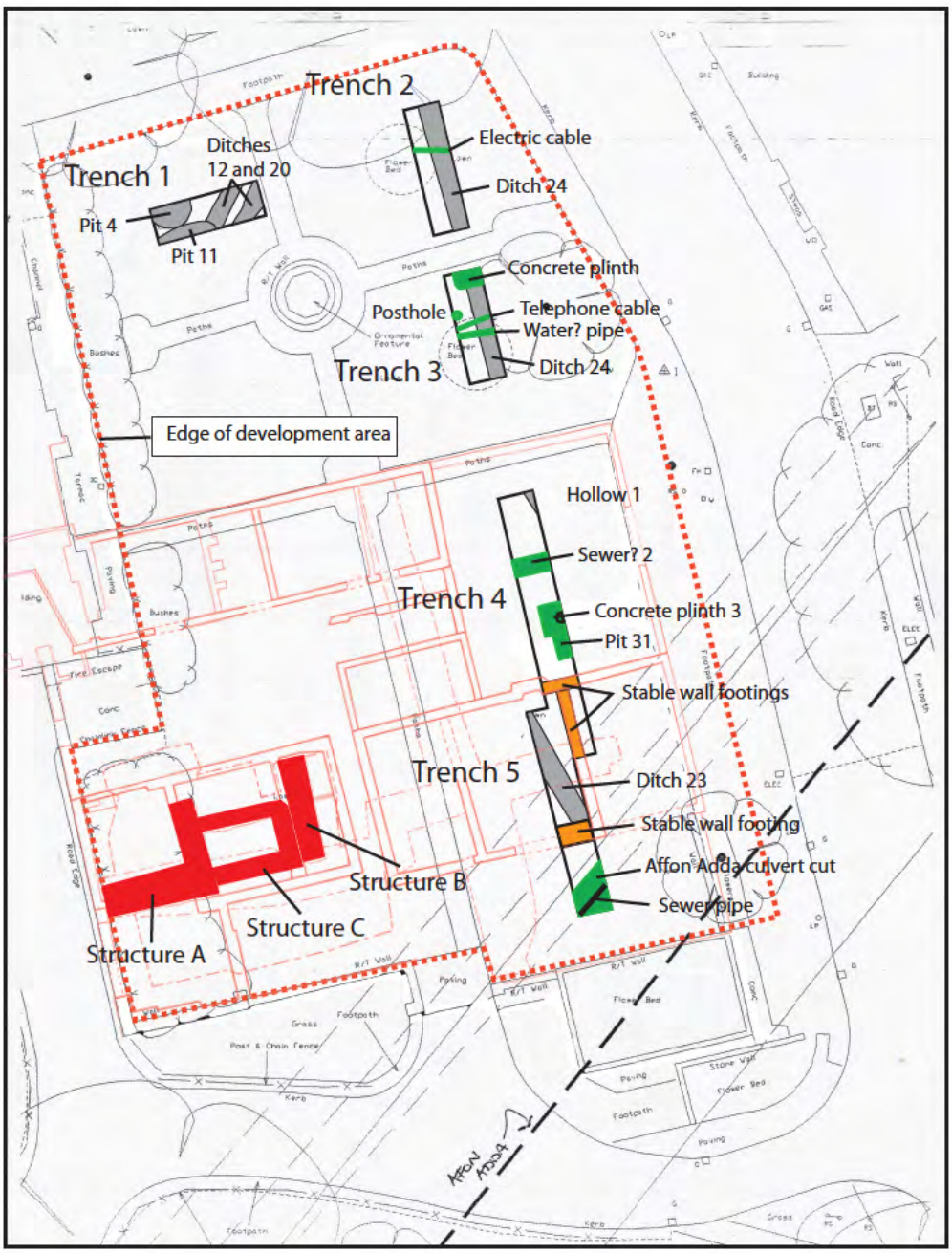

Fig. 11 Bishop's Palace, Bangor : Location of evaluation trenches and main features in relation to the former palace outbuildings and the structures excavated in 1996.
Scale 1:400 approx.

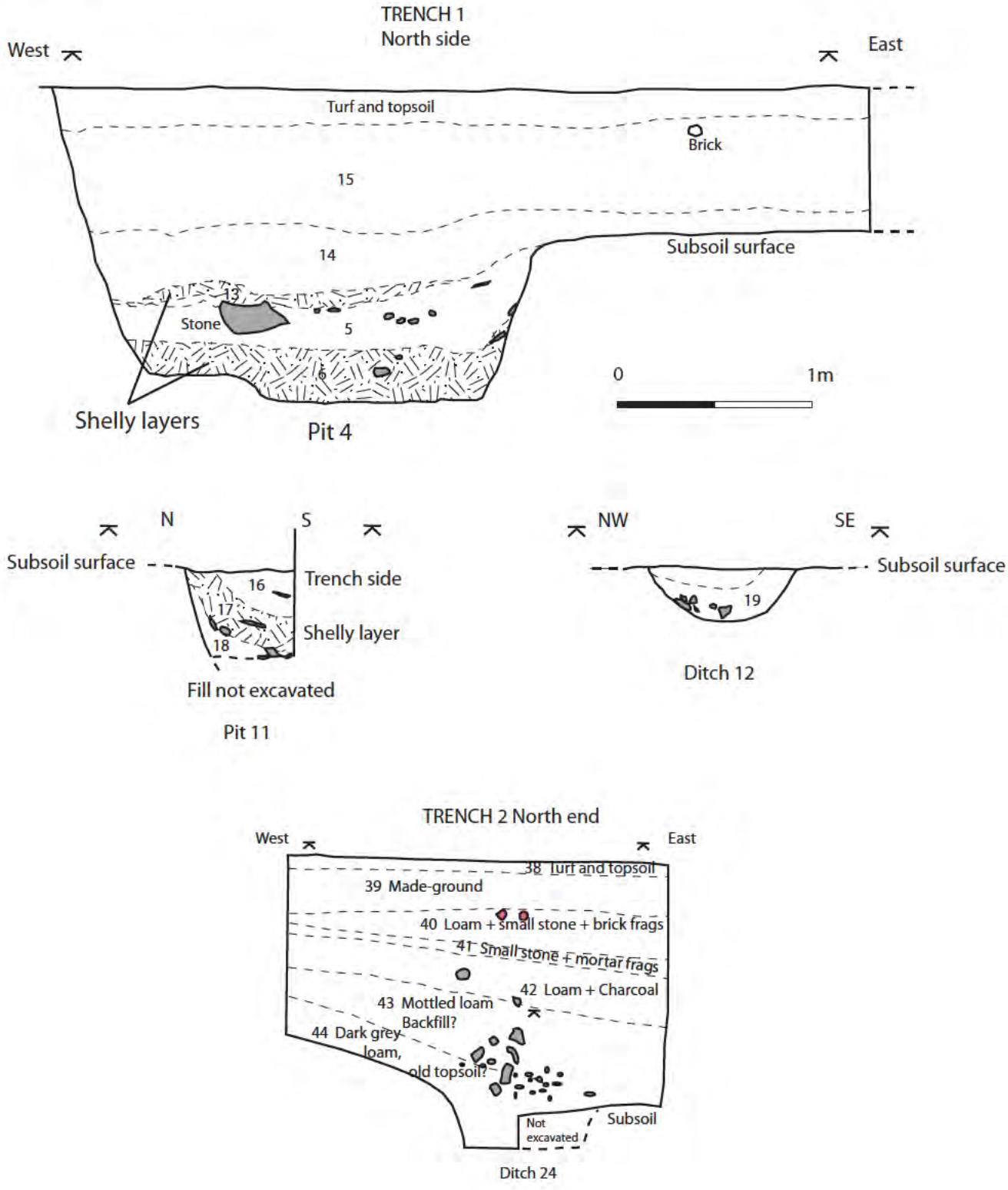

Fig. 12 Bishop's Palace, Bangor : Pit and ditch sections

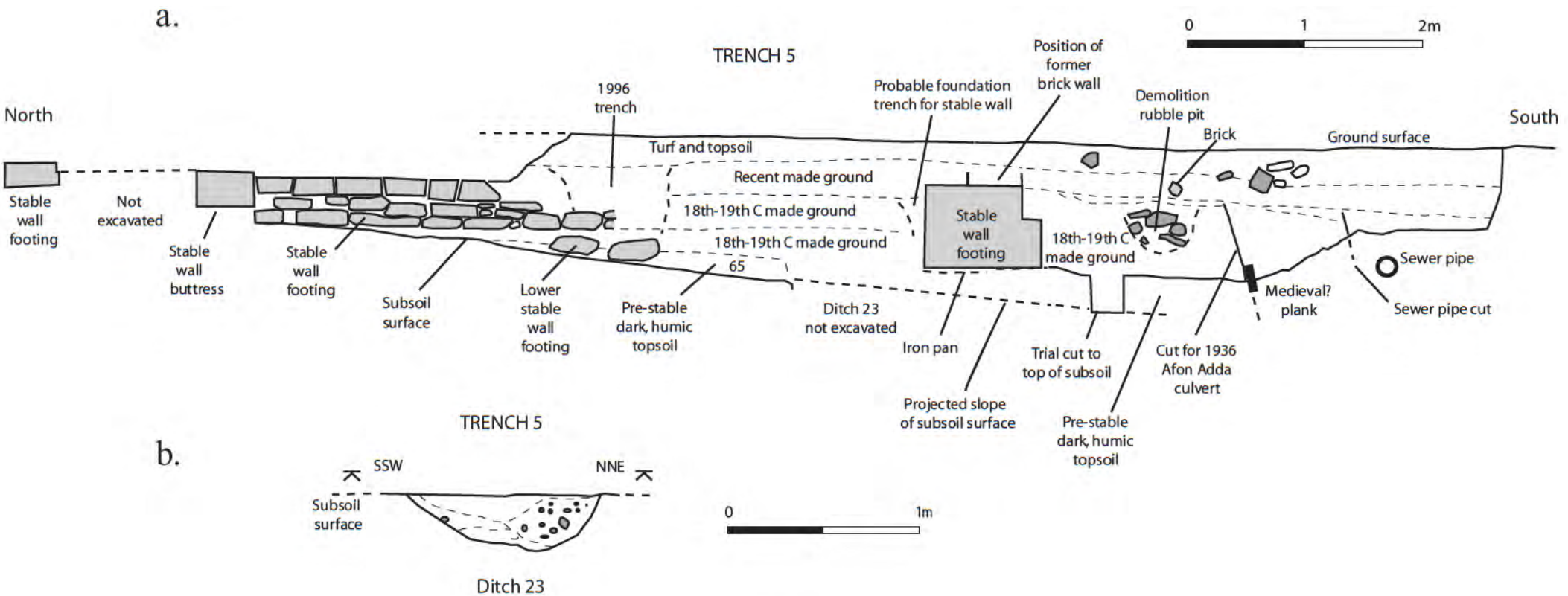

Fig. 13 Bishop's Palace, Bangor :
a. Trench 5 section at east side showing the relation of the footings of the stable buildings to the previous sloping river bank.
b. Cross section of Ditch 23.

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