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ABERLADY ANGLES

Exploring Aberlady's Anglo-Saxon Past

Excavations at the Glebe Field, Aberlady

FINAL REPORT, JUNE 2017

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East Lothian Council

EXCAVATIONS AT GLEBE FIELD, ABERLADY

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ABSTRACT

In April 2016 AOC Archaeology Group, on behalf of and in partnership with, the Aberlady Conservation and History Society (ACHS) undertook an evaluation in the Glebe Field, Aberlady, East Lothian. The evaluation was targeted towards geophysical anomalies argued to be two timber buildings of possible Anglo-Saxon date. The work uncovered structural remains, but largely of stone, including cellular buildings and a possible, but still yet undefined, large wall, probably part of a larger structure identified in the earlier geophysical surveys. Underneath these stone features were a series of negative features, possibly structural remains of earlier timber buildings of mid 7th to late 9th centuries AD. The recovered artefacts are indicative of activity from the mid first millennium AD into the post-medieval period. More specifically, bone combs and an Anglo-Saxon coin show activity during the 5/6th to 9th centuries AD. Although only a small area was evaluated the work suggests that there is a complex of timber and stone structures within the Glebe Field that date from the mid to late first millennium AD.

INTRODUCTION

GEOGRAPHICAL SETTING

The site of Aberlady is located in the county of East Lothian in south-east Scotland (fig 1). The site 'Glebe Field' (also known as the Scheduled Monument of Kilspindie Castle, Castle and Settlement (Scheduled 1994, Index No.5997)) lies to the north of modern day Aberlady, between the main body of the village and the Firth of Forth (fig 2). Glebe Field is low lying and generally flat, with a shallow rise from south to north to the visible remains of Kilspindie Castle, after which it slopes down to the bay. From the bay, the Firth is accessible, to the west Edinburgh and the east, the North Sea littoral. The drift geology is sand with a high density of sea shell fragments.

ARCHAEOLOGICAL DISCOVERIES WITHIN AND AROUND THE GLEBE FIELD

Aberlady clearly has prehistoric origins, as shown by the recovery of, for example, cists and food vessels. Aberlady's history also extends back to a time before Scotland, to the days of Roman occupation and native Gododdin Britons. Recent work has confirmed evidence of iron-age fort earthworks and a putative souterrain, the first discovered in East Lothian.

Aberlady is, however, best known for its Early Historic connections, particularly within the context of the arrival of Christianity and the Anglian occupation and settlement of the Lothians . The Anglo-Saxon period is roughly defined by two documented historical events; it begins with the siege of Edinburgh by Oswald, king of Northumbria in AD 638 and ends in AD 973 when Edgar of Wessex ceded Lothian to the Scottish king, Kenneth II. Certainly, by the time of the siege of Edinburgh in AD 638 we can assume that at least those parts of Lothian to the south and east of Edinburgh (including Aberlady) had been effectively annexed by the Angles. The presence of early English placenames in East Lothian, such as the *–ingaham* element in Whittinghame, Tyninghame and Coldingham, as well the *–ham* element in Auldhame supports this claim (see Crone & Hindmarch 2016, 129 -133 for an excellent summary).

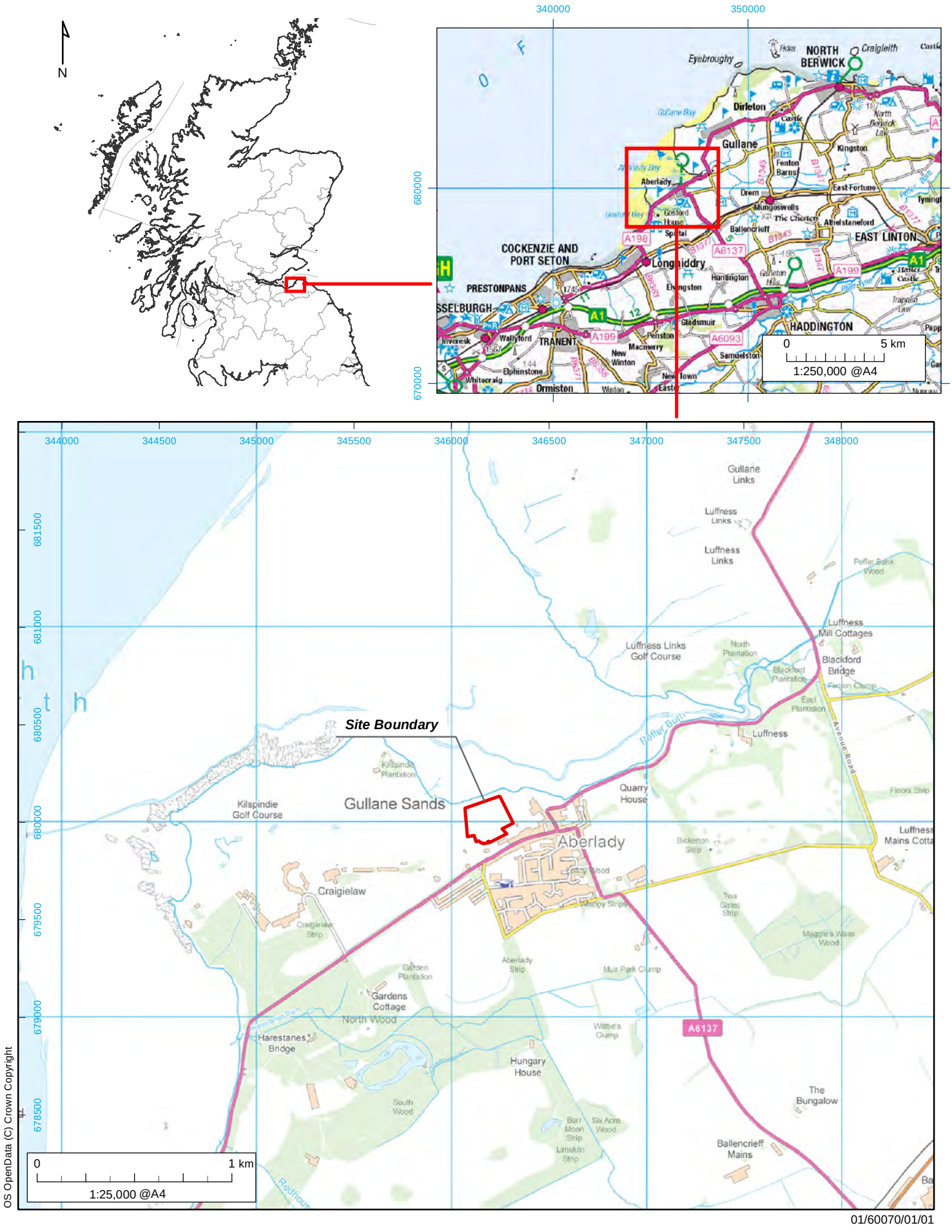

Figure 1: Site location

Prior to the 2016 work the evidence for Early Historic activity in Aberlady comes not in the form of buildings, settlements, churches or burials, it comes in the form of objects.

Figure 2: General location of Glebe Field

In 1867 a beautifully carved 8th century Northumbrian cross (fig 3) was discovered in the Manse garden. The intricate carving on the cross fragment bears strong Celtic and Northumbrian influences; the carving is described by the British Library as the closest sculptural representation that exists of the intricate artwork within the celebrated Lindisfarne Gospels. Indeed, Aberlady is often referred to as a daughter-house of Lindisfarne and place name research suggests that Aberlady may have been an Early Christian centre on a main route used by monks travelling between the monastic powerhouse of Iona and the new foundation at Lindisfarne. Until the Reformation, Aberlady was a detached parish of Dunkeld, where a new monastic community was established by the early Celtic church, and to where Columba's relics were moved, in the face of continued Viking raids on Iona (see also Weatherhead 1993).

In addition to the Northumbrian cross fragment Aberlady also hosts the largest concentration of stray Anglo-Saxon metal finds discovered in Scotland. Finds from the vicinity include an Anglo-Saxon lobed copper alloy sword pommel of late 9th to early 10th century AD and an insular enamelled disc mount of 8th to 9th century AD (recovered by metal detecting at Luffness (Hunter 2002, 34); two strap-ends, and a zoomorphic buckle (Shiels 2001, 30).

Figure 3: Section of Anglo-Saxon stone sculptured cross shaft from Aberlady

One area within modern day Aberlady of particular note for the recovery of Anglo-Saxon objects is Kilspindie (or Glebe Field), the location of the current project (see below). The name – Kilspindie – offers another significant pointer to an ecclesiastical presence from at least the 8th Century (the Gaelic term 'Cille' means, cell, church or chapel). A chapel dedicated to the Blessed Virgin Mary lay within the north-west corner of the old kirkyard. Although there are now no surface remains, possible foundations have been encountered from time to time during grave digging. Professor Michelle Brown, long-serving curator of the Lindisfarne Gospels, opined that the resemblance of the site to the sacred earthworks at Lindisfarne must be more than co-incidental. The name Kilspindie at Aberlady may derive from landholdings of the Douglases in Perthshire and the Bishopric of Dunkeld.

The only visible remains within the Glebe Field are of Kilspindie Castle. Ordnance Survey (OS) maps (fig 4) provides no evidence for buildings in the Glebe Field from 1853 until the present day, other than Kilspindie Castle (remains). Nearby buildings include the Church and the Manse. The presence of a Manse is shown in both the 1853 and 1892 OS Maps, but at slightly different positions, following the demolition of the original building and the construction of the new manse in 1863.

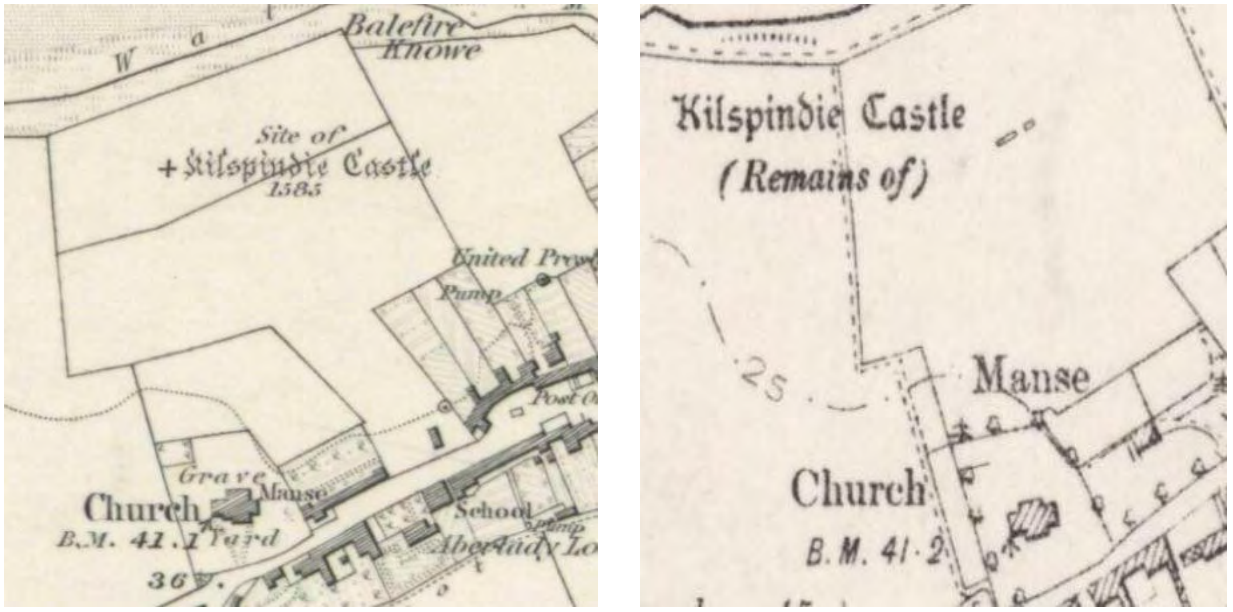

Figure 4: Ordnance Survey Maps showing the Glebe Field.
The one on the left is 1853; the one on the right is 1878.

The 1853 map shows that a boundary wall ran across the southern half of the Glebe Field, springing from the western boundary into the middle of the field where it turned south to join the Manse boundary wall. This had disappeared by 1878.

Metal-detecting surveys undertaken by Roger McWee during the 1990s recovered a remarkable collection of metallic objects from the field. During his fieldwork, McWee discovered many finds that date to the post 10th century. He also discovered a Roman period brooch and a stunning collection of Anglo-Saxon material.

The Anglo-Saxon material has been well-discussed by Blackwell (2004). Finds included an 8th century bronze gilt openwork mount (fig 5), pins of various sizes and Anglo-Saxon types, such as a copper-alloy pin with globular head and ring-and-dot decoration (Hunter 2001; 30), a fragment of decorated metalwork, possibly from a copper alloy brooch, and two Northumbrian styca coins – a coin for King Eanred (*c.*810–830), and another for Aethelred II (*c.*841–844) (Perry 2000: 168).

Ecclesiastical activity beyond the 8th century (and into the 10th) with the Glebe Field is suggested by the recovery of a copper alloy mount, probably from a monk's crosier.

In discussing the finds from Glebe Field Alice Blackwell (see Blackwell 2004 for thorough review) stated:

> '...the metallic finds represent the largest single concentration of Anglo-Saxon stray finds found in Scotland. They indicate activity in the vicinity of the Glebe Field probably during the 8th and 9th centuries'.

Figure 5: Bronze gilt openwork mount found at the Glebe, Aberlady East Lothian 8th century

It is perhaps of interest to note that no Anglo-Saxon finds were found in either the adjoining Kirk Field or Butcher's Field (R. McWee, pers comm Feb 2016). The site was scheduled in 1994 following the discovery of the metal finds.

FIELDWORK 1995 TO 2008

Spurred on by the recovery of these remarkable finds, a range of non-intrusive archaeological work and historical research was conducted in and around the Glebe Fields between 1995 and 2008.

Geophysical surveys undertaken in the 1990s (Neighbour *et al*. 1995; Tulloch and Davies 1998) suggested a number of possible archaeological remains, particularly structures. Some linear features may be prehistoric; perhaps Iron Age ring-houses (Tulloch and Davies 1998, 3, 8; this assertion may be supported by the recovery of a Roman brooch from the Glebe Field) but others seem to indicate Early Historic activity. These include two putative timber buildings / halls and a number of ditch defined enclosures and what appears to be a pear-shaped enclosure with double palisade (Tulloch and Davies 1998, 32). During the 1998 work Neighbour, Tulloch and Davis (1998, 8, Fig 2 E) stated:

> 'Three low resistance anomalies (E, F & G) are the most interesting of the anomalies detected. The Southernmost feature (E) measures approximately 40 metres by 20 metres and may represent the remains of two Anglian, or perhaps earlier, timber halls, one overlying the other at right angles..the westernmost anomaly (G) appears to be a series of ditch defined enclosures. The shape of these is consistent with the outlines of Anglian recorded by the late Ian Smith at Sprouston (1991). Roger McWee (pers.comm) has indicated that it was in this vicinity of these features that he recovered the Anglian coins and the Roman brooch'.

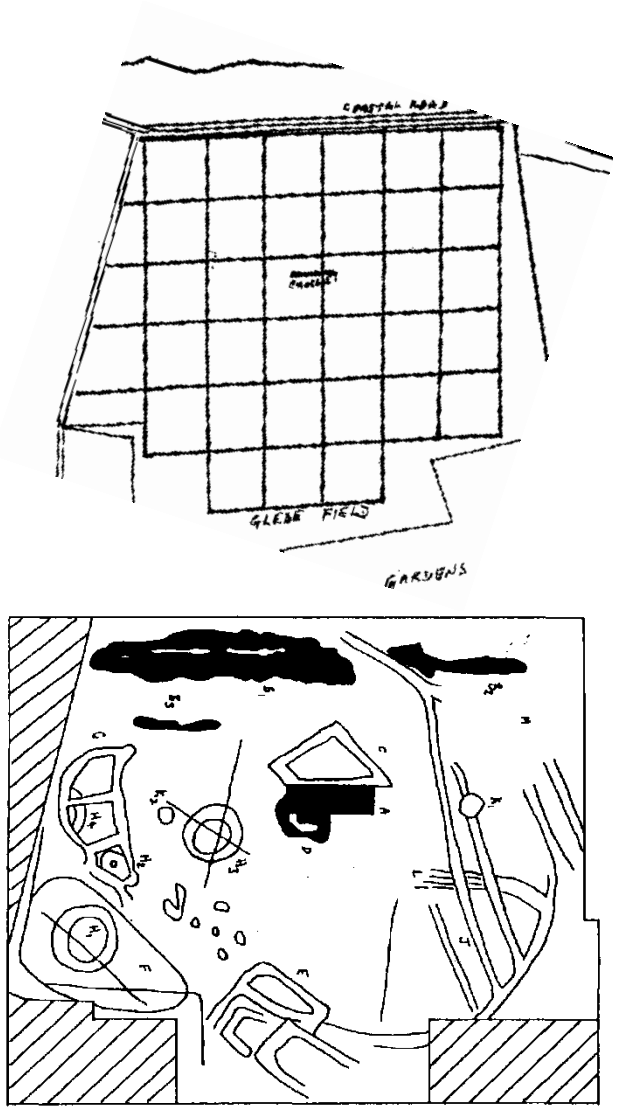

Figure 6: The geophysics results from the 1995 and 1998 survey

These geophysical surveys suggest that the field was a place of importance during the first millennium AD, possibly the Anglian period.

In 2008 further geophysical surveys were undertaken by Alice Blackwell (2008) on behalf of the Aberlady Conservation and History Society. These too revealed anomalies suggestive of structures that looked rectilinear in nature. Two main groups of anomalies stood out in the 2008 resistivity results, identified again as two possible trench-built structures (fig 7). The southern-most group of anomalies consist of strong low-resistance linear features, 25m and 15m in length, which appear to join and form a sharply defined right-angle (Blackwell 2008, 14, fig 14, A). Running parallel to the longer linear feature (A), 20m distant, is a second linear anomaly of similar magnitude (fig 14, B). Another feature (C) may also be related to A and B.

The second group of anomalies are located adjacent to B and C, identified by another low resistance anomaly (E). Possibly associated with E is a long curving low-resistance anomaly (G).

However, in discussing the findings (Blackwell 2008, 5, 22), Blackwell identified some issues with the results, in relation to their interpretation as Anglo-Saxon. Indeed, she was more equivocal in her conclusions, suggesting that the structures may not be Anglian in date.

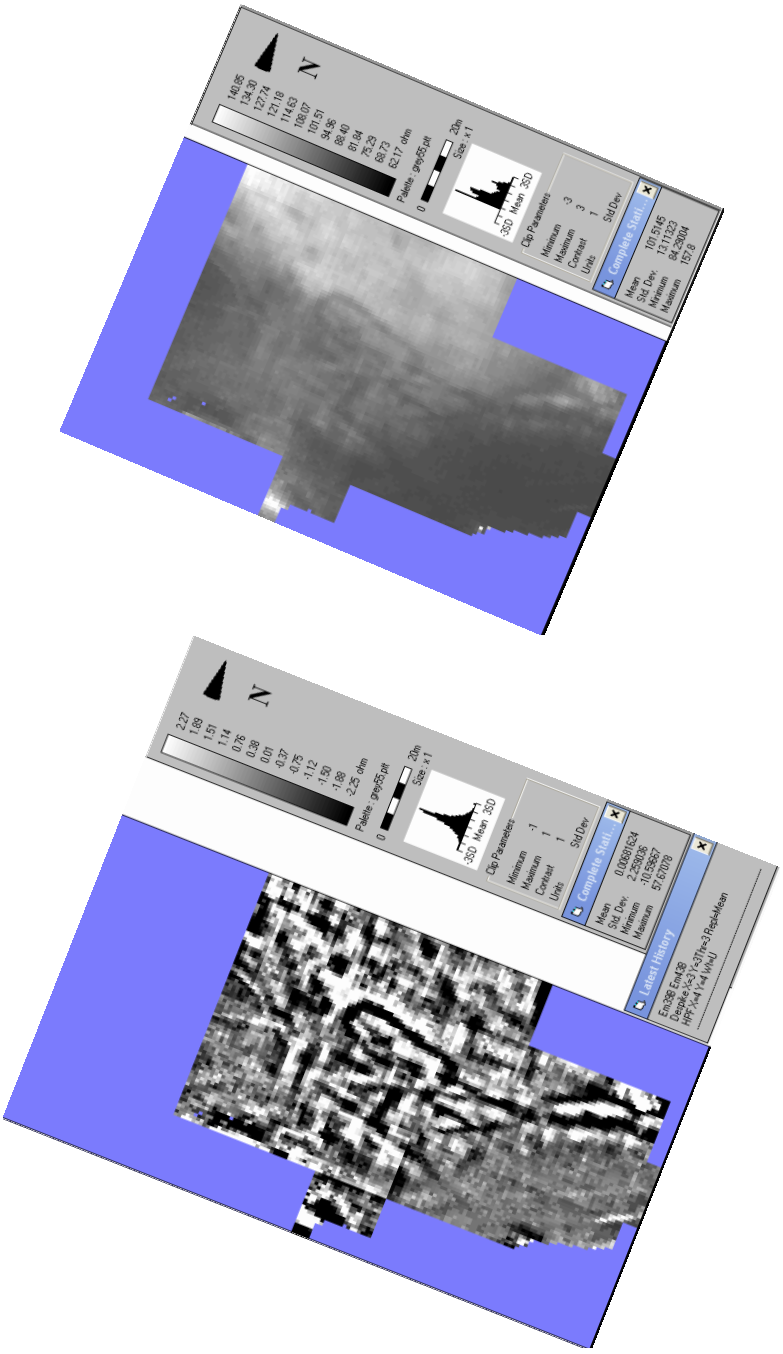

Figure 7: The geophysics results from the 2008 survey

First, while one series of anomalies (A, B & C) looks morphologically like trench-built timber structures characteristic of the Anglo-Saxon period, it would be uniquely large compared to other known examples. Indeed, the site may relate to a different, perhaps prehistoric date (Blackwell 2008, 19). Second, the interpretation of the characteristic feature of these structures – the additional annexe at one end of the main hall – is rendered somewhat ambiguous because of interference from crossing features (which may be modern drains). Third, the second series of anomalies (E & G) believed to be another trench-built timber hall has rounded rather than sharp corners; again these features may indicate prehistoric rather than Early Historic structures (Blackwell 2008, 19-20). Finally, the ditched enclosure – similar to that identified at the Anglo-Saxon site at Sprouston (Smith 1991)– may also be prehistoric in date. Blackwell (2008, 22) concludes that:

> ‘Two areas were re-surveyed in the scheduled Glebe Field in order to target features identified in the surveys undertaken in 1995 and 1998. The 2008 survey has cast some doubt over the identification of two-hall structures suggested to be Anglo-Saxon in date... While one series of anomalies looks morphologically like trench-built timber structures characteristic of the Anglo-Saxon period, it would be uniquely large compared with other known examples...The second series of anomalies appear to relate to a second trench-built timber hall, but in terms of its proportions and morphology, it resembles prehistoric examples more than early historic structures. Excavation of these two adjacent possible structures would be desirable but as the field is scheduled this seems unlikely’.

This was a prudent warning. Timber buildings, prior and subsequent to Blackwell’s commentary, have been recovered from parts of Scotland and dated to the Neolithic. Many rectangular buildings, of course, date to the later medieval and post-medieval periods and the modern era. Given the location of Kilspindie Castle in the Glebe Field it is likely that contemporary buildings or associated features may be uncovered within the area.

That said, few would disagree with a sober analysis of the evidence of Anglian activity in the area. The Anglian cross was discovered in the Manse garden wall just to the south of Glebe Field. The Anglo-Saxon finds from the Glebe Field suggest some activity (if only deposition) during the period. Indeed, Neighbour *et al* (1995, 4) suggested that the ‘…quantity and range of finds suggest that there is settlement in this [Glebe] field from at least the Anglian period to the 17th century’. Four years prior to her geophysical survey on the site Blackwell (2004) stated that,

> ‘The metallic finds represent the largest single concentration of Anglo-Saxon stray finds found in Scotland. They indicate activity in the vicinity of Glebe Field probably during the 8th and 9th centuries, and seemingly beyond, but they are not a great deal of help identifying what that activity was. Clearly, there is an ecclesiastical element in Aberlady given the sculptured 8thC Christian cross fragment and other Christian finds, but whether these metallic finds relate to that, or whether there is other activity too, is not clear at the present time’.

Because of the ambiguities in the survey results, all previous surveyors concluded that further work was necessary on the site to ascertain what the anomalies were.

Prior to the 2016 excavations only very small-scale work has taken place in the Glebe Field and not in the area of the putative timber structure anomalies. In 2000 AOC Archaeology Group carried out a small-scale watching brief associated with the laying of a field drain (as shown by the red line on fig 8 below). Several archaeological features were noted including a mortared wall, a cobbled surface, animal bones and a semi-circular arrangement of stones (see Knowles Jackson 2000).

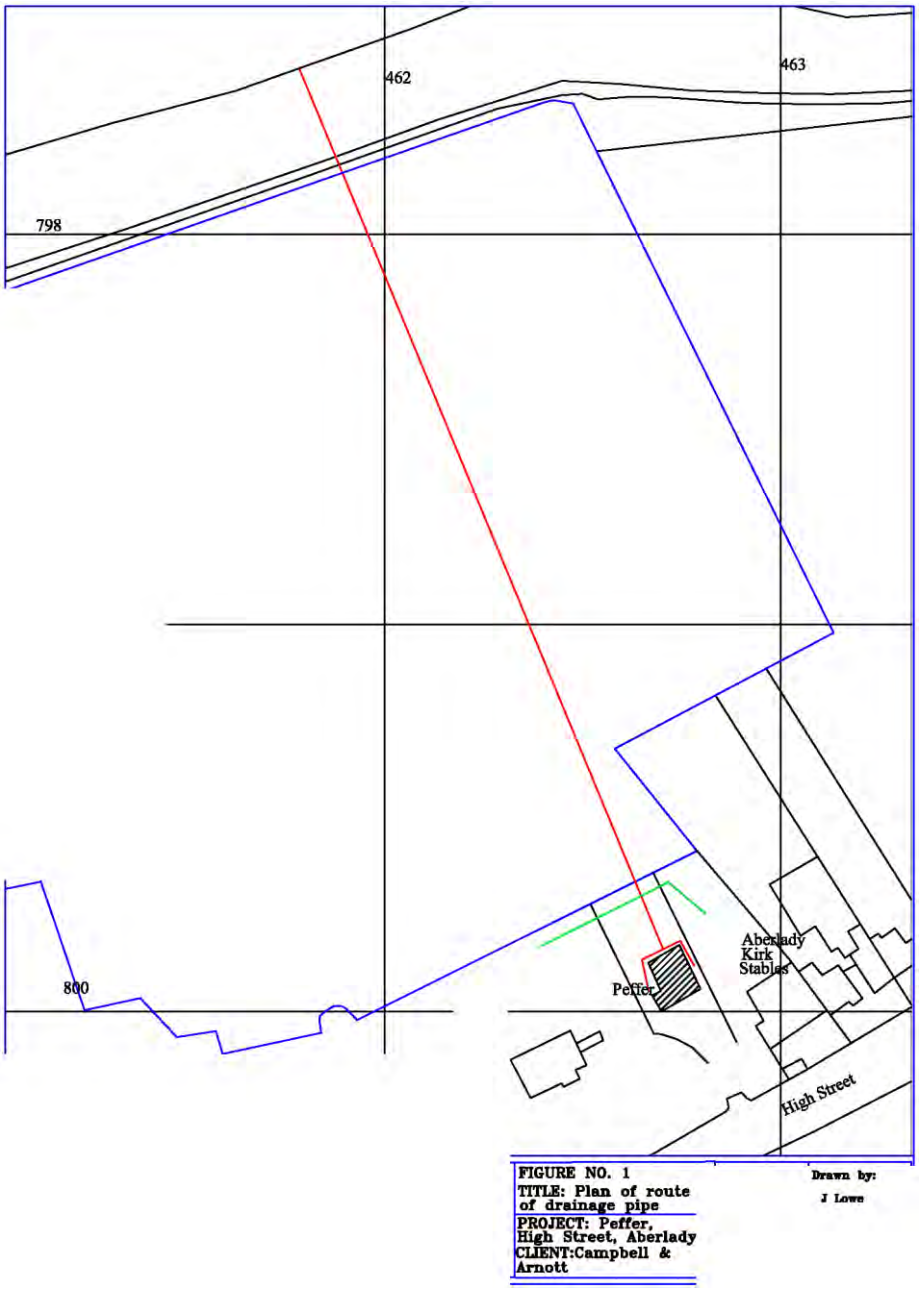

Figure 8: The excavations in 2000 in Glebe Field, the red line is the pipe line

The wall lay approximately 90m from the road and continued to run along the west side of the trench for 10m before it started to curve towards the east side of the trench. There was evidence of mortar on some of the stones; the wall was approximately 0.5m wide and still existed to a depth of 0.7m. The wall appeared to consist of a 0.3m deep base of small stones/rubble and was topped by the larger stones, to the depth of only one stone surviving. No finds were associated with this feature.

Approximately 139m from the road a cobbled surface, possibly a path, was located. A two metre length of this was exposed and cleaned by hand. The cobbled surface appeared to be approximately 0.7m wide, but their direction was unclear. The main body of the cobbles appeared to cross the trench from north to west. Larger stones were noted above the level of the cobbles at both edges of the trench. The relationship of these to the cobbles is not known. The cobbles themselves were up to 280 x 200 x 100mm and irregular shapes, although mostly flat. There were

many smaller stones, up to 100 x 90 x 70mm. Again, there were no finds associated with this feature.

Approximately 3m to the south of the cobbles, some disarticulated animal bones were noted in the west section of the trench, including a spine and ribs, probably from a cow

Finally, a cluster of stones, which appeared to have a semi-circular arrangement going into the western side of the trench, was noted approximately 150m from the road. Due to the small area exposed (about 1m x 0.6m) the nature of this feature is inconclusive. There were some animal bones found in this general area, but their relationship, if any, to the stones is unknown.

Although there were tantalizing suggestions of cobbled surfaces and mortared walls, no further excavations took place in the field until the 2016 excavations. The sculpture and metal finds suggest that the area was an important location during the Early Medieval period in northern Britain. Aberlady Conservation and History Society (ACHS) chose to focus on Glebe Field because of: the collection of Anglo-Saxon finds and possible structures and buildings that could be Anglo-Saxon in date. In particular, ACHS wished to undertake a targeted evaluation on the rectangular buildings previously identified during the geophysical survey work.

THE EXCAVATED FEATURES

AIMS AND OBJECTIVES

The 2016 work in Glebe Field was consistent with current research agendas, particularly the *Scottish Archaeological Research Framework*. The project represented an exciting opportunity to provide new research information on a number of areas pertinent to the Scottish Early Historic and Medieval period. More specifically the project had the capacity to inform some key issues raised by the recent Scottish Archaeological Research Framework (ScARF). The overall aims and objectives of the 2016 evaluation work were to:

- Establish the presence (or otherwise) of preservation of the rectangular buried features, (interpreted from previous geophysical survey images) in the Glebe Field;
- Establish the nature, date, purpose and state of preservation of said buried features;
- Consider whether the large rectangular building(s) are of grandiose appearance and dimensions?
- Ascertain their structure material – wood, stone or mortar?
- Establish the extent of the archaeological deposits within the Glebe Field rectangular structures;
- Establish the relationship between the different rectangular structures interpreted from the geophysical surveys;
- Excavate a sufficient area of the site to establish the extent and character of the archaeological remains present in order to identify individual structures, internal features and deposits;
- Recover environmental samples and artefacts which will assist interpretation and chronology of the past activities within the site and the function of the structures;
- Obtain secure dating material / artefactual evidence from the site to be used in chronological interpretation.

As noted, the working hypothesis is that the Glebe Field has evidence for Early Historic / Medieval settlement. Excavation at the Glebe Field could, therefore, provide a rare and much needed opportunity to investigate an Early Historic settlement and contribute to wider questions, such as:

- Is the Glebe Field a complex of Early Historic timber halls?
- Is the Glebe Field a high status settlement, the populous of which had a wide range of economic and social contacts?
- Did specialised craft production take place at Aberlady?
- Were other non-specialised domestic activities taking place within Aberlady?

Figure 9: The excavated area

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- What do the numerous Anglo-Saxon finds tell us about the area and its cultural links with its neighbours?
- Are the artefacts and features cultural indicators of incoming settlers or mere gifts to native Britons?
- What was everyday life like in the Glebe Field in the Early Historic period?
- What were the precursors for the Anglian activity? What happened after?

It was hoped that the small-scale evaluation would provide the answer to some of these questions. Irrespective, the fact that an evaluation of a possible Anglian settlement was taking place was in itself a step forward; that further excavation of possible Anglian sites in the Lothians is necessary is highlighted by Alcock (2003, 248). In discussing the existing evidence of Anglian halls in southern Scotland he concludes:

> 'The obvious conclusion from this brief survey… at least as far as the evidence of air photography takes us, is that we still have much to learn about the repertory of the king's architects in Early Historic Bernicia. Moreover, excavation of the crop-mark indications at both Milfield and Sprouston may confidently be expected to lead to further surprises, as well as some answers to existing problems'.

THE EVALUATION AREA

With the kind permission of the landowner, the tenant and Historic Environment Scotland (HES) a 10 day evaluation took place in May 2016. The original intention was to strip-and-map a large area approximately 50m x 50m but this was reduced; HES gave permission for a smaller evaluation trench of 25m by 10m (Trench 1) with an additional small trench (Trench 2) located 6m to the west. Discussions with HES and AOC Archaeology resulted in the decision for the rectangular trench to run north / south across the geophysical results (fig 9). This trench represented around 15% of the footprint of the two putative timber buildings identified in previous geophysics results. Thus, the community work was more of an evaluation than a strip-and-map exercise, geared more to establishing the presence (or otherwise) and preservation of buried features, establishing the nature, date and state of preservation of said buried features, ascertaining their structure material, establishing the extent of the archaeological deposits within that particular part of the Glebe Field, recovering environmental samples and artefacts which could assist interpretation and chronology of the past activities within the site and the function of the structures; and with obtaining secure dating material / artefactual evidence from the site to be used in chronological interpretation.

The Mortared Wall

As noted above the 1853 OS map shows a boundary wall that ran across the southern half of the Glebe Field, springing from the western boundary into the middle of the field where it turned south to join the Manse boundary wall. This wall had disappeared by 1878. This anomaly arguably was picked up in the geophysical surveys described above, as a thick dark line running across the two putative timber buildings.

This pre 1878 wall was the latest feature uncovered during the excavation and consisted of the foundation course of a south-west to north-east oriented wall [007]. It was up to 0.8m wide and survived to a height of up to 0.3m. The preservation levels varied, with the west end surviving as a thin band of sandy pale brown mortar with abundant crushed shell and small stones. To the east the remains of the wall were more extant and consisted of unshaped field stones set in a mixture of topsoil and lime mortar (fig 10).

The cartographic evidence indicates it predates 1878 while the construction technique, specifically the use of lime mortar, may suggest a post-medieval date. Indeed, the wall could be broadly contemporary with Kilspindie Castle which lies to the north. To the immediate south of the wall was a truncation cut [009, with fill 025] that is interpreted as a robber trench associated with the construction of the wall. This cut was 2.4m wide and had truncated several of the underlying archaeology features described below. Indeed, it is assumed that the stone forming the underlying

structures had been unconsciously discovered during the excavation for the foundation of wall [007] and robbed to be re-used in the resultant wall's construction. One strap handle sherd from a 13th to mid-13th century Yorkshire jug (probably a product of the Brandsby kiln) was found in the fill of the truncation cut [025], presumably redeposited from earlier, disturbed contexts.

Figure 10: The remains of the mortared wall running across the trench, and overlying earlier stone structures.

Topsoil and Plaggans

The topsoil [001] covering the entire evaluation trench was up to 0.4 m deep in places (fig 11). Immediately below the topsoil were a series of soils [002] and [008] that covered a series of stone structures and deposits below. Context [002] was in the northern section of the trench and covered [008], which was confined to the southern area of the trench, demarcated by the truncation trench [009] for wall [007].

Both [002] and [008] are assumed to be buried agricultural soils, possibly a plaggic anthrosol, a type of soil created in parts of north-west Europe in the medieval period as a result of so-called "plaggen" agriculture (J. Barber pers comm.). A sondage in the south-east corner of the trench uncovered a similar context [024] which is also assumed to be a buried agricultural soil.

The overwhelming majority of finds (over 95%) recovered during the 2016 evaluations were from these topsoil or buried agricultural soils (see *artefact* discussion below). However, this is to be expected given the limited excavation of the structures and deposits below. The pottery from these contexts range in date from the 19th century to the 12th/13th century AD, the majority dating to between the 19th and 14th centuries AD. Similarly, two coins were recovered including a 17th century William and Mary, copper bodle (1692) and a cut half of an English silver penny, short cross coinage, uncertain class (5 or 7), 1205 – c. 1242. A large amount of iron objects were recovered from these contexts (due to the use of a metal detector on site), although the overwhelming material was undiagnostic or nails. As discussed below much of the material uncovered is likely to date to anytime between the 13th and 19th centuries AD. Due to the agricultural activity that has taken place on the site, particularly and presumably during the later medieval period when

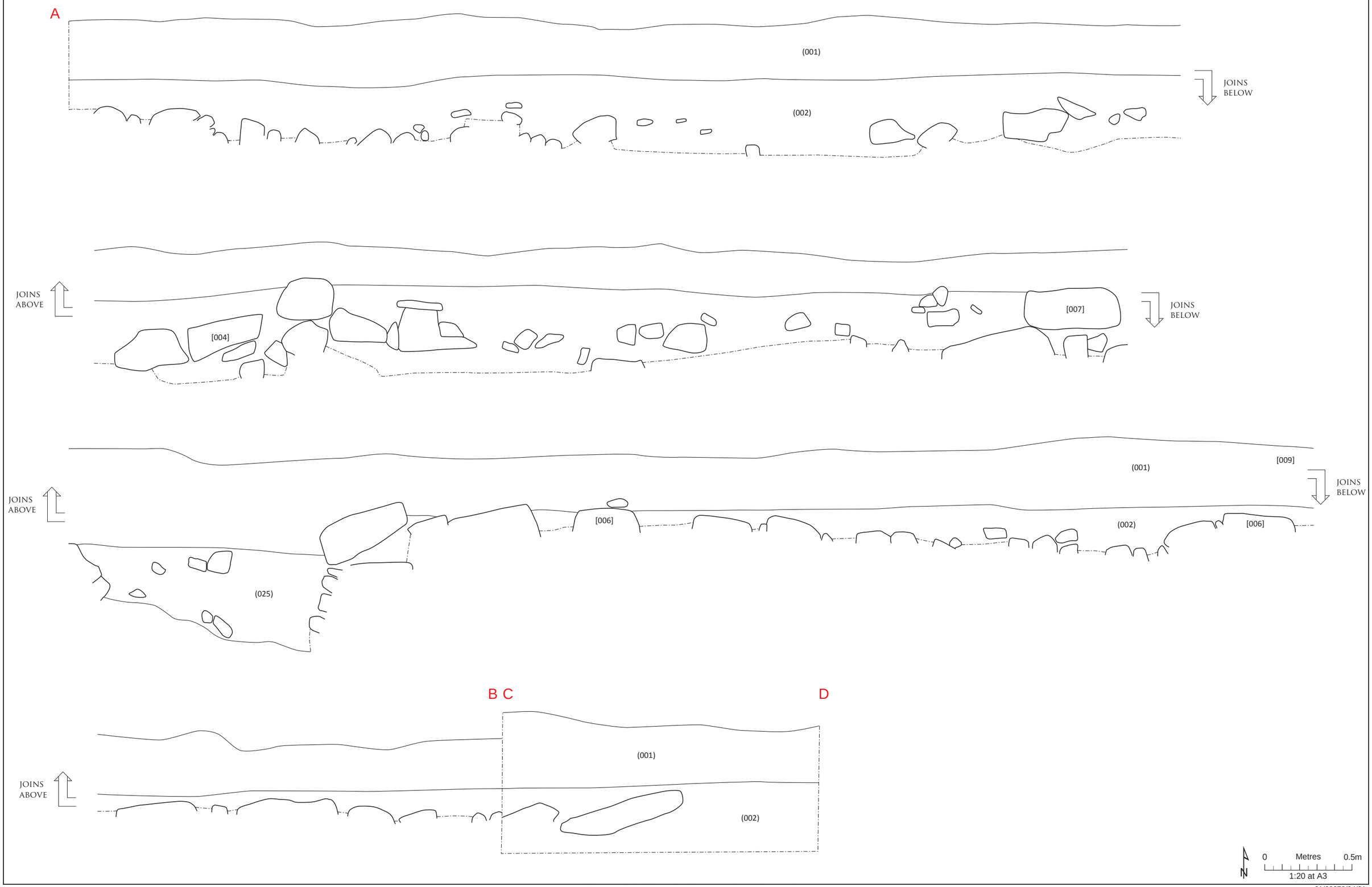


Figure 11: West facing section of trench

Kilspindie Castle was in use, then we can say little more than the material probably was deposited sometime during the second millennium AD and, possibly, up until recent times.

Immediately under the topsoil and buried agricultural soils were a series of stone features and spreads (fig 12). Within the stone spreads were a series of built structures (hereafter defined as Structures 1 to 4) that consisted of an arrangement of large flat stones (interpreted as being part of a large structure or possibly a path) with an associated paved area, and a complex of numerous small, denuded cellular buildings. These features were well-preserved given their location in a field that had been ploughed prior to becoming a Scheduled Monument. The historical use of this area as the Glebe for Aberlady Church is likely to account for the high level of preservation. It has been less intensively ploughed and it appears that this area has not been subject to heavy, deep-ploughing. Of course, the discovery of stone features below the agricultural soils was of surprise; prior to excavation it was assumed that the site would be more like a cropmark site with negative features (representing long-gone timber structures) cut into natural. But this proved not to be the case.

Structures 2, 3 and 4

To the west of the trench was a series of linear and curvilinear stone arrangements interpreted as the remains of a complex of small, cellular buildings with aisles defining routes of access to them. The form of these buildings was, in the main, relatively indistinct during the excavation though they coalesced into more obvious structures once the loose, disturbed stones had been removed. Two of the structures (2 and 3) in the complex were more coherent than the others with more clearly defined walls, entrances and possible internal features.

Structure 2

Structure 2 was located in the centre of the excavation area and is interpreted as being a small D-shaped building measuring 4.4m by 4.3m externally, 3.5m by 2.9m internally with an internal area of *c* 8.5m^2. The wall [052], constructed with unbonded sandstone, was between 0.5m to 0.7m wide, and survived to a height of up to 0.3m. At the west of the structure was an upright slab [055] which was assumed to be part of Structure 2. No distinct floor surface was present and it is likely that during its use the building had an earthen or wooden floor that is not discernible due to bioturbation. Structure 2 was the only cellular building within the excavation area that contained architectural details other than the outer wall. In the interior was a linear arrangement of large stones [053] that formed a sub-division within the building. It could also represent an alteration or repair to the outer wall of the building. A large rectangular slab [051] had been set level in the middle of the western wall of the building. This measured 0.67m by 0.87m and was up to 0.05m thick; it rested on a plinth of smaller stones and its placement suggests it formed the threshold of an entrance in to the building.

Curiously, this building had another possible entrance, though it is difficult to determine if they were contemporary and it is possible that the access to the building was altered at some point during its history of use. The other possible entrance was located in the building's southern half. Unlike the entrance with the threshold this consisted of a gap in the wall accessed through narrow paths or aisles that converged at the entrance. The southernmost of these was aligned north-south and formed by narrow linear arrangements of stones [047] and [048]. This aisled structure was much less substantial than the building walls and it is more likely the stones had been placed as markers to define a path to the entrance of Structure 2. This aisle was 2.3m long and narrower at the southern end where it was only 0.5m wide, it gradually widened to 0.9m where it converged with the other aisle. It is possible this aisle extended further to the south but has been truncated by the construction event Wall [007; see above]. A second aisle was oriented south-west to north-east and ran between Structure 2 and another cellular building to the south-east (Structure 4, only partially exposed by the excavation and described below).

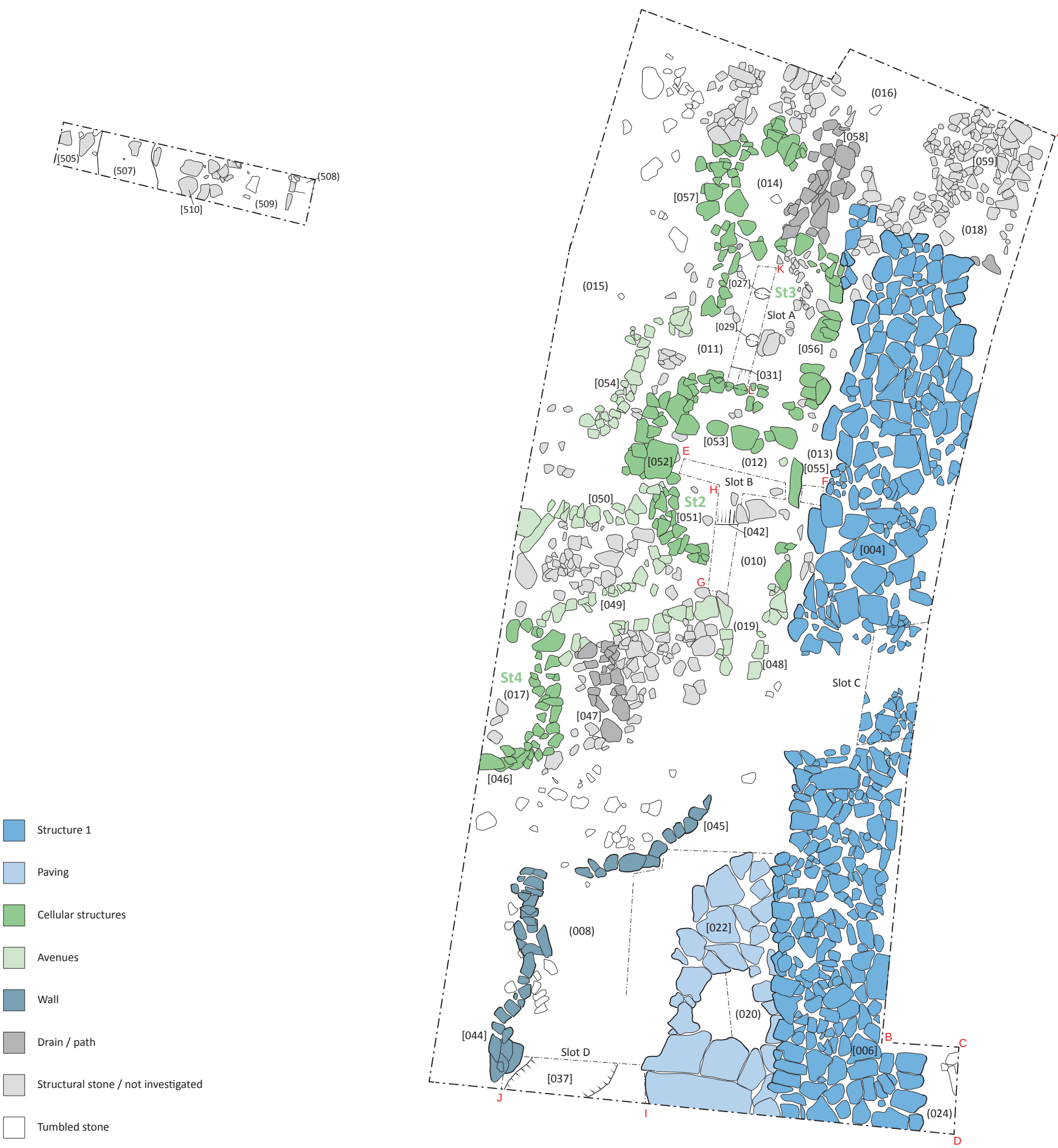


Figure 12- Plan showing main stone features uncovered during the evaluation

Structure 2 and the associated aisles were filled by three deposits [012, 010 & 019]. A sandy silty layer [012] largely filled the interior of the structure; [019] filled the aisles and [010] ran between the structure interior and the aisles. The shallowness of the deposits make it impossible to be certain whether the deposits were associated with the actual use of the structures or later deposits filling the interior. It is likely that they represent a mixture of both.

Structure 4

As noted, a second aisle was oriented south-west to north-east and ran between Structure 2 and another cellular building to the south-east, Structure 4. The aisle, like the other, was formed by narrow arrangements of stones [047] and [049]. The aisle was 4m long and had a fairly consistent wide of *c* 0.7m. The aisle joined a curved wall [046] which has the appearance of another cell. The exposed part of the building was C-shaped in plan, measured 3.6m by 1.7m externally, 2.5m by 0.9m internally with an internal area of *c* 2.2m. The walls were up to 0.7m wide and had been constructed in the same fashion as Structures 2 and 3. This feature was only partially exposed by the excavation but the working assumption is that it forms another cellular structure as yet unexposed by the evaluation.

Between the excavation trench edge and within wall [046] was a soil deposit [017], dark brown loose and friable sandy silty clay with abundant sea shells and bone. An Anglo-Saxon coin (SF 106) dated to c837-855 was recovered from this context.

Structure 3

Structure 3 was located immediately to the north of Structure 2, which it probably conjoined, with the building formed by two cells in a rough 'figure-8' shape in plan. The building was *c* 6.7m long and between 3.1 and 3.7m in width externally. The northern cell had internal dimensions of 1.5m by 2.2m; the southern measured 2.3m by 2.9m; the internal areas measured *c* 2.3m^2 and *c* 6.3m^2 respectively. The walls of each cell varied, with the northern cell walls being more substantial. It had a with a width of up to 1.1m while the less substantial southern cell walls, containing less stone, were up to 0.6m wide. The walls of both cells [056 & 057] survived to a height of 0.4m.

The entrance to Structure 3 was located in the south-west part of the building and could also have been accessed by an aisle or path, though it was very narrow compared to the others present on site and it is possible this represents some different type of structure. This was formed by part of the wall of Structure 2 on the east side and by a narrow linear arrangement of stone on the west [054]; the aisle was only up to 0.35m wide, this narrowness casting some doubt on its putative function as a path; it is equally likely that [054] is part of another cell.

Along the western edge of Structure 3 was an arrangement of stones laid flat [058] that are interpreted as the remains of a possible drain or path associated with the building. It measured 2.9m in length and was up to 0.75m wide. It was formed of medium sized slabs, up to 0.65m by 0.4m in size.

No stone-built internal structural elements were present and, like Structure 2, the floor of the building was likely to have been earthen. Each of the cells of the 'figure-of-eight' was filled by a deposit; the northern section by [014] and the southern section by [011]. Only context [011] was explored in any depth. Like the other structures, the shallowness of the deposits make it impossible to be certain whether the deposits were associated with the actual use of the structures or, more likely, later deposits filling the interior. Again, it is likely that it was a combination of both.

A double-sided bone comb and a knife (arguably both could date to around the 6th to 12th centuries in date) were recovered from context [011]. One small orange glazed, white gritty ware body sherd from a jug was also found in this context [011]. As Haggarty says below although it is difficult to be sure the piece may be from a Yorkshire vessel of late 12th or 13th century date.

Context [014] was only partially excavated and a piece of glass was recovered from the top of the context. Although relatively undiagnostic because of its size and lack of decoration, it is made in a high quality soda-rich glass which, from its colour and composition, would be consistent

with it coming from a late 16th- or early 17th-century drinking vessel, most probably a wine glass. It is likely that this derived from the mixed agricultural soils identified above.

Fig 13: Structures 2 and 3, with structure 3 in the foreground

Deposits out with Structures

Outside of Structures 2 and 3 were a series of mixed deposits ([015], [016] & [018]). One very badly abraded redware jug strap handle sherd with two rows of vertical stabbing was recovered from [018]. This was not produced in Scotland and while hard to date is almost certainly medieval. A fragment of a clay tobacco pipe was also found in context [018]. A fragment of Westerwald type salt glazed stoneware everted rim sherd from a large crock with traces of blue cobalt decoration beneath its exterior rim was found in [015]. This is a common imported form, which can still be purchased in Scottish antique shops and which probably dates from the late 17th or early 18th century. It is likely that these deposits are a series of mixed, truncated deposits from the agricultural soils above the cellular structures. They were not fully excavated.

Other structural features

Several other stone features were present but they were either less coherent than the other structures on site or were only partially exposed during the evaluation.

Wall [044] was located at the south end of the excavation area, opposite the paved surface [022]. It ran parallel to and lay 5.5m to the west of Structure 1 (see below). Unlike the other walls, Wall [044] was linear in plan with a visible length of 5m. The full extent of the wall is not known as it continued beyond the southern limit of excavation. A soil layer [043] had built up against this wall.

Another structure, similar to path/drain [058] in Structure 3, was present to the east of Structure 4. This feature is also interpreted as the remains of a path or drain. It measured 2m in length and was up to 0.5m wide. It was formed of medium sized slabs up to 0.55m by 0.4m in size.

Structure 1

The predominant feature within the main excavation area was an arrangement of stone along the eastern edge of the evaluation trench [004] and [006] that is interpreted at this stage as the base of a wall belonging to a substantial building. It measured 19m from north to south with the full extent lying outwith the eastern and southern limit of excavation. A small trench extension in the south-east corner revealed the structure to have a width of 3.5 m, at least in that area.

The structure consisted of an arrangement of large to medium sized pieces of sandstone. The larger stones were fairly substantial and measured over 1m in length and 0.7m in width; the structure was aligned north-north-east to south-south-west and was slightly curved on its western edge. The limited investigation of the eastern edge of Structure 1 suggests that this edge is also curved perhaps indicating that the 'wall' of the building bowed slightly. At the north end, the wall appears to return at a right angle and continue out with the limit of excavation, perhaps indicating this was possibly the corner of the building. A rectangular extension, measuring 1.3m by 2.3m was present on this corner and is likely to represent the remains of a corner buttress or similar supporting structure.

Where the structure was better preserved, the foundation had formed edging on the interior and exterior faces. This consisted of mostly rectangular slabs set at right angles to the long axis of the wall. These were also set at a slight angle, between 10 and 20 degrees, with the higher end to the outside where some had been propped with smaller stones. It is suggested that the wall structure sat between these (Barber, pers comm) with Structure 1 being the base for this. If this is the case it gives an indicative width for the wall of *c* 2m.

Not enough of the structure was exposed in the allowed evaluation trench to be sure what this feature is definitively (see below *discussion* section). As explained below the uncovered archaeology does appear to align with the geophysics results but not as the putative western edge of a timber building (defined as the dark low resistance in the geophysics results). The stone does however align with the high resistance anomalies of white. The stone structure could, therefore, be interpreted as the remains of a stone structure associated with the putative substantial rectangular building present on the geophysical surveys. Equally, it could be a path, but the geophysics do not seem to support this claim as it is unclear where the path is going to or ending. Definition of the structure is also difficult due to the truncation by the post 1853 mortared wall.

Paved area

A paved area [022] lay adjacent to Structure 1 at the southern end of the excavation area (fig 14). Structure 1 slightly overlapped, and was set directly on, this paved area suggesting they had been laid in the same construction event. The paving consisted of large, flat angular slabs. The majority of the slabs were up to 1.6m by 0.8m by 0.05m in size. One rectangular slab was exceptionally large, measuring 2.5m long and over 0.8m wide (the slab extended beyond the limit of evaluation).

A shallow, broad V-shaped linear depression was present in the paved surface. This was present towards the northern end, was oriented south-west to north-east, and measured *c* 1m across. The depression was also visible in Structure 1. It is speculated that this was caused by the structures subsiding into an earlier negative feature present below, most likely ditch [037] (see below for description). As the paved area ran outwith the excavation area it is unclear of the features, extent. Visiting scholars suggested that the paved area (and particularly the blank hole) may be associated with a cross, now removed, although this is, of course, impossible to prove.

Fig 14: Paved area [022] and Structure 1; note the subsidence of the paving, presumably into an earlier ditch

Earlier features and deposits

At the end of the excavation a series of small slots were cut through the soft deposits associated with the structures described above, in order to further characterise the archaeological remains below. Several of the slots uncovered negative features that predate the overlying stone structures (figs 15 & 16). However, the limited scope of the excavated slots only allowed partial characterisation of some of these features.

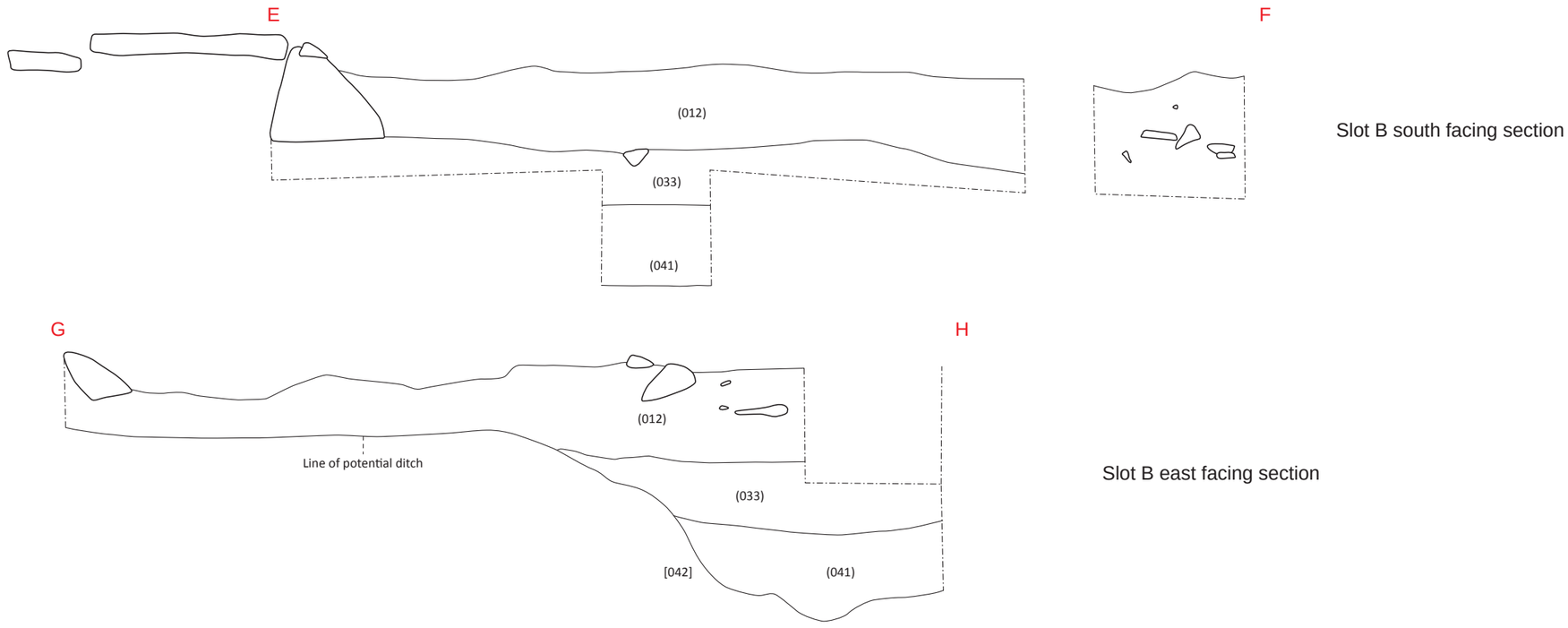
Pits and Post holes

Slot A, excavated within the interior of Structure 3, uncovered two shallow negative features [027 and 029] that appear to be pits and/or post-holes. These measured 0.35m in diameter and were up to 0.05m deep. They were filled with mid-brown sandy silt with occasional small stones and shell fragments. These post holes were filled by [028] and [030] respectively. The limited scope of the slot makes it difficult to ascertain whether they relate to the building or belong to an earlier phase of activity, although the latter seems more likely. If they were associated with the structures then it means that the fill [012] was formed after the building was abandoned.

?Ditch 1

To the immediate south of the aforementioned postholes was a larger negative feature [031], which measured 1.3m wide and was up to 0.65m deep with steeply sloping sides and a rounded base. It was filled with dark brown silty coarse sand [032] which contained frequent animal bones. This context also included an iron knife (SF 126a) and a piece of lead. Below [032] was an earlier fill [040]. An animal bone from this context [040] was radiocarbon dated to AD677 to AD871 (AD677 to AD779; AD789 to AD871).

Figure 15 - Plan of negative features uncovered below the stone structures



Slot B south facing section

Slot B east facing section

Slot D north facing section

Slot A west facing section

Figure 16: Section of neagtive features uncovered below the stone structures

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Slot B, excavated within the interior of Structure 2, also revealed a substantial negative feature [042]. This had a similar profile, dimensions and fill to that of [031] and contained two fills, [033] and [041]. Although there is no stratigraphic relationship between [031] and [042] it is probable that they are two edges of the same feature: either a large pit or a ditch. What can be determined is that they are stratigraphically earlier then the stone structures above and are evidence for an earlier phase of activity on the site.

Figure 17: Features 28, 29 and 31 with feature 31 underlying wall 052

?Ditch 2

The most substantial negative feature, interpreted as a ditch [037], was located at the south end of the excavation area and, unlike the others, it was possible to more fully characterise this feature. The ditch was oriented south-west/north-east, was 1m wide and up to 0.55m deep. It pre-dated the stone revetment wall [044] that had been partially set in to the ditch's west side. It was filled with loose dark brown silty coarse sand [038] which contained occasional animal bone. While the ditch was only fully investigated in one area its line could be determined by a slight depression in Structure [006] and paving [022] (see above). The underlying ditch had led to subsidence of these structures and there was evidence that stones had been deliberately placed to compensate for or repair this within Structure 1.

The fill of this Ditch 2 (038) produced a radiocarbon date of AD656 to AD769 (AD656 to AD724; AD739 to AD769), almost identical to the date of the lower fill of Ditch 1 described above. Although there is no stratigraphic link between the two negative features the radiocarbon dates suggest they could be contemporary.

Deposit under Structure 1

A radiocarbon date from an animal vertebra was obtained from the deposit directly below Structure 1. This deposit (039) is likely to be a former topsoil upon which the stone in Structure 1

had been laid.. The vertebra returned a C14 date of AD677 to AD875, again almost identical to the C14 dates from the earlier negative features (see fig 18).

Figure 18: The animal vertebrae from underneath structure 1 (in section and in plan).

Test pits (Trench 2)

As the test pits located to the west of the main evaluation area contained structural remains it was decided to link two by opening a trench between them (Trench 2). The trench contained three stone-built structures ([504], [508] and [510]) that were similar in form to those present in the main excavation areas, specifically those identified as possible cells.

Structure [504] was located at the west end of the trench and consisted of a linear arrangement of three flat stones laid to possibly form a path or base of a narrow wall. It measured 0.5m by 0.75m, with the stones being up to 0.1m thick.

Structure [510] was located in the centre of the trench and consisted of a broadly circular arrangement of flat stones laid onto a buried soil containing abundant animal bone, fish bones and charcoal. This area was notable in that it had a visibly higher concentration of fish bones than was present anywhere in the main evaluation area. The structure measured 1.2m across and was present across the full 1m width of the trench. It is unclear what the function of this structure. There were patches of charcoal indicative of *in situ* burning around the structure and it is possible that it was a hearth setting.

Structure [508] was similarly enigmatic and consisted of three large edge-set stones in a north-east/south-west- aligned linear arrangement; it is possible that it represents the remains of a drain, though this is not conclusive.

CHRONOLOGY

During the excavation, contexts were identified that were considered likely to provide meaningful dates. Due to the mixed medieval plough soils that dominated the excavated assemblages, and the mixed artefacts that were derived from within, secure contexts from which radiocarbon dates could be retrieved were limited. Further, material from said desirable contexts was equally limited.

It was clear that many of the soils associated with the structures both inside and outside were likely to have been mixed and thus gaining reliable dates for scientific dating was deemed impossible. Thus, emphasis was on obtaining dates from features below the stone structures and associated soils. After consideration, material from three contexts was chosen for radiocarbon dating: [038], [039] and [040]. As outlined above [038] and [040] were the lower fills of the putative ditches; [039] was from a sealed deposit under Structure 1.

Organic materials selected for radiocarbon dating were identified and single-entity samples for radiocarbon dating were selected in accordance with good practice guidelines specified by Historic Environment Scotland and SUERC. All samples were of animal bone. Table 1 shows a summary of the C14 dates and their contexts.

Context	Description	Material	95.4% probability
39	Deposit below Structure 1; wall [006]	Vertebra bone: large mammal	AD677 to AD780 AD788 to AD875
38	Fill of Ditch [037]	Rib: large mammal	AD656 to AD724 AD739 to AD769
40	Lower fill of ?ditch [031]	Tibia: medium mammal	AD677 to AD779 AD789 to AD871

Table 1: Summary of C14 dates

The three returned radiocarbon dates form a consistent group with all three falling between AD656 to AD875, that is the mid-7th to late 9th centuries AD. These dates all form a *terminus post quem*, for the Structures 1 to 4 above them (that is, the earliest time the structures could have been constructed and used).

THE ARTEFACT ASSEMBLAGE

One hundred and seventy-four artefacts (or groups of artefacts) were allocated individual numbers during the excavations. These can be summarized thus, and fall into the following groups.

Material	Total	Summary
Fe (non-nails)	50	Knives; buckles; ?stylus; horseshoes; gouges and handles
Fe (nails)	137	Variety of nail types
Cu	14	Coins (medieval and Anglo-Saxon; button; needle, horse strap decoration
Pb	16	Sheet, lumps and shot
Ag	1	Coin
Bone	4	Single-sided comb; double-sided comb; decorated zoomorphic ?mount; needle
Glass	7	Miscellaneous
Slag	14	Hearth bottoms and misc slag
Stone & Flint	12	Whetstone; flint and ?quern
Mortar	5	Miscellaneous
Pottery	22	Daub (or loomweight) and medieval/post-medieval pottery

Table 2: Summary of the artefact assemblage from Auldhame

In the course of the individual specialists' discussions, attention is drawn to particular aspects of the assemblage, particularly chronology and function, use and manufacture. Where appropriate, wider parallels are drawn. A full contextual list of all the finds is presented in Appendix A.

POTTERY

George R. Haggarty

The small Aberlady ceramic assemblage, although very mixed and in the main badly mixed and abraded, is interesting in that it shows a ceramic background noise from the 12th and 13th centuries and possibly a bit earlier, and like most other east coast burghs during the high medieval period it suggests that much of its pottery was being imported from Yorkshire. It's hard to be sure from such a small assemblage but one can't help get the feeling that there was still sea trade or at least contact through the later medieval and possibly into the post medieval period using the evidence of the English bung hole fragment from context (002; SF 45). With only one sherd of Scottish post medieval reduced ware in the assemblage, what is missing is other evidence of contact in the form of tin-glazed earthenware, late stoneware's etc. from the 16th and 17th centuries.

What is also interesting is that in the National Museums Scotland (NMS) fabric reference collection are three sherds from Aberlady. Two of these were given by the late Patrick McVeigh to the author who said that he found while walking along the shore when the tide was out. One is a rim sherd from a Low Countries grey ware cooking pot (Low - 11) and the other is a Pingsdorf-type proto stoneware red painted sherd (Ger - 29). The third is a large rim sherd from a Paffrath type ladle (Ger - 28), which was given to NMS, apparently retrieved from the mud when the tide was out. These sherds alone suggest continental trade probably during the 12th century. It will however take more work on a much larger assemblage before one can say much with any confidence.

Note 1; Paffrath or Blue-grey wares have a very hard almost laminated light grey paste with a fine pimply blue-grey surface and metallic sheen. They were produced at a number of centres however the very distinctive almost globular single handled ladles were produced at Paffrath around ten kilometres east of Cologne. They were manufactured from the late ninth/early tenth to the late twelve centuries and it has been suggested that this material is the prototype of the later Siegburg stoneware industry.

Note 2; Pingsdorf-type ware is a coarse fabric, fired to near-stoneware whose production sites extended over a wide area of Germany including Vorgebirge, near Cologne, Limburgh, near Hanover and the Langerwehe and it is likely that other production sites await identification. These wares date from the late ninth to the thirteenth century in the Rhineland and into the 14th century elsewhere. Sherds of Pingsdorf-type ware are not common in Scotland being confined in the main to east coast burghs, where its use seems to date from the 12th century.

Context 001 T P 1; SF 001 d: sherds 8
Three small abraded sherds in a reduced fine gritted greyware fabric coved in a thick suspension glaze; looks 14th or 15th century
Two small badly abraded Scottish white gritty ware sherds one glazed internally; medieval
One tiny abraded glazed redware body sherd; 19th century
One small standard white earthenware body sherd: 19th century
One small standard white earthenware blue dipped body sherd; 19th century

Context 001 T P 1; SF 002 c: sherds 4
One Scottish white gritty ware sherd probably from a glazed strap handle sherd; medieval
Two small abraded standard white earthenware sherds; 19th century
One tiny standard white earthenware sherd decorated with a blue and white transfer print; *c*. 1820

Context 001; SF 005: sherds 2
One black glazed redware body sherd from a crock; 19th century
One undecorated creamware body sherds; probably *c*. 1800

Context 001 T P 2; SF 006: sherds 1
One small abraded standard white earthenware body sherd; 19th century

Context 001 T P 4; SF 004c: sherds 8
One Scottish post medieval reduced ware body sherd; 17th century
Two small standard white earthenware body sherds; 19th century
Three small lead glazed redware body sherds one with handle scar: 18th or 19th century
One small glazed white gritty ware body sherd; probably Yorkshire; medieval

Context 001 T P 5; SF 005: sherds 3
One small glazed redware body sherd; 19th century
One small abraded standard white earthenware basal angle sherd; 19th century
One small standard white earthenware rim sherd with traces of blue transfer printing on both surfaces; 19th century

Context 001; SF 013: sherds 1
One late Scottish whiteware base sherd from a large jug; provably 16th century

Context 001; SF 014: sherds 2
One abraded green glazed body sherd from a jug in a late medieval gritty fabric; 15th century?

One abraded redware body sherd with what looks like traces of white slip on its interior; 19th century

Context 001; SF 023: sherds 1
One abraded green glazed rim sherd from a jug in a Scottish medieval white gritty fabric; hard to date but probably late 14th century

Context 001; SF 026: sherds 1
One Scottish white gritty ware body sherd from the shoulder of a large green, splashed jug; late 12th or 13the century

Context 001; SF 027: sherds 1
One Scottish white gritty ware basal angle sherd from a large flat based, cooking pot heavily sooted on its exterior. Its edges look freshly broken with no abrasion and it almost certainly dates from the middle of the 12th century. Similar early looking wares have been excavated from sites in Haddington.

Context 001; SF 049c: sherds 3
One small standard white earthenware body sherd decorated with a light blue standard willow transfer-print; 19th century

One small lead glazed redware body sherd from a crock; 19th century

One small creamware body sherds with traces of overglaze red enamel painting; late 18th or early 19th century

Context 002; SF 021: sherds 1
One thinly thrown Scottish white gritty ware body sherd from the shoulder of a cooking pot which almost certainly dates from either the second half of the 12th or early 13th centuries.

Context 002; SF 025: sherds 2
One small abraded sherd in a reduced fine gritted greyware fabric coved in a thick suspension glaze; looks 14th or 15th century
One small piece of fired clay

Context 002; SF 040: sherds 1
One standard white earthenware body sherd; 19th century

Context 002; SF 041: sherds 4
One standard white earthenware body sherd; 19th century
One standard white earthenware body sherd; burnt and possibly 19th century
One tiny abraded green glazed body sherd; probably a Yorkshire product as it has evidence of a thick suspension glaze; 13th century
One very badly abraded Scottish white gritty ware jug strap handle sherd; medieval

Context 002; SF 45: sherds 1
One thick green glazed reduced ware body sherd with a 16mm diameter bung hole which has had an applied ring of clay lutted on to its slightly oxidised knife trimmed exterior. This is not a Scottish form and is probably part of a late medieval north east English bunghole jar of a type often thought to have been used to make beer?.

Context 011; SF 110: sherds 1

One small orange glazed, white gritty ware body sherd from a jug; it's difficult to be sure but my best guess is that it's from a Yorkshire vessel and of late 12th or 13th century date?

Context 018; SF 033: sherds 1
One very badly abraded redware jug strap handle sherd with two rows of vertical stabbing; not Scottish and hard to date but almost certainly medieval

Context 015; SF 96: sherds 1
One Westerwald type salt glazed stoneware everted rim sherd from a large crock with traces of blue cobalt decoration beneath its exterior rim. A common imported form, which can still be purchased in Scottish antique shops and which probably dates from the late 17th or early 18th century

Context 025; SF 105; sherds 1
One strap handle sherd from a Yorkshire jug probably a product of the Brandsby kiln. It has a thick dark green suspension glaze over its upper surface and probably dates from *c.* 1300-1350.

GLASS

Dr Hugh Willmott, University of Sheffield

A very small assemblage of glass was recovered from the excavations, consisting of ten fragments from seven contexts, and all the pieces are very small making precise identification difficult. All the glass appears to be post-medieval in date, and all but one fragment come from common utilitarian containers or window glass. With the exception of one find (SF 122) all came from the topsoil.

The exception is SF 122, a small curving body fragment. Although relatively undiagnostic because of its size and lack of decoration, it is made in a high quality soda-rich glass, which from its colour and composition would be consistent with it coming from a late 16th- or early 17th-century drinking vessel, most probably a wine glass.

A single fragment of window glass was recovered, SF 001. This too is very small and hard to date precisely, but its colour and relative thinness suggest it is late in date, belonging to the latter part of the 19th or early 20th century.

The remaining fragments are all from very similar free-blown containers made in a green high lime low alkali glass, typical of that used for wine bottles in the post-medieval period. Again given the small size of all of these fragments precise dating is difficult, but the colour and surface weathering suggest they were made in the late 18th or more probably 19th centuries.

SF 001 One fragment of flat window glass. Light green glass. Later 19th-early 20th century. Context 001.

SF 004. Two fragments of curved body possibly from different wine bottles. Green high lime low alkali glass. Late 18th-19th century. Context 001.

SF 004 Two fragments of curved body probably from different wine bottles. Green high lime low alkali glass. Late 18th-19th century. Context 001.

SF 005 One fragment of curved body from a wine bottle. Green high lime low alkali glass. Late 18th-19th century. Context 001.

SF 006 Two fragments of curved body from different wine bottles. Green high lime low alkali glass. Late 18th-19th century. Context 001.

SF 017 One fragment of curved body from a wine bottle. Green high lime low alkali glass. Late 18th-19th century. Context 001.

SF 122 One fragment of curving body, possibly from the lower bowl of a wine glass. Clear grey-tinted soda-rich glass. Late 16th-mid 17th century?. Context 014.

BONE

Andy Heald

Four bone objects were recovered from Aberlady: a single-sided 'high-backed' comb; a double-sided comb; a needle and a decorated zoomorphic mount.

Double-sided bone comb

The fragmentary nature of the comb makes it impossible to reconstruct the original size and form, given that most combs are defined by their end plate. It also hinders placing it within standard typologies. There are still problems with typological dating for double-sided combs as most of the comparative material comes from sites which have no radiocarbon dating. They type appear to have been current around the 7th century, though there are a few earlier examples. Defining the end point in the sequence is more difficult, although a date around the 8th or 9th century is often suggested (Foster 1990, 161-162; Smith 1998, 157; Campbell, Smith & Sharples 1998, 186; but see below).

SF 52 The comb is in poor condition being in four conjoining fragments; only parts of the side plates and teeth survive. The comb is decorated with ring and dot. There are traces of 3 iron rivets, irregularly spaced. The surviving teeth have an equal density on both sides. The length of the longest surviving tooth is 15 mm. H 23mm; L: 43mm; and T: 6mm. Context 11.

The bone comb from Aberlady can be added to the small corpus of said combs from East Lothian and the Borders. In this light it is worth reviewing other bone combs from Scotland and Ireland current during the second half of the first millennium AD. Composite bone combs have been central to many discussions of life in later Iron Age Scotland, that is during the second half of the first millennium AD. The various types of composite bone combs have been discussed extensively elsewhere (eg. Dunlevy 1988; Curle 1982; MacGregor 1985; Foster 1990; Smith 1998). In essence, three types of double-sided composite combs are believed to be in use in the pre-Norse period: 'Roman', 'Dark Age A' and 'Dark Age B'. Only the latter two groups concern us here.

Double-sided type A combs are shorter than Type B and the teeth graduate, becoming progressively shorter over the last 30mm or so, resulting in triangular or D-shaped solid zones which are generally decorated. The side-plate is usually deep and flat in cross section and sometimes a narrow area is left in reserve at the extremities of the end-plate. The end-plate may have a sinuous or even ogival outline, and some incorporate a perforated central convexity (Foster 1989, 117). Type A are similar to Dunlevy's 1988 Irish Class B.

Both types are regarded as distinct 'Pictish' types, believed to be common during the 7th to 9th centuries, and often used to define the Pictish / Viking transition (eg Stevenson 1955; Ritchie 1977; Curle 1982; Foster 1990; Smith 1998). Dating is based primarily on Curle's work at Brough of Birsay (1982) and interpretations of depictions on Pictish symbol stones (e.g Stevenson 1955, 97; Foster 1990). Curle argues that Type A came from the Pictish horizons at Brough of Birsay, Orkney, whereas Type B came from the lower Norse horizons. Thus, Type A were dated to the pre-Norse period. Foster (1990) concludes that with the possible exception of Howe, Orkney (Smith 1994, no 4376) there was '…no evidence that their life could possibly be extended any further back than the

C7th AD' (1990, 162). Smith (1998, 157) follows suit arguing that '…double-composite combs appear to 'have a restricted chronology in Scotland; they were current in the seventh century, and seem to have faded away with the advent of the Vikings'.

Such divisions have supposedly been bolstered by studying the representation of the two types on Pictish symbol stones. Type A combs, like the single-sided ones discussed earlier, are believed to be depicted only on Class I Pictish symbol stones, whereas Type B are shown on stones of Class II[1]. Class I stones are argued to date to anytime between the 6th and 8th centuries AD (e.g. Stevenson 1955, 97). The depiction of single-sided and double-sided Type A on Class I stone suggests that they may be broadly contemporary. As well as being used as a chronological tool, type A combs have been used as a generic cultural indicator, upheld as 'one of the few diagnostic 'Pictish' artefacts' (Curle 1982, 191; Foster 1990, 147) or a quintessentially 'northern Scottish' type.

But critical analysis of these combs and, more particularly, their archaeological associations suggests that these interpretations are less straightforward than is often assumed. There are three principal areas of concern. First, our understanding of the date of certain combs has been based more on a self-perpetuating cycle of assumptions and inadequate excavation data than sound archaeological information and critical reasoning. Second, the consistent labelling of the combs as 'Pictish' ignores an important group of similar combs from outwith the 'Pictish' heartland, particularly from western and southern Scotland. Indeed, the notable similarities of these combs to Irish examples suggest that, like manuscripts and metalwork, the term 'Insular' would be more appropriately applied to them. Third, past explanations for the significant number of occurrences of double-sided combs in post 9th-century (Viking) contexts must be questioned. Are they really 'residual' or evidence of a 'Pictish continuum'? Reviewing these three areas leads us to suggest that the labelling of double-sided composite combs as 'Pictish' is misleading, both chronologically and culturally.

Dating the Aberlady comb

As noted dating of both types of double-sided combs is based primarily on three elements: old excavations, the assemblages from Orcadian sites and analysis of comb depictions on Pictish symbol stones. Of these, Curle's (1982) interpretations of the Brough of Birsay assemblages have been particularly important. She argued that because Type A combs came from the Pictish horizons at Brough of Birsay they should be classed as Pictish. Foster is more precise suggesting that, with the possible exception of an example from Howe, Orkney (Smith 1994, no 4376), there is 'no evidence that their life could possibly be extended any further back than the 7th century AD' (Foster 1990, 162). Such a date is supposedly bolstered by representations of Type A combs on Class I Pictish symbol stones.

Dating Type B combs has been slightly more problematic. As many came from the lower Viking horizons at Brough of Birsay Curle concluded that they were of Viking date but of native manufacture (1982, 57). Recent studies have challenged this latter view. Although admitting that only one example of a Type B comb is from a pre-Viking context at Brough of Birsay, Foster felt that representations of Type B combs on Pictish Class II stones and the existence of 4th-10th-century Irish and Anglo-Saxon parallels demonstrated that the type dated to the pre-Viking period. She argued that 'at the latest an 8th-century date can be suggested for the Scottish examples' (Foster 1990, 162; 1997, 147-8). This is apparently supported by the occurrence of types A and B alongside one another at Pool and in the Late Iron Age phases at Scalloway (Smith 1998, 157).

Yet the explanation for why pre-Viking combs turn up in substantial quantities in Viking contexts is unconvincingly argued through residuality - 'it does appear that of over twenty examples of LIA combs from Norse contexts only three examples were virtually complete. More complete combs are found in earlier contexts. This may suggest that the majority of LIA-style combs appearing in Norse contexts were residual' (Foster 1990, 168). Smith adopted a similar position arguing that 'double-composite combs appear to 'have a restricted chronology in Scotland;

[1] Furthermore, depictions on the Maiden Stone and Meigle I suggest that Curle's symbolic differentiation is not as clear-cut as once

they were current in the seventh century, and seem to have faded away with the advent of the Vikings' (1998, 157).

But with this in mind we do have to consider two combs closer to Aberlady – those from Edinburgh Castle and Dunbar.

Both single-sided (but not High-Backed combs) and double-sided composite combs were recovered from Castle Park; perhaps interestingly, the single-sided examples having an earlier distribution (Perry 2000, 146). Three examples of double-sided were recovered (378, 383, 392) and 'others represented by toothplates' (391, 395). Much of the material is residual and unhelpful for chronological discussions, particularly finds from trench fills (ibid., 187). The double-sided combs are associated with the Medieval or post-medieval periods (*circa* after the 13th/14th centuries AD; Phases 18 to 21). One (395) is unstratified.

A similar problem awaits the two combs from Edinburgh Castle. Although Foster acknowledges that precise definition is difficult she concludes that '…on balance it is most likely that the combs are of Dark Age type B', and likely to be of 7th or 8th century date (Foster 1997, 148). However, these conclusions are based more on reference to past beliefs of the date and cultural associations of these combs rather than sound stratigraphic information. The first comb (2) was found in the Mills Mount area (Area H context 440, Phase 6) and from contexts dated to the mid-14th century AD (Driscoll and Yeoman 1997, 56). The other comb (1) offers little more precision. It was found in the Mills Mount part of the castle Area H (context 493, Phase 4) and assigned to a period that could be no closer dated than between the Late-Roman and the early Medieval period, *circa* AD300-?1000. This phase shows no discernible break in the continuity of the earlier Roman period midden yet was distinguished from this earlier Phase 3 for two reasons (ibid., 43):

> 'First, while digging, definite but subtle distinctions were recognised between the later layers (431, 461, 493 and 1382) and the earlier layers (516, 522, 1387). Secondly, upon analysis of the finds from the two sets of layers, a few artefacts of early medieval type were noted in the upper layers. Thus, although the distinctions between the particular layers were at times unclear and contexts were sometimes defined instinctively, if not arbitrarily, the basic distinctions seems to have been valid'. It should be stressed that there was no suggestion of a hiatus in the deposition of material upon the midden between phases 3 and 4. Rather it looks as though similar rubbish continues to be deposited throughout the early to middle centuries of the first millennium AD, with changes only being recognised through the types of artefacts and faunal remains'.

Dating for this phase is provided by charcoal extracted from a bulk sample of soil from context 461 and by the artefacts. The radiocarbon date (GU-2662) calibrates to AD151-553 at one sigma, which is an overlap with the 'preferred' Phase 3 sample (GU-2913 511: AD68-247) and is indistinguishable from the two less secure dates from Phase 3 (ibid., 29, 43). The artefacts however point to a later date. In addition to the occasional sherds of native Iron Age pottery and less frequent Roman pottery and glass, three artefacts (the comb, buckle and fire-steel) were Hinton believed to be indicative of an early medieval date, albeit covering a wide time period.

Although earlier examples of D-shaped buckles are known from 6th to 7th century Anglo-Saxon burials (White 1990, 135-6, fig 6) and from 7th / 8th century 'contexts in Ireland (eg Hencken 1950, 66, fig 11, 323), the broad-bowed frame of the Edinburgh Castle buckle is a common 13th-/14th-century form (Clark 1997, 149). The fire-steel (SF193) the form of which, although incomplete, would not be out of place in a 7th-9th century context. Closer analysis, however, shows that this artefact is actually from the earlier Phase 3 (Foster 1997, 155-6) again highlighting the difficulty in dating the finds through the excavated sequence.

Taken together the phase in which the comb is assigned seems to stretch from around the 3rd to 4th centuries AD (radiocarbon dates and Roman finds) perhaps to as late as the 13th century. Indeed, the beginning of the next phase (the Medieval period) is as equally difficult to interpret 'impossible to define with precision...the paucity of closely datable finds makes it impossible to provide a tight chronology for beginnings of this reuse of Mills Mount' (Driscoll and Yeoman 1997,

28). In sum, dating of comb 1 can be refined no closer than *circa* AD300 to AD1300 and comb 2 was found in mid-14th century contexts. This suggests, perhaps, that double-sided combs were in use beyond the usually lauded Viking era.

Is the comb Pictish?

As noted, combs similar to the Aberlady example are normally associated as being 'Pictish'. But it is clear that, like the Aberlady find, many other examples come from outwith the Pictish heartland.

Provenance	Region	Collection	Site no	Draw ref?
Dunadd	Argyll	NMS GP 255		Yes
Dunollie	Argyll	SF 139	SF 139	Yes
Buiston	Ayrshire	NMS HV 48		Yes
Buiston	Ayrshire	NMS HV 49		Yes
Buiston	Ayrshire	NMS HV 50		Yes
Loch Inch-Crindil	Wigtownshire	NMS HT 10		No
Dun Cuier	Barra	NMS GU 270	2	Yes
Dun Cuier	Barra	NMS GU 271	3	Yes
Dun Cuier	Barra	NMS GU 272	3b	Yes
Foshigarry	North Uist	NMS GNA 150		Yes
Foshigarry	North Uist	NMS GA 151		Yes
Castle Park	Dunbar			Yes
Scotland	Scotland	HB.1914.495		No
St Ford's Links	Fife	NMS HR 517b		Yes
Broch of Burrian	Orkney	NMS GB 70	153	Yes
Broch of Lamaness	Orkney	NMS GH 7		No
Brough of Birsay	Orkney	NMS 211		No
Buckquoy	Orkney		50	Yes
Howe	Orkney		4376	Yes
Midhowe	Orkney	NMS GAM 1		Yes
Peterkirk	Orkney	HB.1914.806		No
Scalloway	Shetland	Cat 1		

Table 3: Examples of type A combs from Scotland

Further, it is possible that many combs are similar to ones found in Ireland. For example, during excavation of Dun Cuier, Barra Young (1956) suggested that the site was a single-period construction that dated to the 7th century AD. However, Armit (1992, 1996) has convincingly argued that the site was originally an Atlantic roundhouse into which a cellular complex was later built. The majority of artefacts date to the second half of the 1st millennium AD. Although Young suggested that the pottery dated to between the 5th to 7th centuries AD (Young 1956; 1966) the plain flaring rims suggesting a termination date in the later Pre Norse (Lane 1983, 255; Topping 1985). Nail-headed pins compare with the Dark Age material from Mote of Mark (Young 1956, 303). One complete double-sided composite comb (NMS GU 270) and the remains of other combs were found in the vicinity of hearth 2, beside the nail-headed pins. The nearest parallels for the comb are at Ballinderry (Munro 1882, 278, fig 255), Lagore (ibid., fig 97, 241) and Buiston. Interestingly the ornate high-backed comb, argued by Dunlevy to be part of the Irish series, was also found in this general phase. Young (1956, 316) suggested that the Dun Cuier combs could be related to other Hebridean examples from Foshigarry, North Uist (Beveridge & Callander 1932; Hallen 1994) and Garry Iochdrach, North Uist (Beveridge & Callander 1931). Both Foshigarry and Garry Iochdrach were long-lived sites (Armit 1992) and clearly used into the first millennium AD. Youngs considered these combs to form a 'Barra group', unconnected to the 'Orkney group', related more to an 'Irish series' at Ballinderry, Lagore, Loch Gur (PRIA 1948-50, fig 13), Port Bradden (Ulster J A, 6, 1944, 39) and Ballintoy (Irish Naturalists' Journal 6, 1934, 104).

This link with Ireland is also shown at other sites. The crannog site at Buiston, Ayrshire, originally excavated at the end of the 19th century (Munro 1882) and again in the 20th century (Barber and Crone 1993; Crone 2000). During Munro's excavations, beyond the central platform, was a refuse heap (Munro 1882, 210). Crone has demonstrated that this 'refuse heap' lay outside the line of the palisade suggesting that the palisade was in place by the time the domestic refuse was being thrown over the side of the crannog. This palisade has been dendrochronologically dated to AD630 thereby giving a *terminus post quem* for the 'refuse-heap' and all the artefacts it contained (ibid). This fits with art-historical understandings of the finds, most which date to around the 7th century AD, and include contacts with the Anglo-Saxons[2]. Although Anglo-Saxon and Continental objects usually dominate discussions (e.g. MacSween 2000, 157-9) Duncan (1982) highlights the similarities of the combs with Irish examples. One, (NMS HV 50) is almost identical to a comb from Lagore (Hencken 1950, fig 97, no 1626).

The multi-phased site of Dunadd, Argyll is well known in Scottish archaeology, mainly due to the links with Dal Riada (Christison and Anderson 1905; Craw 1930; Campbell and Lane 2000). The bone combs (GP 255 & 266) were recovered during excavation of the subsoil in fort B during excavations by Christison and Anderson (1905, 316). Although they did not excavate within fort B Lane and Campbell (2000) assign fort B to the 6th or 7th centuries AD (Phase D). Again, the design element on the comb from Dunadd (GP 255) is paralleled at Lagore (Hencken 1950, fig 98, no 1398; see also Duncan 1982, vol 2, 95). This decorative link with Ireland is also shown at Dunollie[3].

These sites, then, demonstrate that during the mid to late first millennium AD double-sided type A composite bone combs were circulating outwith conventional Pictland. In fact, the west coast examples are very more similar to Irish examples. Indeed, there now seems to be a strong Irish connection and with this we return to Young's (1956, 316) suggestion that these west coast combs should be considered as a groups unconnected to the 'Orkney group' with relations more with Ireland. Connections between Ireland and Scotland during this period are hardly surprising. As Campbell (2001) has argued sea communications would have been important with occasional developments in material culture and settlement types passing from one area of the west to another. This is clearly shown in the shared styles and motifs in the material record between the area. Many metal objects, and evidence for their manufacture, such as handpins and penannular brooches (Newman 1990) have distributions across Ireland and the west coast. Irish parallels can also be drawn from analysis of glass technology indicating the use of a common technology rather than the importation of actual objects (Lane & Campbell 2000, 241). Whilst there is no need to see these evidence of specific ethnic groups nor imports or migrations from one area to another (see Alcock 1971, 265; Campbell 2001) there were clearly shared traits in material culture.

Further, it is clear that many objects were used across Ireland and other parts of Scotland during this time. Although individuals are continually searching for 'Pictish' or 'Scotti' material culture to bolster the study of the inter-relationships between the two it is inescapable that often there are few recognisable differences between the material cultures and that a large element of their cultural repertoire was shared. This, of course, brings us back to the distribution of type A double-sided combs and brings into question the whole cultural labelling of type A combs as 'Pictish'. If we follow the stringent criteria outlined by Smyth (1984, 52-3) - 'provided it is found

[2] The hanging bowl, annular brooch, cup bindings and coin forgery are indicative of Anglo-Saxon contact in the seventh century, while theE-Ware, glass vessel fragments and decorated bead indicate Continental contact at around the same time.

[3] Small excavation on the earthwork at Dunollie Castle, the *Dun Ollaigh* of the early annals[3], was carried out in 1978. Five or more phases were revealed, of which *Phase 1-3* are datable to the 7th to 9th/10th centuries AD and incorporate a wall-faced rubble rampart around the summit of the stack. After a dereliction phase, *Phase 4* saw the building of a later rampart, perhaps in the 13th century. Most excavations concentrated on the ramparts (Alcock & Alcock 1987). The comb (SF 139) was found in DH119, phase 1 of the site. Iron weapons and E ware were also found suggesting that 'Dunollie 1 was the seat of a person of importance' (Alcock and Alcock 1987, 123). The general implication of the dates is that this phase dates to between the 7th and 9th centuries AD. The other comb (SF 083) was found in DH209, Phase 2. There is no direct dating evidence and is bracketed between radiocarbon dates for phases above and below, 7th to 11th centuries AD).

outside Dal Riata in the south-west and provided it can be shown to be of native manufacture then an artefact is Pictish' – double-sided type A combs need to be relabelled.

In summary, the Aberlady comb is a welcome addition to the corpus of combs found outside Pictland. However, it is not clear what cultural group, if any, the comb can be assigned to. One thing is certain though, other nearby sites such as Edinburgh and Dunbar also had such combs. Most scholars would argue that the comb dates to between the 7th and 9th centuries, but caution has been raised with this restricted time period. At the very least such combs do apparently appear in later contexts. Whether this reflects residuality, heirlooms or a comb type that prevailed for a longer period of time is currently moot.

Single-sided bone comb

One decorated tooth-plate from a single-sided comb was recovered from Aberlady. The comb is identified as a single-sided comb tooth-plate on the basis that only one edge has evidence of the remains of teeth. The plate is decorated on both sides; one side has three ring-and-dot motifs, the other has four. Given the location of the probable rivet and the belief that the decoration would not have been covered up by the side-plate then it is likely that the single-sided comb is part of a group conventionally called 'high-backed' (now called Ashby (2011) Type 1c). This is the only major type of comb within the first / second millennium whereby the top of the tooth plate is extended higher than the side-plate for decorative purposes, hence the name 'high-backed'. As discussed above, an extensive range of combs was used across Britain, Ireland and Europe throughout the first millennium AD. The majority derive from sites excavated in the first half of the 20th century with no stratigraphical relationships or supporting scientific dates. Wider discussions, therefore, have relied on drawing similarities between certain types through physical similarities or art history. This has led to the belief that certain forms have chronological, cultural or regional validity (Dunlevy 1988; Stevenson 1955; MacGregor 1985; Foster 1990).

These single-sided 'Dark Age' or 'High-backed' composite bone comb are conventionally dated to around the 5th to 8th centuries AD, perhaps even to around the period of AD450 to AD780 (see Ashby 2011). Similar to the double-sided combs discussed above some of these combs, for example at Brough of Birsay, have been recovered from Norse levels (Curle 1982, 22) but these combs are generally argued to be residual. The type has been discussed before, particularly by Curle (1982, 22-24), Dunlevy (1988, 356-8, 'class C) and Smith (2000, 185-6). Interestingly, these are largely found in Orkney and the Western Isles leading some scholars to suggest, '...They are known from so many other sites in N Scotland that they can be classed as Pictish' (Curle 1982, 22). Others believe that the type may be derived from proto-types (eg barred zoomorphic combs) in circulation around areas of the North Sea coast and first produced in Scotland from the later 5th into the 6th centuries AD (eg see Smith 2000, 185). Given the location of Aberlady then Smith's suggestion may carry some weight. To conclude, it is likely that the Aberlady come dates to sometime between the 5th and 8th centuries AD although it is possible that the type may exist into later centuries. The geographical location of the object certainly puts it outwith the traditional 'Pictish' heartland of the comb type.

SF51 Bone tooth-plate from a single-sided composite comb. The plate is from a comb with a shallow curved back. The plate has all original edges surviving. There is a trace of a rivet hole on one edge. No actual teeth survive although there is evidence of 15 saw cuts where the teeth would have been. The top of the plate has 3 ring and dot motif decorations on one side and four on the other. The decoration would have been created with a compass. H 33mm; L: 21mm; T:2.5 mm. Context 10.

Needle

One object from Aberlady is interpreted as a bone needle as it has a deliberately streamlined form which would offer little resistance in sewing. These objects are well represented across Scotland, particularly where bone preservation is good. For example on numerous Atlantic roundhouses and

wheelhouse assemblages across Shetland (Hamilton 1956), Orkney (Smith 1994, 171, fig 95, no 7100; Hedges 1987, 99, fig 2.25); the Hebrides (Campbell 1991, 161 fig 21, no 615; Hallén 1994, 214, illus 10, nos 3 & 4); and Caithness (Anderson 1901). Closer to home needles have been found at Castle Park, Dunbar (Perry 2000, 150).

SF 15 Bone needle. From a longitudinally sliced bone. The top is kite-shaped with an oval perforation. Point and eye broken. The head is flattened with a rectangular perforation. L: 45mm; B: 5mm; T: 2mm. Context 001.

Zoomorphic decorated mount

One decorated antler tine was recovered. As it was found from the plaggen soil (002) the object cannot be dated on stratigraphy. However, finding parallels for the object has proved difficult. The archaeological literature has many examples of decorated antler tines, eg Anglo-Scandinavian and Medieval York (MacGregor et al 1999, 1993-1994) or later. Some, for example the find from Staunch Meadow, Brandon, Suffolk (Tester et al 2014) have zoomorphic terminals but not as elaborate as the Aberlady find. The distinctive rectangular slot is also difficult to parallel.

SF 107 Zoomorphic mount. Multi-facetted and beveled antler tine. Saw and file marks present on the surface. The tip of the tine has been carved into a zoomorphic face with two eyes and a protruding tongue. At the top of the object there is one solitary hole. The function for this is unknown but it could have been for suspension. On the opposite side from the suspension hole is 40mm sub-rectangular slot. L: 103mm; B: 18mm: H: 17mm. Context 002

SILVER

N.M.MCQ HOLMES

One silver object was recovered from Aberlady, a 13th century silver penny.

Cut half of an English silver penny, short cross coinage, uncertain class (5 or 7), 1205 – c. 1242, moneyer Adam at London
17.5 mm, 0.46 g, die axis 315º
Obv.: illegible
Rev. AD [ ]VND (ND ligatured)
Worn
No number

COPPER ALLOY

Andy Heald and Nick Holmes

Fourteen copper alloy objects were recovered during the excavations at Aberlady. Like many of the finds from the site the majority were found by the metal-detectorist from topsoil and agricultural soils, hence the mixed type and date of assemblage. The majority of finds are likely to date to the post 13th century, aside from the Anglo-Saxon coin and a fragmentary copper alloy strip, bent over to form a loop or ring.

Coins

Northumbria, Eanred, copper alloy 'styca', Phase II (c. 837 – c. 855), moneyer Monne.
13.0 x 14.0 mm, 1.04 g, die axis 30º
Obv.: +EANREDREX; cross in middle
Rev.: +MOИNE; cross in middle
Very little wear
SF106. Context 017. Dia: 12mm.

Eanred's reign is traditionally dated to c. 810-840, but alternative dated have been proposed. It is considered that the 'styca' coinage became severely debased from around 840 onwards.

Scotland, William and Mary, copper bodle (1692)
20.0 mm, 2.41 g, die axis 0º
Fairly worn
SF166. Context 001.

Uncertain disc, apparently lead alloy, and not a coin
SF 53b. Unstratified.

Horse strap pendant

Pendants from horse harnesses and their associated suspension mounts have long been recognized and many individual examples published (eg *London Medieval Catalogue* 1940, 118; Griffiths 1986). Horse pendants were common in the 13th and 14th centuries although it is now believed that they continued in use longer (Griffiths 1986). In use, the pendants were suspended from the straps by means of small mounts with a hinge, riveted to the leather.

SF 167 Horse strap pendant; Octofoil; the eight lobes project from a central point and are patterned as natural leaves. The loop remains intact at the top of the pendant. H: 28mm; W: 18mm; T: 2mm. Context 001.

Buckle

A range of buckles were in use from the medieval into the post-medieval period. Diversity in form, decoration and material is a feature of all buckles from all periods, because these ubiquitous functional accessories present opportunity for fashionable expression at virtually every level of society (see Egan and Pritchard 2002, 50-54 for summary). The Aberlady example is a simple buckle with a central bar and is similar to examples from Medieval London; buckles of this form were used for spurs in the late-medieval period (ibid, 65-66).

SF 53 Circular buckle; circular frame with central bar; pin missing. This buckle may have been used on a spur or other leather fitting. Dia: 18mm. Unstratified.

Domed mount or applique

During the medieval period, particularly the 14th and 15th centuries, a variety of thin metal decorative discs and plates, often called 'appliqués', were applied to medieval belts, straps, boxes and other objects of leather, textile and wood. Generally, if the rivet is short and blunt-ended, it may be assumed to have been for leather, pushed through a hole after the leather had been moistened.

SF 31 Domed, circular sheet mount. Slightly damaged around one edge. Rivet no longer survives, but traces are still embedded on the other side. Dia: 12mm. Context 008.

Wire loop / ring

SF 121 Ring / hoop; curved piece of copper; essentially a rolled piece of copper bent round to form a ring, edges overlap to make the ring. Dia: 18mm; T: 2mm. Context 012.

Button

SF 53 Modern four-holed button. Dia: 17mm. Unstratified.

Needle

SF 101 Needle? Tapering, pointed object with a hole at the the top. Probably a needle. L: 43mm: T: 2mm. Context 008.

Pin shaft?

SF 168 Shaft; bent piece of wire; tapers to a point; possibly the shaft of a pin? Not enough survives to be sure of original object shape. L: 42mm; T: 2mm. Context 001

Mount

SF 53 Trapezoidal mount; with attachement holes are either end. Decorated plate. L: 38mm; H: 11mm; T: 2mm. Unstratified.

Miscellaneous sheet

Four pieces of sheet metal were found. Not enough of the original shape or size survives to ascertain original shape or size.

SF 53 Miscellaneous sheet with two punch holes; also has 2 incised linear lines. Unstratified.

SF 53 Miscellaneous sheet or strip; broken at both ends; one end has the remnants of a circular hole. Unstratified.

SF 53 Sheet metal with remnants of a rivet. Broken at both ends. Possible signs of decoration or an 'x' on one side. Unstratified.

SF 149 Miscellaneous piece of sheet; broken on all edges. Context 002.

IRON

Andy Heald

One hundred and eighty-seven fragments were recovered from the excavations at Aberlady. All of the ironwork is corroded and assessment could only be undertaken with the aid of X-radiographs. Due to the presence on site of a metal-detectorist for the duration of the evaluation it is of little surprised that metal objects dominated the assemblage. The Aberlady assemblage is dominated by nails although there are a few other diagnostic objects, for example knives, buckles, horseshoes, an auger, handles and a possible stylus.

A range of objects were made from iron during the Iron Age through to the post-medieval period. With the advent and wider spread use of iron from the first millennium BC, particularly with the influence of the Romans, many types remained consistent throughout two millennia, making finds recovered from topsoils and mixed agricultural soils impossible to date precisely. Some of the objects described below, therefore, could date to anytime between the Iron Age through to modern times. That said, although the assemblage is chronologically indistinctive, most of the objects which can be broadly dated (the knives, the buckles and the horseshoe) would probably fit better into a post 9th century or later time bracket. That said, it is possible that one knife could be

earlier in date, and possibly date to the mid- to late-first millennium AD. Measurements (in millimetres) are largely taken from X-rays, using the abbreviations: L length, W width, T thickness, H height, D diameter.

Knives

Three knives were recovered from Aberlady; two from topsoil and/or mixed agricultural soils. One [SF 126a] came from a context argued to be mid- to late-first millennium AD in date.

Knives were used during the Roman Iron Age through to the present day. Extensive studies have been undertaken on the Roman (Manning 1980); Anglo-Scandinavian (Ottoway 1992) and the Medieval periods (Cowgill et al 1987) which create a basis for cultural and chronological discussions. Up until the 13th/14th centuries the main type of knife used was of the whittle tang type, whereby the tang is inserted into handles; later handles had scale tangs with riveted handles. The Aberlady knives are of the whittle-tang type and are similar to examples from Anglo-Scandinavian York (eg Ottoway 1992, 561, fig 227, nos 2773, 2776). However, they can also be paralleled on later sites, for example Medieval London, where the knives date to the 13th/14th centuries (Cowgil et al 1987, 78 to 81, fig 55). Closer to home examples are known from a range of Scottish medieval sites including and Perth (Ford 1987, 131-2, illus 65, nos 74-77, 80-83; Cox 1996, 773, 775- 776, illus 21, nos 332, 333, 340), Edinburgh Castle (Clark 1997, 154-55, illus 130, nos1, 10, 11) and Aberdeen (Goodall 1982, 188-9, no 87). Further, similar knives are known from Early Historic sites such as Dunadd (Lane & Campbell 1990, 161, illus 4.7.1). At best then, all we can say regarding the Aberlady knives is that they probably date to sometime between the mid-first millennium AD through to the mid-second millennium AD.

Knives were used for a variety of purposes in daily life and the range of types and of size and shape is considerable. A knife's practical function is probably related as much to its size and proportions as to its form. Under the criteria outlined by Ottoway (1992, 583) it is likely that the knives were used for a variety of domestic or craft activities, as opposed to weapons or specialist tools.

SF 126a — Knife. Slightly curved blade with straight back tapering to the tip. The tang is intact, rectangular in section, tapering to a blunt rounded point. The tang joins the back of the blade almost without a shoulder. L 78mm; blade length 52mm, width at shoulder 12mm, thickness 5mm, tang length 22mm. Context 032.

SF 20 — Knife. Slightly curved blade with straight back tapering to the tip. The tang is intact, rectangular in section, tapering to a blunt rounded point. The tang joins the back of the blade with a small, distinct shoulder. L 74mm; blade length 48mm, width at shoulder 12mm, thickness 5mm, tang length 25mm. Context 001.

SF 30 — Knife. Slightly curved blade with straight back tapering to the tip. The tang is intact, rectangular in section, tapering to a blunt rounded point. The tang joins the back of the blade almost without a shoulder. L 58mm; blade length 44mm, width at shoulder 12mm, thickness 5mm, tang length 16mm. Context 008.

Buckles

A range of iron buckles were in use from the Roman into the post-medieval period. Diversity in form, decoration and material is a feature of all buckles from all periods, because these ubiquitous functional accessories present opportunity for fashionable expression at virtually every level of society (see Egan and Pritchard 2002, 50-54 for summary). The two examples from Aberlady are of a basic type, plain design and use on a wide range of leather and textile articles, such as belts and harness fittings. Similar to the knives described above they could date from the Iron Age through to the post-medieval period.

110b Buckle. Simple rectangular frame. Length 31mm; width 25mm; thickness 4mm. Unstratified.

110e Buckle. Simple square frame. Length 38mm; width 27mm; thickness 4mm. Unstratified.

Horseshoes

The function and history of horseshoes have been discussed by Clark (1986), leading to an established typology, at least for Medieval London. Ottoway (1992, 707) suggests that the shoeing of horses is necessary if the horse are passing regularly over hard surfaces which wear down the hooves, so that the introduction of horseshoes may to some extent parallel the increasing use of metalled streets in the 9th to 11th century settlements.

Regards date many scholars believe that there is no sound evidence for the use of horseshoes in the Roman Iron Age, nor indeed the Early Historic period. Manning (1985, 63) omits horseshoes from his account of the British Museums collection of Romano-British ironwork on the reasonable grounds that all are unstratified. Horseshoes are, however, known from the Anglo-Scandinavian world with examples, for example, known from York and dated to the late 10th or 11th centuries (Ottoway 1992, 707). Horseshoes, of course, become far more widespread during the later medieval and post-medieval periods. The three Aberlady examples are from topsoil or mixed agricultural soils and it is more likely they date to the later medieval period. Unsurprisngly horseshoes are known from a range of other Scottish medieval sites including nearby Tantallon Castle, East Lothian (Caldwell 1991, illus 4, nos 32) and Edinburgh Castle (Clark 1997, 161-2, illus 133, no 84) and a myriad of other sites including Perth (Ford 1987, 137; Cox 1996, 773-774, illus 21, no 297), and Aberdeen (Goodall 1982, 188-9, no 83).

SF 172a Horseshoe. Broken; half survives. Complete horseshoe with three (possibly four) rectangular nail-holes, two of which are occupied. Length 88mm; width 63mm; thickness 8mm. Context 001.

SF 47c Horseshoe. Incomplete horseshoe with one visible hole, occupied. Length 78mm; width 26mm; thickness 8mm. Context 002.

SF 145 Horseshoe. Incomplete horseshoe with three visible holes, none occupied. Length 98mm; width 25mm; thickness 8mm. Unstratified.

Auger

One object from Aberlady has the appearance of an auger, although the identification is tentative due to corrosion. Spoon augers have a long life, beginning in the Roman period (Manning 1985, pl 12, B55-6) to almost the present day with relatively little change in basic shape (see Ottoway 1992, 533). The auger was basically used for boring or enlarging holes in wood but a variety of blade sizes and forms throughout the first and second millennia indicates that some specialized adaptation might be made for particular types of work.

29.1.a Tool / Auger. The spoon, shaft and tang survive. Length 188mm; width 9mm; thickness 8mm. Context 001.

Structural fittings

Nails

The most common iron finds from the site were nails, with 137 catalogues examples. The nails were characterised by study of their overall length, the diameter, shape, and thickness of the head,

and the section of the shank. All of the nails had square-sectioned shanks and although a variety of head shapes were found, the majority were flat and either (sub)square or rectangular. Square-sectioned rod fragments with no other distinguishing features were assumed to be nail fragments.

Structural Plates

There are numerous unpierced sheet plates recovered from Aberlady (listed in the Appendices). These could come from a variety of objects, including bindings, straps structural fittings, or boxes.

Rings

Three rings were recovered from Aberlady. Again, these could come from a variety of objects, including bindings, straps structural fittings, boxes or ornaments.

53a Ring. Penannular, open ring. Diameter 17mm. Thickness 4mm. Unstratified.

53q ?Ring. Rectangular sheet, curved and broken at both ends. Possibly a ring or a fitting. Diameter 11mm. Thickness 7mm. Unstratified.

66 Ring. Penannular, open ring. Diameter 26mm. Thickness 9mm. Context 016.

Hook

SF 108 Hook. Fragment of a thick square-sectioned rod which has been bent back on itself to form an open hook. L:179mm. Context 024.

Miscellaneous objects

?Stylus

SF 024 Tapering ironobject with a splayed V-shaped head. Such objects with V-shaped heads, which would have been used as an eraser, are often referred to as stylus' in the literature (eg Ottoway 1992, 606-7, fig 252, no 3011). However, x-ray does not show any of the other diagnostic features of a stylus, thus identification of this object must remain tentative. Context 002.

Tapering hollow object

65a and 65b Two fragments of a curvilinear hollow object. One part is broken at both ends and is, therefore, difficult to reconstruct original shape. The other fragment tapers to a point although the point is also broken meaning that reconstruction of original shape is difficult. It is possible that the two objects were once part of the same object. Context 008.

Structural fitting?

SF 82a Context 15

Ard share or ferrule?

53a.a Fragment of a curved sheet that converges to a point at one end. Possibly a plough share. Height: 110mm; width: 48mm; Thickness: 24mm. Unstratified.

LEAD

Sixteen small miscellaneous lead sheets or lumps were recovered by the metal-detectorist. Again, the majority of this small assemblage was recovered from ploughsoil or unstratified contexts. A full catalogue can be found in the archive. Folded strips and sheet fragments dominate the assemblage. A small quantity of nodular casting waste and off-cuts suggests that a limited amount of lead-working was taking place on the site, although its date is unclear as the finds are unstratified.

VITRIFIED MATERIAL

A small quantity of vitrified material was recovered during the excavations at Aberlady, the majority from secondary contexts and ploughsoil. Although a little iron-working debris is present, many of the fragments cannot be related to iron-working activities and are likely to be residues from hearths or another high-temperature process.

This material was broadly categorised on criteria of morphology, density, colour and vesicularity and has been described using common terminology (eg McDonnell 1994). A full catalogue is given in the archive report.

Plano-convex hearth bottoms – smithing?

Smithing hearth bottoms are an accumulation of slag formed in a pit as the result of high temperature reactions between the iron, iron-scale and silica from either the clay furnace lining or sand used as a flux by the smith. They are recognisable by their characteristic plano-convex form, having a rough convex base and a smoother, vitrified, upper surface. Smithing hearth bottoms are typically smaller in size and lighter than furnace bottoms from smelting (McDonnell 1994, 230). The size and weight of those from Aberlady are consistent with smithing hearth bottoms.

Unclassified slags

The remaining bulk slags are fractured and small. Such slags are a common component within a slag assemblage and can be produced during both iron smithing and smelting. Differentiating between the two through visual examination alone is difficult and for this reason such slags are often referred to as undiagnostic slags.

THE ENVIRONMENTAL ASSEMBLAGE

MACROPLANTS

A total of 23 bulk samples were submitted for environmental analyses from the excavation undertaken at Glebe Field Aberlady, East Lothian. With the exception of samples from context [025] and [024] all of the samples were collected only from deposits that were beneath the topsoil and agricultural soils. They derived from a series of floors/deposits, middens associated with the cellular structures [011,012,013,015, 017, 019], a ditch [040], and negative pits [030, 032, 033].

Methodology

The bulk samples were processed in their entirety in laboratory conditions using a floatation method designed to retrieve charred macroplant remains and artefacts (cf. Kenward *et al*. 1980). The sediment consisted of a sandy silt which did not require any pre-treatment. All plant macrofossils were subsequently examined at magnifications of x10 and up to x100 where necessary to aid identification. Identifications were confirmed using modern reference material and seed atlases stored at AOC Edinburgh (Cappers *et al* 2006; Jacomet 2006). Taxonomic and nomenclature for plants follows Stace (2010).

The recovery of charcoal from Scottish sites tends to be limited and this is true of the assemblage from Aberlady which was very small. To ensure as much information as possible was

obtained from this small charcoal assemblage the conclusions presented in the discussion can only be described as interpretive assumptions.

Results

The results are presented in table 1 the charred macroplant and table 2 the charcoal (see appendices).

A total of 106 charred plant remains were recovered from the 16 contexts and the assemblage was dominated by poorly preserved cereal caryopses. The species identified were barley (*Hordeum* sp), bread/club wheat (*Triticum aestivum-compactum* L), wheat (*Triticum* sp) and oat (*Avena* sp). The dominate species was wheat which accounted for 22% followed by bread/club wheat (12%), oat (8%) and barley (7%). The remaining cereal which formed 51% could not be identified further due to poor preservation. Given the level of poor preservation and absence of chaff it was not possible to determine if the oat belonged to the cultivated or wild variety. The plant remains were concentrated in context [33 Slot B] with the rest of the assemblage scattered throughout the remaining 15 deposits with no evidence of either selective or deliberate disposal. There was evidence of a weevil infestation and malnutrition affecting a small number of wheat caryopses in context [33 slot B]. There was also a single pea (*Vicia sativa* L) and three wild radish (*Raphanus raphanistrum* L) pod segments. The remaining four plant remains could not be identified further due to poor preservation.

The charcoal assemblage was small (5.5g) and 40 fragments were suitable for species identification from 14 contexts. The species were birch (*Betula* sp), hazel (*Corylus avellana* L), apple/pear/hawthorn/quince (*Maloideae* sp) and elm (*Ulmus* sp). The dominate species was hazel which accounted for 45% of the fragments identified followed by birch (35%), apple/pear/hawthorn/quince (15%) and elm (5%). There was no evidence of any worked wood offcuts or structural burning within any of the deposits. There were two fragments of hazel roundwood.

The results are presented below by feature

Structure 2

Possible entrance [019]

Macroplant: There was one barley and four cereal caryopses in context [019].

Charcoal: A small quantity of charcoal (0.5g) was identified as birch and hazel.

Synthesis: This small deposit of macroplant and charcoal has derived from domestic food and fuel refuse.

Structure 4

Macroplant: From context [017] there was a small mix of one barley, four bread/club wheat, one wheat, two oat, one cereal and three wild radish pod fragments. A further seed could not be identified due to poor preservation.

Charcoal: The charcoal assemblage was small (0.2g) and was identified as birch and hazel.

Synthesis: These remains are representative of domestic waste debris which was probably overlooked during cleaning before being trampled into the floor surfaces.

Structure 3

Deposit within structure contexts [011], [011 Slot A], [012 slot B], [013]

Macroplant: A total of 10 charred macroplants were recovered from four floor/occupation deposits from within a small structure. These were identified as bread/club wheat, wheat and pea. This was the only part of the site from which pea was recovered. There was no evidence of selective or deliberate disposal within any particular context.

Charcoal: Small quantities of charcoal totalling 1.8g were recovered from these four contexts. Hazel charcoal (0.7g) was present in context [011] along with hazel and elm (0.4g) in context [011Slot A).

The only species in context [012 Slot B) and [013] was birch which accounted for 0.5g and 0.2g respectively.

Soils outside the structures
Midden [015]
Macroplant: A single bread/club wheat was recovered from this midden.
Charcoal: No suitable charcoal for species identification was recovered from this context.
Synthesis: This material was of little interpretive value.

Paving [022] contexts [020] and [021]
Macroplant: Five poorly preserved cereal caryopses were scattered among the paving deposits.
Charcoal: A small quantity of charcoal (0.2g) present in [020] was identified as birch and apple/pear/hawthorn/quince.
Synthesis: This small accumulation of cereal and charcoal is representative of domestic waste which was probably accidently trampled into this surface.

Earlier features

Pits
Pit [027] context [028]
Macroplant: No charred macroplants were present within this pit.
Charcoal: There was a single fragment of bitch charcoal (0.1g).
Synthesis: This material was of little interpretive value.

Pit [029] context [030]
Macroplant: A single poorly preserved wheat caryopsis was recovered.
Charcoal: No charcoal was noted within this pit.
Synthesis: This material was of little interpretive value.

Pit [031] context [32]
Macroplant: In this pit there was a single barley, one bread/club wheat and nine cereal caryopses.
Charcoal: There was no evidence of charcoal fragments larger than 4mm within this pit.
Synthesis: The cereal remains are evidence of small accumulations of food refuse.

Under Structure 1
[006] context [039]
Macroplant: There were no charred macroplants within this deposit.
Charcoal: The charcoal fragments (0.3g) were identified as birch, hazel, elm and apple/pear/hawthorn/quince.
Synthesis: This material was of little interpretive value.

?Ditch 1
Fill [033]
Macroplant: This context contained the largest concentration of macroplants with 55 recovered. The species were four barley, five bread/club wheat, 15 wheat, six oat and 24 cereal caryopses. There was also a single seed which could not be identified further. Preservation of these remains was poor but there was also evidence of damage attributable to a weevil infestation and malnutrition which affected the wheat in particular.
Charcoal: The charcoal assemblage (0.5g) was identified as hazel which included two roundwood fragments.

Synthesis: It is possible the cereal was deliberately destroyed due to the presence of weevils. The charred macroplants and charcoal is representative of small accumulations of domestic rubbish.

Fill [041]
Macroplant: There was no charred macrplant present within this feature.
Charcoal: A small number of of hazel charcoal (0.7g) was recovered from this ditch.
Synthesis: This material was of little interpretive value.

Fill [040]
Macroplant: Two poorly preserved seeds were present within the primary fill of this ditch but neither was identifiable.
Charcoal: A small quantity of charcoal (0.8g) was identified as birch and apple/pear/hawthorn/quince.
Synthesis: This material was of little interpretive value.

Discussion
Taken within its entirety the cereal assemblage recovered from Aberlady suggests that wheat was the favoured cereal crop with smaller numbers of oat and barley consumed as well. The soils around Aberlady are particularly sandy which traditionally tends to favour the cultivation of barley over wheat crops which are normally more demanding in terms of soil conditions. If wheat was the dominate crop at this site then it was either an imported item from more fertile agricultural lands or the people of Aberlady were able to invest significant manpower and manuring resources in maintaining their fields to successfully harvest wheat in sandy soil conditions. Given the small size and poor preservation of this assemblage the actual economic importance of specific cereal groups is difficult to establish with any strong degree of certainty based on the current evidence. Instead what can be ascertained is that the people living at Aberlady had access to a range of cereal crops including other food sources such as peas. The presence of oats and peas has previously been questioned as to whether they were a trade item or introductions by the Anglicans into the east coast of Scotland (Dickinson & Dickinson 2000; 140). The small number of both these species at Aberlady makes it difficult to determine if they were cultivated locally or were imported food items.

The absence of chaff plus the small number of weed seeds suggests that the processing of cereal crops either occurred prior to its transfer to Aberlady or that such waste was disposed of in another location away from the current excavated area.

The wood species recovered from Aberlady are all typical finds that would usually be found growing in woodland and hedgerows. There is no evidence of any structural burning within any of these contexts, nor is there deliberate disposal of large quantities of fuel debris. Instead the charcoal assemblage probably accumulated haphazardly during general domestic cleaning.

While the charred macroplant and charcoal assemblages are both small it is still possible to infer some information regarding diet and status. The cereal species from Aberlady are all common finds from the Anglo-Saxon period and similar results have been reported at the Anglian monastic settlement in Auldhame, East Lothian (Robertson 2016b ;122), Whithorn in Wigtownshire and at Edinburgh Castle. The only noticeable difference was that the inhabitants of Aberlady potentially preferred wheat, whereas those at Auldhame, Whithorn and Edinburgh castle clearly favoured barley. If this is true this could be interpreted as evidence that Aberlady possessed the resources to acquire wheat which was usually a more expensive food commodity along with other potentially imported food items such as oat and pea. The people living at Aberlady in the Anglo-Saxon period had access to a range of cultivated cereals, vegetables and wild resources in the form of woodland.

ANIMAL BONES

A total of 25 archive boxes of animal bone (155 kg) were recovered from the excavation undertaken at Glebe Field Aberlady in East Lothian. Similar to the artefacts all encountered bone was recovered, including from the topsoil and agricultural features. Almost half the assemblage (in terms of numbered samples) derived from the topsoil and agricultural soils, meaning, of course, that a significant proportion of the assemblage is likely to date to the post-medieval or later periods.

That said, like the macroplant fossils animal bone was collected from a range of features underneath the topsoil and agricultural soils; that is associated with the soils and infills of the cellular structures and the negative features underneath the stone structures.

Methodology

The fragments were identified to element and species with the aid of skeletal atlases (Hillson 1986; 1996; 2001; Schmid 1972) and the reference collection stored at AOC Archaeology Group. Where an element could not be identified to species, it was instead described as large mammal (horse/cattle/deer) medium mammal (sheep/goat/pig) or small mammal (dog/cat/rodent). Evidence of epiphyseal fusion, tooth eruption and wear were briefly noted to determine the potential for providing age of individuals within the assemblage. The clean fragments were rapidly assessed for evidence of butchery, pathology, bone working, burning and carnivore gnawing.

Results

Assessment of the faunal remains revealed the presence of cattle, horse sheep/goat, pig, dog, bird and fish. Preservation of the assemblage ranged from poor to excellent but most fragments were designated as adequate to good. Discounting the bone derived from the topsoil and agricultural soils (eg only discussing those species from the structure fills, associated soils and negative features) we see that the assemblage comprises a mixture of cattle, horse sheep/goat, pig and dog. This is similar to the recent excavations at Aberlady (Robertson 2016a, 123).

DISCUSSION

The overall aims and objectives of the 2016 evaluation work were outlined above; the table below gives an appraisal of whether these objectives were met:

Research Questions	**Achieved?**
Chronology	
Obtain secure dating material / artefactual evidence from the site to be used in chronological interpretation.	Yes
Recover environmental samples and artefacts which will assist interpretation and chronology of the past activities within the site and the function of the structures;	Partially
Materiality	
Ascertain their structure material – wood, stone or mortar?	Yes
Preservation	
Establish the nature, date, purpose and state of preservation of buried features within the excavation area;	Yes
Establish the presence (or otherwise) of preservation of the rectangular buried features, (interpreted from previous geophysical survey images) in the Glebe Field;	Partially
Characterisation, use and social structure	
Establish the extent of the archaeological deposits within the Glebe Field rectangular structures;	Partially

Excavate a sufficient area of the site to establish the extent and character of the archaeological remains present in order to identify individual structures, internal features and deposits;	Partially
Consider whether the large rectangular building(s) are of grandiose appearance and dimensions?	No
Phasing of Occupation	
Establish the relationship between the different rectangular structures interpreted from the geophysical surveys;	No

Table 4: A review of the specific research questions for the 2016 Aberlady work

RESEARCH QUESTION 1: CHRONOLOGY

One of the aims of the evaluation was to obtain secure dating material / artefactual evidence from the site to aid chronological interpretation. This was achieved by obtaining secure samples from underneath sealed deposits to obtain three C14 date samples. Dating from artefactual material was more difficult: although a range of artefacts and ecofacts were recovered that could be individually dated the large majority were not found *in situ*, but from mixed deposits. Thus, only broad patterns could be ascertained.

That said, taking account of the stratigraphy, the recovered assemblages and the C14 dates it is possible to suggest that 4 broad phases were uncovered during the Aberlady evaluations, summarized thus:

PHASE	ACTIVITY	DATING MATERIAL	SUGGESTED SPAN
Phase 1	Topsoil and buried Agricultural Soils	Glass Later 18th-early 20th century Pottery late 12th to 19th century Coins, 13th C, 17th C Metal 6th to 20th century	Post 9th to 20th century
Phase 2	Soil contexts associated with the cellular structures (maybe infill or contemporary) or most likely both	Glass late 16th to mid 17th century Pottery late 12th or 13th century Combs 6th to 12th centuries Coin AD837 – c. 855	post 7th to 17th century
Phase 3	Stone structures	n/a	Post 7th to 9th century
Phase 4	Ditches and pits	C14 AD656 to AD875	7th to 9th century

Table 5: The Phases of Activity at Aberlady

Late Medieval to Modern Activity

Phase 1

As noted above the entire site was covered by a topsoil and agricultural soil that contained a mixed and varied assemblage of artefactual and ecofactual material. No samples were taken for C14 dating due to the mixed nature of the assemblage. In terms of dateable artefacts the overwhelming majority of the assemblage covers a time span from around the 13th century to the modern era, with the majority falling into the latter period. The metal knife could be earlier although this is an anomalous find within the wider assemblage that is best viewed within a mixed assemblage of high medieval, post-medieval and modern periods. Phase 1 is, thus, interpreted as relating to the use of Glebe Field during the mid to late second millennium AD, that is around the 13th to 20th centuries with some activity contemporary with Kilspindie Castle. .

Late 1st millennium to early 2nd millennium AD

Phase 2

This phase is defined and represented by the deposits below the topsoil and mixed agricultural soils (phase 1) but above the lower (phase 3) stone structures. Phase 2 soils though were mixed in places and shallow and are interpreted to represent the use of the stone structures, their abandonment and subsequent mixing of deposits as the above agricultural soils were created. This was the hypothesis on site and this theory is supported by the recovery of material that dates to between the 6th to c16th centuries AD. That said phase 2 is the level in which mid- to late first millennium AD material culture first appears on site (eg the Anglo-Saxon coin and the bone combs) and it is notable that no such material was recovered from the above phase 1 levels. Together with the contextual details of the finds the authors suggest that Phase 2 activity dates to around the 6th/7th to 12/13th centuries AD. It is also the belief that the actual structures in which the phase 2 soils sit in the earlier part of this sequence.

Phase 3

This phase is represented by the 4 stone features uncovered and assumed to be associated with the Phase 2 soils that filled and surrounded them. Given the artefactual dates from above (Phase 2) and below (Phase 4) it appears that Phase 3 dates to between the 7th to 13th centuries AD. However, it is the belief of the authors that all of the 4 stone structures are contemporary and probably date to around the 9th to 10th centuries AD. This is due to the shallow nature of the soils beneath the structures from which a consistent suite of C14 dates were obtained, and represent Phase 4 activity.

7th to 9th centuries AD

Phase 4

Phase 4 is represented by a series of negative features (ditches, pits and postholes) that underlay the Phase 3 stone structures and their associated soils. Three radiocarbon dates were obtained from this phase: all three form a consistent pattern that fall between AD656 to AD875, that is the mid-7th to late 9th centuries AD. As noted, these dates all form a *terminus post quem*, for the Phase 3 structures 1 to 4 above them (that is, the earliest time the structures could have been constructed and used).

RESEARCH QUESTIONS 2 & 3: MATERIALITY & PRESERVATION

Previous interpretations of the geophysics features had focused on timber structures being the dominant structural type in the specific area of the Glebe Field chosen for excavation. Hence, the original intention of the evaluation was to open a far bigger area across the two putative timber buildings; in essence to strip-and-map negative features expected to represent timber buildings. But, of course, immediately under the topsoil and burial agricultural soils was a series of stone features and stone spreads. This was an unexpected find; the excavations demonstrated the presence of stone archaeology across the entire area of the evaluation. The limited slot trenches below the stone features none-the-less revealed a series of negative features which are likely to be a combination of ditches and posts/pits, of which some presumably held timber features.

Regards preservation the structural archaeology was found to be in a good state, presumably due to the lack of widespread deep ploughing the field and the previous use of the field as the Glebe for the Church. Thus, there is a good chance of well-preserved archaeology across other nearby areas of the Glebe Field.

RESEARCH QUESTION 4: CHARACTERISATION, USE & SOCIAL STRUCTURE

Late Medieval to Modern Activity

Phase 1

As noted above the entire site was covered by a topsoil and agricultural soil that contained a mixed and varied assemblage of artefactual and ecofactual material. Given the use of a metal detectorist on site it was unsurprising that the majority of finds from the evaluations were of metal, and the large majority deriving from this phase. Although of interest in the wider Aberlady context, their residual and mixed context from which they derive is of little us in wider interpretation of the specific site as the material could be a series of mixed, individual midden deposits scattered across almost a thousand years. The same is true of the abundant animal bone.

Thus, Phase 1 is best interpreted as relating to the use of Glebe Field during the mid to late second millennium AD where the use of the area, including during the time of Kilspindie Castle, was given over to domestic and farming activities. Given the area was only scheduled in the 1990s then it is entirely likely that the upper levels have been consistently mixed for at least 700 years; hence the mixed assemblage of material.

Late 1st millennium to early 2nd millennium AD

Phases 2 and 3

This phase comprises the period between the use of the (phase 3) stone structures, their abandonment and subsequent mixing of deposits as the above agricultural soils are created. No *in situ* floor deposits survived within Structures 2 and 4 so it is impossible to be sure of the function of said buildings. That said, the mixed assemblage of pottery, metal and ecofactual remains suggest a domestic leaning, perhaps with some indications of small-scale crafts including ironworking. Clearly the inhabitants had access to Anglo-Saxon trade, demonstrated by the coin; perhaps the combs are best interpreted in this light too.

Not enough of structure 1 was exposed during the current evaluation to be able to characterize this feature. That said, the stone feature(s) uncovered during the evaluation do appear to align with the geophysics results (fig 19) but not as the putative western edge of a timber building (supposedly defined as the dark low resistance in the geophysics results). Instead, the stones appear to align with the high resistance anomalies of white. The stone structure could, therefore, still be interpreted as the remains of a stone structure (walling or internal features) possibly associated with the putative substantial rectangular building present on the geophysical surveys. Equally, the geophysics results could be misleading and the recovered stone features could be a remnant of another building; indeed it could be a path. If the latter is true then the geophysics do not seem to support this claim as it is unclear where the path is going to or ending. Definition of the structure, of course, is made equally difficult due to the truncation by the post 1853 wall which slices across the entire trench. Put simply, further evaluation would have to take place to the south and west of the evaluation trench to ascertain what the stone structure uncovered in 2016 was. As a minimum excavation of another 20% of the putative structure would be necessary to ascertain the presence (or otherwise) of said features.

Irrespective, it is clear that the date of the feature is broadly within the date bracket suggested by the earlier geophysics and interpretation (eg Blackwell and Neighbour both suggest a broad date around the 8th centuries AD), even though the full extent of the structure(s) cannot yet be ascertained.

Finding parallels for structures 1 to 4 is difficult for a number of reasons. First, given we do not know the true extent and shape of structure 1 then we can little more. If it does conform to the geophysics shape and extent that the structure may represent a significant building, as has long

Figure 19: The trench plan and the geophysics: the stone features recovered during the 2016 work appear to align with the white high resistance anomalies recovered in the earlier geophysical fieldwork. The darker, lower resistance, anomalies (assumed to be negative features and remnants of the rectangular timber buildings) were not recovered in the 2016 evaluation trenches.

been thought. But it would be of stone, not wood. Structures 2 to 4 appear to be ephemeral 'cellular' buildings. Cellular buildings, admittedly far more robust examples, are best known from the Atlantic Scottish area and being within a different region and cultural milieu the similarities probably have little further meaning. The simple fact is that stone structures of this date are rare finds across southern Scotland, thus parallels are difficult to find.

7th to 9th centuries AD

The three C14 dates all returned consistent dates of between the 7th and 9th centuries AD, entirely consistent with the Anglo-Saxon period. As outlined through this text these dates relate to phase of negative features (ditches, pits) underlying the positive features (stone structures) outlined above. Every slot excavated under the stone features revealed negative features (ditches, posts, pits) suggesting that there is a plethora of negative features within the excavated area that date to the Anglo-Saxon period. It is clear that no archaeology uncovered within the current evaluation can begin to characterize the putative features but within this context it is worth considering some possibilities.

Recent work at nearby Auldhame (Crone & Hindmarch 2016) uncovered a suite of archaeology related to the Anglo-Saxon and later periods. Their work was dominated by the stone chapel and the numerous graves but they did none-the-less uncover other features located on the fringes of the site away from the core of the graveyard (ibid., 30, fig 30).

Figure 20: The chapel, graveyard and ditches (in grey) uncovered at Auldhame

The majority of these features were negative, and although defined as 'ditches' were of different shapes and sizes, perhaps suggesting that they had different characteristics and features. Some probably represent buildings. The earliest building on the site is represented by a short length of a narrow bedding trench, which was probably a small earth-fast timber oratory. The fills

of the negative features were all dated. Ditch 1 returned a C14 date of AD680-890; Ditch 2 returned a date of AD690 -940 and 660-860; Ditch 3 returned a C14 date of AD790 to 950. Ditch 4 returned dates of AD650-810 and AD650-820. In essence, all of the negative features from Auldhame date to around the mid-7th century AD through to the 9th/10th centuries; exactly the same date as the negative features uncovered at Aberlady.

Crone and Hindmarch (ibid., 50) suggest that perhaps the Auldhame evidence suggests a transition from earthfast timber construction to stone-footed timber buildings. This has been noted on other sites, eg Whitby (Rahtz 1976, 461), Hartlepool (Daniels 1988, 175-81) and Hoddom (Lowe 2006, 183) with this transition arguing to take place around the mid-to later 8th century AD.

With this in mind it is worth turning our attention to nearby Dunbar. This site is long argued to be one of the most important settlement sites in the region and has been described as '*urbs sua Dynbaer*', 'his town of Dynbaer', him being the Northumbrian king at the time, Ecgfrith. Ecgfrith imprisoned Wilfred, Bishop of York in Dunbar in AD 680, implying that it was a royal stronghold. The town is also described as being in the charge of a *praefectus*, interpreted as a royal official who may have had administrative responsibility for a region centred on Dunbar.

Figure 21: The Royal site of Dunbar

Excavations at Castle Park have revealed evidence of Northumbrian settlement and have also shown that this was originally a fortified British tribal centre taken over by the Northumbrians. There were many rectangular earth-fast timber buildings, including a *grübenhaus*, a sunken-floored building that is very characteristic of Anglo-Saxon settlement. Although they did not find a large hall, which you would expect to find on a royal site, its royal status was confirmed by the discovery of a mortar-mixer, a structure only associated with high-status sites elsewhere in Britain and on the Continent. Radiocarbon dates and artefacts indicate activity there from the 7th to 9th centuries AD (see Perry 2000 for full discussion). Again, on this site the archaeologists suggest that the transition from timber to stone took place sometime between the mid-8th and mid-9th centuries.

Is it possible therefore that within the limited evaluation trench in Aberlady that we are seeing the remnants of transitions that appear to have taken place on other important, nearby Anglo-Saxon sites (eg Auldhame, Dunbar, Whitby) whereby we see the transition from timber construction to stone, sometime around the 8th to 9th centuries. It surely cannot be coincidental that all of these sites have produced almost identical C14 dates to those at Aberlady. Clearly

Aberlady should now be viewed within this expanding repertoire of evidence and on sites that show a transition from timber to stone architecture.

In summary, it appears that at Aberlady there was a (presumably permanent) episode of activity in the 7th to 9th centuries AD that involved the use of timber buildings. For whatever reason there was then a transition to stone-footed timber buildings, perhaps around the same time as this happened at other nearby sites. Thus, at Aberlady future work should concentrate not only on better defining the stone structures, but also the negative features that lie beneath the stone remains; not only would one have to expand the horizontal nature of the excavation area, one would also have to, arguably, remove the uncovered stone features to ascertain what was the characteristics of the negative features below were.

RESEARCH QUESTION 5: PHASING OF OCCUPATION

One of the aims of the project was to establish the relationship between the different rectangular structures interpreted from the geophysical surveys. As only c15% of the area was evaluated, it was impossible to define the shape and phasing of the two putative timber buildings.

CONCLUSION AND SUMMARY

The finds uncovered by Roger McWee, the Anglo-Saxon cross fragment and historical texts suggest that that the area in and around Aberlady was likely to have been occupied by the Anglo-Saxons during this period (see Lowe 1999; Crone and Hindmarch 2016, 129-132 for an excellent summary of other Anglo-Saxon activity within the surrounding Aberlady hinterland). The 2016 work at Aberlady has, of course, added to the existing artefactual corpus and demonstrated the presence of people during the Anglo-Saxon period. The coins and arguably the combs may suggest access to trade and commerce and the ecofacts and some artefacts (e.g. the slag) suggest that the area in the Glebe Field was taken over to domestic and small-scale craft activities during this period.

Placename, artefactual and documentary evidence notwithstanding, the physical archaeological evidence for Northumbrian activity in Lothian is not extensive. One of the major achievements of the recent work at Aberlady is, therefore, to add to the meager settlement / structural corpus and demonstrate the actual physical structural presence of people during the Anglo-Saxon period in the Glebe Field.

In the original research design stage two assumptions were made: that the building archaeology in the Glebe Field would largely be of a 'negative type' and it would be permissible to excavate a large enough area over the two possible putative timber buildings to allow characterisation of the buildings. In reality the 2016 evaluation trench only exposed around 15% of the footprint of said buildings and the building archaeology largely turned out to be of stone. The latter restricted the available area uncovered and it was not, therefore, possible to undertake a large 'strip-and-map' exercise as per the original research design. What was uncovered in the trench though was very important: the work resulting in a suite of ephemeral stone cellular structures, apparently associated with a very large stone, but as yet ill-defined, feature (structures 1 to 4). These stone features were likely to have been built around the end of the first millennium AD during the 8th to 9th centuries AD.

Underneath those features was a range of negative features that presumably once housed timber fittings and buildings. Importantly, the excavations, supported by the C14 dates, seems to suggest that, whatever the actual building shapes were, there was a tradition of timber construction during the 7th to 9th centuries that appears to have ended, to be replaced by a stone tradition. As mentioned above such a tradition has been noted on other sites, including very nearby ones like Auldhame and Dunbar. Is it possible that the same thing happened at Aberlady? If

true, and it appears likely, then the future potential of Aberlady is huge. What we appear to have is a suite of well-preserved stone features (distinctly huge ones if the geophysical surveys match with the archaeology) that overlie preserved 7th to 9th century timber buildings. Although the current project did not find the putative timber buildings suggested in the geophysics, it did apparently discover two phase of buildings of which one, and arguably both, date to the mid to late first millennium AD. The evaluation therefore in one sense exceeded expectations.

To the artefactual and stone corpus we can now add structural remains to the Aberlady story. Historical analysis by Alex Woolf (pers. comm.) has tentatively linked the Glebe Field to the ancient site of Pefferham, an important, but as yet undiscovered, Anglo-Saxon site. The elaborate cross presumably once sat proud beside a church on the same spot as the present day Aberlady Kirk. This alone suggests a site of status and permanent presence. Standing on the grassy knoll looking towards the beach it appears that people in the mid-to later first millennium AD would have looked out across the Forth and, in the foreground, there may have been a series of timber buildings (presumably associated with the retinue of the church), these buildings to be replaced, for whatever reason, in stone. The monks crozier discovered by Roger McWee must also be considered here, perhaps indicative of the continuing religious importance of Aberlady.

Going forward it is clear that many of the research questions for Aberlady will only be answered by a larger scale excavation that investigate a sufficient enough horizontal area to establish the nature of the stone archaeology that was prevalent throughout the 2016 evaluation trench. But in addition, consideration would also have to be given to removing said features to uncover the 7th to 9th century negative features that appear to lie beneath.

ACKNOWLEDGEMENTS

ACHS and AOC would like to acknowledge the support of the landowner, the Church of Scotland, and the tenant, William Jackson. Particular thanks to all HES staff who aided in the research design and the excavations, as did the Archaeology staff at East Lothian Council. Special thanks to all the volunteers who took part in the community work and all the hundreds of visitors who visited the site. Final thanks to our funders Heritage Lottery Fund, East Lothian Council, Awards for All and the Strathmartine Trust.

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APPENDIX A: CONTEXT REGISTER

Context	Type	Sub-area	Description	Interpretation
0	Soil		Natural subsoil	Natural subsoil
1	Soil		Dark brown clay and sandy-silt with lots of grass roots with inclusions of small to medium rocks. Compaction fairly loose. Approximately 0.3m deep.	Topsoil. Upper surface of grass field - previously used for agriculture
2	Soil		Dark brown sandy, silty clay - more silty. Fairly loose. Depth varies from 0.1m to 0.5 m with deeper depth towards the north. Substantial inclusions of animal bone, sea shells, green glazed ceramics and white gritty ware	Buried subsoil, possibly medieval plaggan soil. This would explain the substantial animal bone and the rubble from (003 and 005) being ploughed up and plough damage
3	Structure		Loose concentrated patch of stone rubble, mixture of rocks, rounded and angular (small to medium size). Dimensions of rubble spread approximately 3.3m long x 0.8m wide; 0.25m height. Located at the east side of trench, slightly overlies structure 004 - sits within deposit 002	Rubble -probably from a truncated structure. May relate to undiscovered structure to the east of the excavation area. Sits on top of 004.
4	Structure		Stone structure of medium to very large stones (no mortar) laid flat. As it appears in the trench the structure is linear running north south down the trench. Wall 077 is built over it. At this point it is truncated to the south. Structure 006 is likely the same structure after this truncation.	Either a path or part of a very large structure running east west
5	Structure		Unorganised collection of stone rubble within dense 002. Mixed stone, large to small, rounded and angular. This deposit may be demolition material from as yet undiscovered features below - possibly plough damage of buried features, stone broken and fragmented over time. Some possible linear features and larger stones partially visible below it. Approximate measurements 7m wide (east-west) and 16m long (north-south). Covers most of the trench north of wall (007) and west of structure 004	Disturbed stone from underlying stone features that have been damaged by the plough
6	Structure		Stone structure of medium to very large stones (no mortar) laid flat. As it appears in the trench the structure is linear running north south down the trench. Continuation of 004, after truncation 009	Either a path or part of a very large structure running east west
7	Structure		Linear wall, orientation SSW, NEE. Construction varies - east end - large stones and topsoil; west end - thin band of sandy pale brown mortar with lots of crushed shell and small stones. Approx 0.8m wide and 0.1 to 0.3m high (mortar part 0.1m high).	Likely to be the remains of the foundations of a wall, as shown on OS 1853 maps. Variation in construction due to the re-use of structure 004 as a base at the east end, and overlying later stone rubble
8	Soil		Dark brown loose and friable with inclusions of sand, silt and clay with moderate crushed shell and abundant animal bone. Extends across southern half of the site from wall 007 to south end of trench.	Relict plough soil in southern half of trench - less disturbed plough soil; designated a separate context as deemed earlier than 002. Abuts the south-west enclosure wall (still to assign a number)
9	Cut	Slot C	Linear feature which extends NEE to SWW across the trench and through 004 and 006	Possible associated with the construction of wall 007; possible stone-robber trench
10	Soil		Dark brown sandy silt and clay with abundant shell and bone fragments. Loose and friable (2.7m x 1.8m). Similar in character to 011 - 017. Bounded by walls.	Possible floor / occupation deposit within small structure
11	Soil	Slot A	Dark brown loose and friable sandy silty clay with abundant sea shells and bone. Similar to 010, 012-017.	Possible floor / occupation deposit within small structure
12	Soil		Dark brown loose and friable sandy silty clay with abundant sea shells and bone. Similar to 010, 011, 013-017.	Possible floor / occupation deposit within small structure
13	Soil	Slot B	Dark brown loose and friable sandy silty clay with abundant sea shells and bone. Bounded by structure 004; deposit within stone rubble 005	Possible floor / occupation deposit within small structure
14	Soil		Dark brown loose and friable sandy silty clay with abundant sea shells and bone.	Possible floor / occupation deposit within small structure
15	Soil		Dark brown loose and friable sandy silty clay with abundant sea shells and bone.	Midden deposit to exterior of small cellular structures
16	Soil		Dark brown loose and friable sandy silty clay with abundant sea shells and bone.	Possible floor / occupation deposit within small structure

17	Soil		Dark brown loose and friable sandy silty clay with abundant sea shells and bone. Similar to 010, 011, 013-017.	Possible occupation / midden deposit
18	Soil		Dark brown loose and friable sandy silty clay with abundant sea shells and bone. Similar to 010, 011, 013-017.	Possible occupation / midden deposit
19	Soil		Dark brown loose and friable sandy silty clay abutting possible entrance into structure	Possible occupation / midden deposit
20	Soil		Dark brown loose and friable sandy silty clay abutting possible entrance into structure; within gap of paving (022)	Upper deposit within void in paving 022.
21	Soil		Mid grey brown loose and friable sandy silt with abundant crushed shells and occasional animal bone	Lower deposit within void in paving 022.
22	Structure		Area of paving at south end of trench to west of stone structure (006). Composed of large slabs of sandstone with no bonding material	Stone paving
23	Soil	Extension	Topsoil in trench extension	Topsoil. Upper surface of grass field - previously used for agriculture
24	Soil	Extension	Dark brown loose and friable sandy silty clay with abundant sea shells and bone.	Occupation deposit in Trench extension
25	Soil	Slot C	Dark brown loose and friable sandy silty clay abutting possible entrance into structure; within gap of paving (022)	Fill of robber trench (009)
26	VOID		VOID	VOID
27	Cut	Slot A	Fairly round, concave sides and base. 0.35m in diameter x 0.1m deep	Possible cut of small rounded pit/post hole
28	Soil	Slot A	Medium, brown sandy, silty clay, occasional small stones and shell fragments	Fill of cut 027
29	Cut	Slot A	Fairly round, concave sides and base. 0.35m in diameter x 0.1m deep	Possible cut of small rounded pit/post hole
30	Soil	Slot A	Medium, brown sandy, silty clay, occasional small stones and shell fragments	Fill of pit 029
31	Cut	Slot A		Cut of large pit
32	Soil	Slot A		Fill of pit 031
33	Soil	Slot B		Lower deposit in Slot B (under 012)
34	Cut		Possible linear cut orientated ne-sw exposed in sondage within gap in paving (022)	Possible beam cut slot
35	Soil		Dark brown loose and friable silty sand and crushed shell fills cut 034	Fill of feature 034 (possible beam cut slot)
36	Soil	Slot D	Dark brown loose and friable sandy silt and crushed shell with occasional animal bone (0.12m deep)	Relic agricultural soil? Deposit below 008 in Slot D
37	Cut	Slot D		Linear cut in Slot D
38	Soil	Slot D		Fill of cut 037
39	Soil	Extension	Deposit with articulated animal vertebrae	Deposit below wall 006
40	Soil	Slot A		Primary fill of ditch 31
41	Soil		Basal shell fragment rich sandy loam fill of pitch (042); 0.3m in depth. Emerges at step of ditch 42; fill of 042	Likely mix of deposit (033) and natural
42	Soil		0.7m deep ditch orientated E-W. Only south side exposed; initially sloping slide to a steeper slope. Broad flat base	E-W Orientated ditch with parallel ditches either side
43	Soil		Humic soil that abuts south-west enclosure wall	
44	Structure		North-south oriented drystone wall	
45	Structure		Rectilinear drystone wall one stone wide	
46	Structure		Reverse C shaped drystone wall	Structure 4
47	Structure		Approximately NNW-SSE oriented stone drain parallel to Structure 4	Stone drain/path
48	Structure		Approximately N-S oriented drystone wall, possible continuation of [55] and [56] to the north	Structural wall
49	Structure		NE-SW oriented wall parallel to wall [50]	Structural wall
50	Structure		NE-SW oriented wall parallel to wall [49]	Structural wall
51	Structure		Curvilinear dry stone wall, abutting [52]	Structure 2
52	Structure		Curvilinear dry stone wall, abutting [51] and at the NE end of walls [49] and [50]	Structure 2
53	Structure		E-W oriented drystone wall	Structure 2 - possible internal division
54	Structure		Slightly curving NE-SW drystone wall	

55	Structure		Short section of N-S oriented wall	Wall part of structure 2
56	Structure		Short section of wall oriented N-S	Wall part of Structure 3
57	Structure		Approximately curving drystone wall	Possible wall
58	Structure		Approximately NNE-SSW oriented linear structure	Drain/Path
59	Structure		Rectangular drystone structure	Possible cellular structure
501	Soil	Trench2	Topsoil	
502	Soil	Trench2	Buried topsoil	Buried topsoil, possibly medieval plaggan soil.
503	Soil	Trench2	Dark grey-brown sandy silt	Possible ground surface
504	Structure	Trench2	Edge-set stone structure	Possible drain/wall
505	Natural	Trench2	Natural subsoil	Natural subsoil
506	Cut	Trench2	Cut for structure 504	Construction cut
507	Soil	Trench2	Dark grey-brown sandy silt with charcoal patches	Possible ground surface
508	Structure	Trench2	Dark grey-brown sandy silt with charcoal patches	Deposit to east of Structure 510
509	Soil	Trench2	Dark grey-brown sandy silt with charcoal patches	Deposit derived from use of 504/510
510	Structure	Trench2	Circular stone structure- flat flagstones	Possible hearth base

APPENDIX B: PHOTOGRAPHIC REGISTER

No.	Trench	Description	Taken From
512	-	Aberlady cross	-
513-518	1	Rubble [003]	Various
519-539	1	Rubble [003]	Various
540-546	1	Working shots trench 1	Various
547-548	1	Wall [007]	NE
549-550	1	Wall [007]	SW
551	5	Test pit 5	SE
552-553	5	Test pit 5	NE
554-579	1	Working shots	Various
580-591	-	Working shots of site tour	Various
592-596	-	Working shots of planning training	Various
597-598	-	Working shots	Various
599-604		Plan of (20)	SW
605-606		W facing section of sondage (20)	W
607		NE facing section of sondage (20)	NE
608-617		Working shots of Section drawing	-
618		Plan of (20)	-
619-620		Occupation deposit 90240 in trench extension	S
621-836		Photogrammetry	-
837-838		Context [004] paving or building (north end)	N
839-840		Context [004] paving or building (north end)	S
841-842		Context [004] paving or building (north end)	N

843-844		Context (013)	N
845-846		Context (013)	S
847-848		Context (013)	S
849-850		Context (006) Possible paving or building (south end)	S
851-852		Context (006) Possible paving or building (south end)	N
853-854		Context (006) Possible paving or building (south end) with possible floor level	E
855-856		Context [006] and front of the wall (facing west)	W
857-858		Paving [022] and wall [006]	S
859-860		Paving [022] and wall [006]	S
861-862		Paving [022]	N
863-864		Paving [022] + wall [006] showing slumping into possible ditch	W
865-866		Paving [022] + wall [006] showing slumping into possible ditch	SW
867-868		Wall in SW corner	E
869-870		Robber trench at wall [009]	W
871-872		Robber trench at wall [009]	E
873-874		Robber trench at wall [009]	N
875-876		Robber trench at wall [009]	S
877-878		Slot A - General	NW + NE
879-880		Slot A – Post hole [027]	N
881-882		Slot A – Post hole [029]	N
883-884		Slot A – Pit [031]	N
885-886		Slot removing wall [006] exposing (039)	W
887-888		Possible beam slot [034]	-
889-890		Ditch [037] Post-excavation shot	NE
891-892		Ditch [037] Post-excavation shot	E
893-899		Volunteer Group shots	-
900-902		Slot A – working shots	Various
903-905		Slot A showing ditch [031] fully excavated	N; W; W

APPENDIX C: SAMPLE REGISTER

Sample Type	Context	Description
Bulk	11	Possible floor / occupation deposit within small structure
Bulk	11	Possible floor / occupation deposit within small structure
Bulk	12	Possible floor / occupation deposit within small structure
Bulk	13	Possible floor / occupation deposit within small structure
Bulk	15	Madden deposit to exterior of small cellular structures

Bulk	17	Possible occupation / midden deposit
Bulk	17	Possible occupation / midden deposit
Bulk	17	Possible occupation / midden deposit
Bulk	19	Possible occupation / midden deposit
Bulk	20	Upper deposit within void in paving 022.
Bulk	21	Lower deposit within void in paving 022.
Bulk	24	Occupation deposit in Trench extension
Bulk	25	Fill of robber trench (009)
Bulk	25	Fill of robber trench (009)
Bulk	28	Fill of cut 027
Bulk	30	Fill of pit 029
Bulk	32	Fill of pit 031
Bulk	33	Lower deposit in Slot B (under 012)
Bulk	39	Deposit below wall 006
Bulk	40	Primary fill of ditch 31
Bulk	41	Basal fill of Ditch (042)
Bulk	509	Charcoal rich deposit associated with possible hearth 510