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Excavation at Blundell's House, Dundrum Castle, County Down 2009

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On behalf of

ENVIRONMENT AND HERITAGE SERVICE

Data Structure Report: Site Evaluation and Excavation at Blundell's House, Dundrum Castle, County Down 2009

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Contents

1 Summary

1.1 Background

1.1.1 Blundell's House is a ruined, post-medieval, L-shaped two-storied house located on the southern edge of the lower ward of the Anglo-Norman castle of Dundrum. Dundrum Castle has a long and complex history. The Anglo-Norman castle was apparently sited upon an Early Christian settlement or fort. Following the collapse of the Anglo-Norman Earldom of Ulster, in the fourteenth century, the castle was occupied by a branch of the Magennis family, although occasionally it was temporarily possessed by both other prominent Gaelic figures and various representatives of the Crown. Following the Nine Years' War the castle and its associated estate was held by Edward Cromwell, whose son subsequently sold it to the Blundell family. After being garrisoned during the Wars of the 1640s, the castle was apparently slighted by Parliamentarian forces in the mid seventeenth century. There is no evidence to suggest that Blundell's House was occupied after this date. During the late eighteenth century the castle and its estate passed into the hands of the Hill family and formed part of the Downshire Estates. The ruins of Dundrum Castle and Blundell's House remained part of the Downshire Estates until they were placed into State Care in 1954.

1.1.2 Inspection of the architectural fabric of the ruin suggests that the house was the product of two principle phases of construction, with the west wing of the building pre-dating the east wing. The narrowing and blocking of several of the building's windows reflects a period of alteration to the building that post-dates the construction of the east wing. Interpretation and dating of the three different phases of construction and alteration witnessed in the fabric of Blundell's House is complicated by a number of apparent episodes of reconstruction and repair in the modern period, however, the external surface of the southern gable of the east wing contains two triangular pediments located above the windows which can be closely dated, by using Scottish parallels, to the 1630s. This date for the second principle phase of construction coincides with the period when the property was first acquired by the Blundell family. Using this architectural date as a fixed point, the most likely historical context for the initial construction of the west wing is the early seventeenth-century period when the castle was granted to the Cromwell family, whilst the subsequent phase of alterations to the building's fabric probably dates to the 1640s when the castle was garrisoned. The earliest representation of Blundell's House is a sketch dated to 1758, which depicts the building's east wing as a roofless ruin and thereby provides a *terminus ante quem* for the end of the building's use.

1.1.2 Three small trenches were excavated at Blundell's House with a view to informing the future management strategy for this monument in State Care. Two of the trenches (Trenches 2 and 3) were located within the interior of the building's east wing, whilst the other trench (Trench 1) was located immediately to the south of the building's east wing.

1.2 Excavation

1.2.1 The two trenches in the interior of the east wing (Trenches 2 and 3) contained no deposits or features contemporary with the house's occupation. Their excavation demonstrated that the original floor of the building had been removed and the earliest surviving deposit overlying the surface of the near horizontal rock-cut platform upon which the east wing was built, was a soil that had accumulated after occupation of the site had ended. This soil was capped by a thin mortar-rich deposit that represented an episode of repair to the ruin's fabric in the middle of the twentieth century. This horizon was overlain by another thin accumulation of soil that was in turn cut by a number of modern drains and sealed by a deposit of aggregate and gravel which forms the present day ground surface within the ruin.

1.2.2 The external trench (Trench 1), which extended outwards from the east wing's southern wall, revealed that only a single course of masonry extended below the modern ground surface and that the walls of the east wing had been built directly

upon the surface of a platform cut into the bedrock. The external trench also contained no archaeological horizons contemporary with the house's occupation, although an interesting sequence was observed which suggested that the grounds immediately around the house were deliberately modified in the later eighteenth century, apparently to make them conform to contemporary 'naturalistic' ideals of landscape. This alteration involved the construction of a terrace, extending up to five metres to the south of the east wing, which was retained by a mortared stone revetment built at a deliberate angle of 45° to the horizontal and finished so as to resemble a natural outcrop of bedrock. The revetment retained a thick deposit of rubble that contained a large number of nearly-intact roofing 'slates' (actually manufactured from local shale), suggesting that the builders of the terrace had access to displaced material from the roof of the building which is known to have either collapsed or been dismantled prior to 1758. Evidence for a second, lower terrace constructed to the south of the angled revetment was also uncovered as similar deposits of rubble and roofing 'slates' were uncovered beyond the revetment. The southern edge of this lower terrace was probably removed during the construction of the visitor car park located to the south of Blundell's House. The use of building rubble, presumably derived from Blundell's House, suggests that the construction of both terraces coincided with a clearance of debris at the site which may have been intended to make an accessible 'picturesque' ruin out of the standing remains of Blundell's House.

1.3 Reconstruction of the roof

1.3.1 A principal objective of the excavations was to recover evidence of the materials which had been used to roof Blundell's House. A total of 59 roofing 'slates', manufactured from local shale presumably quarried from the rock-cut ditch of the Anglo-Norman castle's upper ward, were recovered. A detailed study of this assemblage indicates they were used in diminishing courses to roof Blundell's House. This conventional late medieval building method keeps the long and heavier slates close to the eaves, minimises waste by allowing for the use of different lengths of 'slate' and produces aesthetically-pleasing results. By combining a detailed study of the 'slates' with an analysis of the building's surviving fabric it is possible accurately reconstruct the profile of the final structural phase of the east wing's roof.

1.4 Discussion

1.4.1 The 2009 excavations at Blundell's House successfully addressed the objectives of the project. The excavation results suggested that no archaeological layers contemporary with the construction or occupation of Blundell's House survive either within the interior of the east wing, or immediately to the south of the east wing. It should be noted, however, that the small size of all three excavation trenches means that the excavation results may not necessarily be representative of the overall levels of preservation within the building and its immediate environs. Although it is a reasonable supposition that a similarly poor level of preservation occurs in the west wing of the building, this assumption would need to be confirmed by excavation. The most successful outcome of the excavations was the identification of a hitherto unrecognised phase in the history of Blundell's House - that is the deliberate modification of the landscape immediately to the south of the building, after it had already become a ruin, during the later eighteenth century.

1.5 Recommendations

1.5.1 In addition to informing the future management strategy for the care and maintenance of Blundell's House, the excavations have clarified our appreciation of the date and historical significance of the monument. Consequently, despite their limited scale, the excavations carried out in 2009 justify publication. It is proposed that a comprehensive report on the excavations is prepared for publication in an academic journal, whilst a detailed summary of the research, suitable for an interested and informed local audience, is submitted to a local journal, such as the *Lecale Review*. In order to facilitate this publication programme it is recommended that additional specialist research on the artefacts recovered during the

excavations is conducted and that a focussed programme of additional historic and pictorial research is also undertaken. In addition, it is recommended that the archive for Waterman's unpublished 1960 excavations in the lower ward of Dundrum Castle is assessed with a view to jointly publishing these excavations with those carried out in 2009.

2 Introduction

2.1 General

2.1.1 Blundell's House is a ruined, post-medieval house located on the southern edge of the lower ward of the Anglo-Norman castle of Dundrum, although it is possible that the curtain wall of the lower ward was already in a ruined state before the house was built. Both the Castle and Blundell's House are monuments in State Care which are open to the public (Sites and Monuments Record No.DOW 044:006). Limited evaluative excavations were undertaken by Philip Macdonald in the east wing of Blundell's House with the aim of informing the future management strategy for the monument (Licence No. AE/09/36). The excavations were funded by the Northern Ireland Environment Agency: Built Heritage and were conducted episodically between the 21st April and the 9th June 2009. This report both details the results of those excavations and assesses them within the historical and architectural context of Blundell's House. Detailed analysis of the historical (Section 2.5) and architectural context (Section 2.8) of the monument, as well as brief reviews of both early representations (Section 2.6) and previous archaeological investigations of the monument (Section 2.7) are incorporated into this introductory chapter. The results of the archaeological excavations are described in Chapter 3, whilst Chapter 4 is devoted to a detailed analysis of the character of the roof of Blundell's House. The success of the excavations and the historical significance of their results are considered in a concluding discussion (Chapter 5), whilst a number of recommendations for further work necessary to meaningfully publish the project results are presented in Chapter 6. The data generated during the course of the excavations is detailed in a series of appendices, along with a specialist report on the single coin that was found (Appendix 6), a detailed catalogue of the assemblage of roof 'slates' recovered (Appendix 7) and an inventory of the excavated pot sherds (Appendix 8, prepared by Nick Brannon).

2.2 Research Objectives and Excavation Methodology

2.2.1 The excavations had the following three principle objectives, which were defined by John O'Keeffe (Northern Ireland Environment Agency: Built Heritage):

I] to establish whether archaeological layers were preserved at the site;
II] to establish what materials were used to roof the building;
III] and to recover: (i) architectural or ornamental stonework; (ii) artefactual evidence; (iii) the return wall of the possible barrel vault or stairwell in the northern part of the east wing as suggested by the apparent traces of a relieving arch within the fabric of the east wing's northern wall; and (iv) evidence of the possible, stepped structure, external to the southern side of the east wing of Blundell's House.

2.3. Geology

2.3.1 Dundrum Castle is situated on the summit of a prominent hill (approximately 62 metres OD) overlooking both the town of Dundrum and the adjacent tidal inlet of Dundrum Bay. The underlying geology of the site consists of the red shales and greywacke of the Hawick Group, which are arranged in a series of near vertically dipping beds that gives the topography of the summit an undulating, if not stepped, appearance. The bedrock supports a thin mineral soil of brown ranker, none of which was exposed during the course of the excavations (information derived from the Geological Survey of Northern Ireland's Strangford Lough Soil Map (Sheet 21) 1:50000).

2.4 Place-name Evidence

2.4.1 During the Anglo-Norman period, Dundrum Castle was known as *Castrum de Rath* (Orpen 1909), whilst in later annalistic references the site is referred to as the Castle of Drumdrona (*Dún Droma*) (MacCarthy 1895, 526-529, 624-625, fn.18). The place-name *Dún Droma* ('hillfort of the ridge') pre-dates the foundation of the Anglo-Norman Castle, the earliest known reference being a passage in the *Annals of Ulster*, dating to 1147, in which the Ulidian army is described as having been pursued 'till they reached the shore of Dun-droma, in Leath-Chathail' (O'Donovan 1856, 1082-1083, fn.q). Residually-deposited artefacts of Early Christian date were recovered during Waterman's excavations at Dundrum Castle (Waterman 1951, 23) and it is a reasonable supposition, albeit not a proven fact, that the eponymous pre-Norman 'hillfort of the ridge' was located on the site of the later Anglo-Norman castle. Apart from the site of Dundrum Castle, there are no other credible alternative locations for the Early Christian 'hillfort of the ridge'. There is no evidence to suggest that either of the only two nearby hill tops (i.e. Clogham Hill located 0.7 kilometres to the north (National Grid Reference J403377) and Shague Hill (National Grid Reference J392367) located 1.3 kilometres to the southwest of Dundrum Castle), both of which lie outside the townland of Dundrum, were ever enclosed. Given the scale of levelling of the interior of the upper ward of the Anglo-Norman castle demonstrated by Waterman's excavations (1951; 1958), the failure to recognise any surviving trace of a definitely Early Christian enclosure at Dundrum should not be considered a significant impediment to identifying it as the site of the 'hillfort of the ridge'.

2.4.2 The annalistic phrase 'the shore of Dun-droma, in Leath Chathail' indicates that by the middle of the twelfth century the place-name was already used to refer to a wider area than just the site of a hill-top fort – 'the shore of Dun-droma' presumably being a reference to Dundrum Bay. Furthermore, the 1147 reference indicates that Dundrum was considered to be part of the territory of Lecale (i.e. Leath-Chathail) prior to the Anglo-Norman period, even though it lies outside of the broad belt of marshes and the once tidal estuaries of the Quoile and the Blackstaff which physically define the peninsula's western boundary cf. Buchanan 1997, 277.

2.5 Historical Background

2.5.1 Prior to the identification in the early twentieth century of Dundrum Castle with the historical '*Castrum de Rath*' (Savage-Armstrong 1906, 17, 19; Orpen 1909), the Anglo-Norman history of the site was poorly understood. Harris had speculated, apparently on the authority of manuscript papers in 'the library of the late Dr. Gilbert', that the castle was '*built by Sir John de Curcey for the Knights-Templars, who enjoyed it till their over-throw in 1313, and that it was afterwards granted to the Prior of Down, who possessed it, and a small Manor bout it, till the general Dissolution of Abbies; after which it was granted by the Crown to the Lord Cromwell of Oakham'* (1744, 267). Harris's probable source, 'the late Dr. Gilbert', was almost certainly Claudius Gilbert (1669/70-1743) - a fellow of Trinity College Dublin and a notable bibliophile whose substantial personal library was presented to his college before his retirement in 1735 (Beaumont 2009, 77-78). In a section describing the principal sources for compiling Harris's *The Ancient and Present State of the County of Down* it is noted the library of Trinity College *'has lately been enriched by the Collections of the Reverend Dr. Gilbert, made at great Expence, and with singular Care; among which are several Bundles of manuscript Papers concerning the whole kingdom in general, and most, if not all, the particular Counties. Many of them have the Name of one Mr. Downing prefixed to them, as some have of the late Sir Richard Cox, and others. They seem to have been written when the Earl of Pembroke, Lord Lieutenant of this kingdom, presided over a Philosophical Society, then established in that College'* (Harris 1744, xii). Although the Templar association had always had its critics (eg.. Reeves 1854, 50, fn.m), Harris's statement was uncritically reiterated by subsequent writers during the eighteenth and nineteenth centuries (e.g. Dubourdieu 1802, 295; Lewis 1837, 573; Hill 1869, 311, fn.37; O'Laverty 1878, 67; Phillips 1883), despite the absence of any historical evidence to support either the Templar association or the assertion that the castle and manor had been granted to the Prior of Down (Orpen 1909, 27-28).

2.5.2 The earliest historical reference to Dundrum Castle is contained within the *Chronica Regum Manniæ et Insularum* (i.e. the *Chronicle of the Kings of Mann and the Isles* a.k.a. the *Manx Chronicle*), which records that in 1205, following his initial expulsion from Ulster, John de Courcy, with the aid of his father-in-law the Manx king Ragnhald (frequently anglicised as Reginald in the historical literature), either considered or commenced a siege of the '*castellum de Rath*' prior to their forces being routed by Hugh de Lacy (Broderick and Stowell 1973, 26, 71; Orpen 1909, 23-24). That de Courcy, even half-heartedly, lay siege to the castle suggests that it had already become an important place by the early thirteenth century. Ironically, given that the castle existed to be laid siege to less than a year after his initial expulsion, it is almost certain that de Courcy was responsible for having Dundrum Castle built. Although there is no evidence to indicate precisely when the castle was first built, given its strategic position guarding the southern approaches by land into eastern Co. Down, it is probable that construction began shortly after de Courcy invaded Dál Fiatach in 1177. If Waterman (1958, 64-65) and Sweetman (1999, 36-37) are correct in identifying the earthen bank uncovered in Waterman's excavations as part of a ringwork-like defence (see Paragraph 2.7.4), then initial Anglo-Norman occupation of the hill is likely to date to the early, 'campaigning' phase of de Courcy's Ulster enterprise.

2.5.3 The subsequent Anglo-Norman history of Dundrum Castle is not of direct relevance to a consideration of Blundell's House and is only briefly summarised here, although particular emphasis is given to those references that inform the architectural history of the site. In July 1210, following his expulsion of Hugh de Lacy, the prestita roll of the 12th year of his reign records that King John visited Dundrum Castle and whilst there made several payments to workmen (Hardy 1844, 196; Sweetman 1875, 62, no.404). The small size of these payments indicates that only minor works were carried out at this time (Orpen 1909, 24). That John made payments to the same craftsmen eleven days later whilst at Carrickfergus Castle (Hardy 1844, 206; Sweetman 1875, 63, no.406) suggests that the work was conducted by a team who accompanied the king during his itinerary around Ulster. A number of references preserved in the State Papers indicate that Dundrum remained a royal possession for the next seventeen years (i.e. Sweetman 1875, nos.407, 611, 741, 755, 1015, 1128, 1158 and 1167), although a reference to a 'castle of Rath ... situated near Dublin' in a letter written by William Marshall, Earl of Pembroke to the king in August 1224 (Sweetman 1875, 182, no.1202) suggests that not all of the 'castle of Rath' references conventionally identified as referring to Dundrum Castle are necessarily correctly attributed (*pace* Orpen 1909, 24). Another episode of building work at Dundrum Castle is apparently recorded in the 1211-12 pipe roll of John which accounts for work on a great tower, a lesser tower and a hall, as well as a granary and stable (Davies and Quinn 1941, 59; Quinn 1943, 36; McNeill 1997, 27). There is, however, a degree of uncertainty over the identification of the castle featured in the text cf. Quinn 1943, 36. The 1211-12 entry accounts for work with a total cost of £4-15-2, a sum too small to reflect the structures being described as having been built from scratch that year (McNeill 1997, 27-28). If correctly identified as referring to Dundrum, then the entry in the 1211-12 pipe roll indicates that the circular great tower had already been built by this date.

2.5.4 Custody of Dundrum Castle was committed to Walter de Lacy in 1226 (Sweetman 1875, 207, 210, nos.1371, 1385) and in the following year it was restored to Hugh de Lacy (Sweetman 1875, 226-227, no.1498). The castle then presumably remained largely in the hands of the Earls of Ulster, although references to the use of freestone and iron to repair the gates and doorways of the castle in 1260 (Orpen 1920, 279) and to a payment allowed to William FitzWarin for wages to the constable of the 'castle of Rath' during 1274-76 (Sweetman 1877, 477, no.2073) presumably coincide with brief periods when the castle temporarily became a royal possession. The Inquisition Post Mortem prepared following the murder of William de Burgh in 1333 records that the castle was ruinous and of no annual value due to the scale of repairs needed to its fabric (Sharp 1909, 374, no.537; Orpen 1914, 54, 60). The holdings of the manor associated with the castle are recorded as consisting of some 18 carucates, which were then held by John MacArtan and other Irishmen (Orpen 1914, 54, 61). The final reference to the Anglo-Norman phase of occupation dates to April 1346 when Edward III committed to Nicholas Taaff the custody of the 'cast' del Rath' at an annual fee of £20 (Tresham 1828, 50, no.84).

2.5.5 At some point after 1346, as a consequence of the contraction of the area of English settlement and influence following the collapse of the Anglo-Norman Earldom of Ulster, Dundrum Castle passed into the hands of the Magennis family, although the English Crown maintained a claim on Dundrum through the descent of de Burgh's infant daughter to Edward IV (McNeill 1980, 118). As Lords of Uí Eachach Cobha (anglicised Iveagh), the Magennises had began their rise to prominence during the twelfth century, but it was only after the death of Tómas Mac Artáin in 1347 that the Lordship of Iveagh devolved irrevocably to the family (O'Laverty 1878, 36; FitzPatrick 2004, 163). By the later medieval period the Magennises had surpassed the McCartans of Kinelarty as the most influential Ulster Gaelic group south of Clandeboye, but were divided into several distinct and competing families (McCall 1983, 19-20; O'Sullivan 1997, 160). The earliest reference to the later medieval Gaelic occupation of Dundrum Castle is preserved in the *Annals of Ulster* for the year 1517 where it is recorded that Gerald FitzGerald, the Ninth Earl of Kildare and then Lord Deputy of Ireland, led a hosting into Ulster 'whereon he broke down the castle of Dun-droma and destroyed what belonged of Ui-Echach to Feidhlimidh Mag Aenghusa and carried off the wife of Feidhlimidh and the son of Mag Aenghusa and hostages of the whole country with him' (MacCarthy 1895, 526-29). Given the site's strategic position, the paucity of historical references to Dundrum Castle between the middle of the fourteenth and the first quarter of the sixteenth centuries almost certainly does not reflect an extended period of abandonment of the castle and its associated manor. As only significant events, such as the death of important individuals, battles and military incursions, were recorded in the Irish annals, it is likely that the absence of historical references reflects a period of relatively uneventful and continuous occupation of the castle by the Castlewellan branch of the Magennises.

2.5.6 The next notices of Dundrum Castle relate to the Lord Deputy Leonard Grey's campaign to capture Gerald FitzGerald, the Eleventh, so-called 'Wizard', Earl of Kildare in Ulster during either 1538 or 1539. The *Annals of Ulster* record that during a raid led by Grey into Lecale in 1538 'the monastery of Down was burned ... and the relics of Patrick and Colum-cille and Brigit and the image of Catherine were carried off ... . And the Saxon captain took the image with him to the green of the castle of Dun-a-droma and he himself went into the castle and there was a hole in the castle and that man fell into it through miracles of God and Catherine, without tidings of him from that to this' (MacCarthy 1895, 624-625). The 'hole' into which the anonymous 'Saxon captain' disappeared is conventionally interpreted as being the rock-cut vaulted cistern located below the great tower (e.g. MacCarthy 1895, 624, fn.19; see Paragraph 2.7.5), rather than a separate supernatural opening or fissure created through an act of divine retribution. Archaeological investigations of the rock-cut cistern suggested that it remained open until at least the seventeenth century, although, proponents of the divine intervention interpretation would no doubt emphasise that neither the remains of the 'Saxon captain' or the looted image of St Catherine were recovered when the cistern was cleared during the Winter of 1959-60 cf. Waterman 1964, 139. Grey's campaign in Ulster was also the subject of a letter he wrote to Thomas Cromwell, Henry VIII's chief minister, which is conventionally dated to 1539. In the letter Grey recorded that he 'toke another castell, being in Mcgynons countre, called Doundrome, whych I assure your Lordeship, as yt standyth, ys one of the strongyst holtes that ever I sawe in Irelande, and moost comodios for the defence of the hole countre of Lecayll' (Anon. 1834, 155, no.279).

2.5.7 It seems that the Crown authorities may have aspired to retain a garrison at Dundrum Castle for a number of years following Grey's capture of the castle. In a letter dating to May 1551, from the Dublin authorities to the Privy Council, concerning unrest in Ulster following the killing of two brothers of the Countess of Tyrone by Andrew Brereton, it is recorded that the Prior Magennis of the College of Down was seized by Roger Broke, apparently an English captain, and held at Dundrum Castle (Hamilton 1860, 113, no.25). As a consequence of his actions Brereton was removed from his position of authority in Lecale and replaced by the son of the then Lord Deputy, Sir Anthony St Leger (Hamilton 1860, 113, no.25). At this point in time, title to Dundrum Castle and its associated manor appears to have been sought after by a number of agents of the Crown based in Ulster. For example in 1557 the then Lord Deputy Thomas Radcliffe, the Third Earl of Sussex, wrote to Philip and Mary referring to Sir Henry Sidney's request to be granted Dundrum Castle and Lecale (Hamilton 1860, 137, no.37). Sidney's bid was apparently unsuccessful as the castle and associated manor were

subsequently granted to Gerald FitzGerald, the Eleventh Earl of Kildare. Precisely when Gerald FitzGerald received his grant of Dundrum is uncertain. A letter Sidney wrote to the Earl of Leicester indicates that it was at least nominally his possession by 1566 (Hamilton 1860, 289, no.35), and it is reasonable to assume that the Earl of Kildare was either granted, or more likely re-granted, Dundrum Castle and its estates by either Edward VI or Mary following his return from political exile in 1555. If it was a re-grant then this would indicate that Dundrum was formerly a possession of the FitzGeralds that had been lost following the collapse of the Kildare ascendancy in the rebellion of 1534-36. That Dundrum was include in a list dating to November 1537 of castles and garrisons that were Crown possessions is consistent with this hypothesis cf. Hamilton 1860, 34, no.44. When the FitzGeralds had originally gained ownership of Dundrum is uncertain, although the 1517 hosting into Lecale led by the Ninth Earl of Kildare would be the most obvious historical context (see Paragraph 2.5.5). The Eighth Earl of Kildare had been granted the Lordship of Greencastle and Mourne in 1506 (Black 1916, 443; Quinn 1933-34, 61) and in 1515 the Ninth Earl of Kildare received a grant which included Strangford, Strangford Lough and the sea-wrack of Ardglass (Brewer 1864, 268, No.999; Quinn 1933-34, 61). As the King's deputy, Kildare was entitled to try and possess the former royal manors, such as Dundrum, lying beyond the ports and a clause in his patent gave him '*in tail male*' all of the King's lands he could recover from the Irish (Quinn 1933-34, 61). In capturing Dundrum Castle in 1517 the Earl of Kildare would have been able to establish a legal claim to ownership of the castle and its manor. Despite such a legal claim to the castle, it is doubtful whether the FitzGeralds ever succeeded in extracting anything, other than perhaps a nominal rent, from the incumbent Magennis family. Certainly, when the Kildare estates reverted to the Crown, following the rebellion of 1534-36, the returns of account prepared by William Brabason, the Under-Treasurer and General Receiver in Ireland, for the period 1534-37 record that 'the manor of Dundrum lay waste all the time of this account' (Gairdner 1891, 459, no.1310). It is stated in the same set of accounts that 'nothing has been received from the Manor of Dundrom, formerly let for 24 cows a year' (Quinn 1933-34, 65). Brabason's returns for 1537-40 record that the 'Manor of Dundrum let to Arthur, son of Phelim McGynness at £6 13s 4d' was all in arrear (Quinn 1933-34, 66) and by 1548 Arthur Magennis had still managed to avoid paying rent and was reported as being ten years in arrears (Quinn 1933-34, 67).

2.5.8 In practice, despite being nominally a royal possession, the Magennises were apparently able to enjoy the Castle and its manor without interference from the Crown's authorities during the middle decades of the sixteenth century. A report on royal possessions prepared by a special commission in 1540 provides us with a description of the castle and manor during this period. The commissioners noted that *'they say the castle is well and sufficiently built and repaired and that Arthur McGynnys entered into it and unjustly holds it along with six towns appertaining to it, namely those which a certain Mcgyllemyghells has called "Macgyllemghells syx townes", which contain by estimation 1,000 acres. They used to yield to the Earl of Kildare or the king's deputy 10 cows yearly but nothing is paid now. There is a port called a haven annexed to the castle where many fishermen come and take fish – and the custom of the same belongs to the castle. The castle is six miles distant from the lordship of Mowrne where certain of the Mcgynnysys live'* (Quinn 1932-34, 76). A preliminary analysis of nineteenth-century maps of the Dundrum Estate suggests the possibility that the *'syx townes'* which formed the later medieval manorial estate of Dundrum can be equated with the modern townlands of Aghlisnafin, Ballybannon, Ballylough, Dundrum, Magherasaul and Moneylane (see Paragraph 2.5.22).

2.5.9 The Magennises' autonomy from the Crown did not prevent them from coming under the influence of more powerful Gaelic groups and in 1565 Shane O'Neill is recorded as having 'put a ward of his own' into Dundrum Castle (Hamilton 1860, 271, no.57; see also Hamilton 1860, 279, no.42). In March 1566 Sidney wrote to Robert Dudley, the Earl of Leicester, complaining of Shane O'Neill stating that Dundrum was amongst a number of castles 'he would keep from Kildare', adding that 'with his sword he won them, and would so keep them' (Hamilton 1860, 289, no.35; Bagwell 1885, 104; Cunningham 2009, 14, no.35). By April 1566 Shane O'Neill was reported by Sidney to the Privy Council to be fortifying Dundrum (Hamilton 1860, 296, no.13; Cunningham 2009, 42, no.84), although how substantial the works he undertook were is not certain. The possibility that O'Neill may have razed the castle in August 1566, following the failed

siege at Dundalk, was raised by Thomas Lancaster in a letter to William Cecil (Cunningham 2009, 110, no.232), however, whether Shane O'Neill even partially slighted the castle is unclear. Certainly, following his death in 1567, Dundrum Castle apparently remained in Gaelic hands, although the 1569 document of Attainder against Shane O'Neill would have strengthened the legal claim that Iveagh was possessed by the Crown (McCall 1983, 19-20). In October 1572, during the crisis prompted by Thomas Smith's aborted attempt to establish a colony in the Ards and North Down, Nicholas Malbie wrote to the Lord Deputy that Brian MacPhelim O'Neill (Lord of Lower Clandeboye) and Turlough Luineach (Shane O'Neill's successor as chief of the Tyrone O'Neills) planned to meet at Dundrum and from there would proceed to attack his own holdings in the adjacent, McCartan Lordship of Kinelarty, which he had been granted in November 1571 (Hamilton 1860, 485, no.12; Williams 1966, 313, no.2293; O'Dowd 2000, 223, no.359).

2.5.10 By the start of the Nine Years' War (1594-1603) Dundrum Castle appears to have been in English hands once again, although by what manner and at what point in time the Crown's forces had taken possession is not clear due to the lack of historical documents relating to the castle during this period. Motivated by Elizabeth's desire to reduce costs, following the failure of the so-called Enterprise of Ulster in the mid 1570s, the Dublin authorities had pursued a new policy of legitimating the role of certain local Gaelic landowners in Ulster in return for minimal rents and inaugurating a gradual process of Anglicising Irish society. This pragmatic approach had been championed by Sir Henry Sidney who believed it was best to give local Gaelic lords recognition as *de facto* rulers of their lordships (McCall 1983, 22). In a letter written to the Privy Council in February 1576, Sidney articulated the policy thus – 'if obedience and rent may be had, it seems better to take some rent and service than to forego it, since a better composition cannot be had of them except by force' (Brewer and Bullen 1868, 43). One consequence of the pursuit of this policy was that in the final quarter of the sixteenth century, the various Gaelic lords of eastern Ulster, whilst retaining a significant degree of independence, came to increasingly rely upon the support of the Dublin authorities in order to consolidate both their personal power and attempts to secure familial succession (McCall 1983, 22). In return for the provision of certain services and rent, Hugh Magennis was granted the County of Iveagh, a territory which comprised both the later Baronies of Upper and Lower Iveagh, in 1584 (Brewer and Bullen 1868, 373-374, 382-383, nos.519, 533; Guinness 1932, 97). Within this political context it is likely that Dundrum Castle would have been surrendered to the Crown authorities without the need for force and presumably throughout the second half of the 1570s and the 1580s the associated manor helped support a garrison at the castle.

2.5.11 The next extant historical reference to Dundrum Castle dates to August 1596, when Hugh O'Neill is recorded as having attempted to bribe James FitzGarrett, a captain of Lecale, into delivering the castle into his hands (Atkinson 1893, 74-75, no.7.xi). By the late sixteenth century the strategic importance of Dundrum Castle was enhanced by it being located on the borders of not only Lecale, but also the Gaelic lordships of Iveagh and Kinelarty. This strategic importance was recognised at this time by Captain Francis Stafford who described the castle as being 'strong and of good receipt, and may be made very strong if it should be possessed by the Earl of Tyrone, and so delivered unto the Spaniard or any other foreign nation, and stands very conveniently to be relieved by shipping of reasonable good burden, and in a very good place for service upon the woodmen, to annoy Magennis, if he should join with the Earl, and specially for the defence of Lecale and all the countries adjoining' (Atkinson 1893, 75-76, no.7.xi). This reference indicates that although the Magennis family still held the surrounding countryside, they were not in possession of the castle itself and that their continued loyalty to the Crown had become questionable. Later that month the Sheriff of Lecale wrote to the Lord Deputy complaining that Gaelic confederate forces had begun to over-run Lecale and that Dundrum Castle was under threat of being besieged (Atkinson 1893, 103, no.9.vii). At this point the Earl of Tyrone was at the height of his power and as Fynes Moryson, secretary to Lord Mountjoy, recorded, Dundrum was one of only seven castles in Ulster which was not 'in rebellion' (Anon. 1907, 207).

2.5.12 Hugh O'Neill had succeeded in extending his authority over much of southeast Ulster from 1594 onwards. He achieved this variously by diplomatically manipulating local disputes over succession, extracting hostages from local Gaelic lords,

and where they refused to submit, as was the case of Ever MacRory Magennis of Kilwarlin, having them driven out or murdered (Hamilton 1890, 239, no.37.iv, 275, no.40; Morgan 1993, 187-188). Sir Hugh Magennis of Iveagh was almost unique in remaining loyal to the crown, probably because of the proximity and support of Marshal Bagenal based at Newry (Morgan 1993, 188), although during 1594 he was obliged to give 'buyings' (i.e. pay protection money) to O'Neill (Brewer and Bullen 1869, 93, 98, nos.139 and 143). Following Hugh Magennis's death in 1596, one of the principle difficulties in negotiations between the Dublin authorities and Hugh O'Neill and Hugh O'Donnell concerned a dispute in the succession to the Lordship of Iveagh between Glasny MacAgholy, who claimed the lordship by tanistry and was backed by the confederates, and Arthur Magennis, the son of Sir Hugh and the preferred candidate of the Crown's representatives (Hamilton 1890, 457, no.23; McCall 1983, 43-44; Morgan 1993, 198). Given the uncertainty over the continued loyalty of the Magennis Lordship of Iveagh, which extended southwards to border Bagenal's power base of Newry, Dundrum Castle attained an even greater strategic importance to the Crown authorities. By October 1596 Arthur Magennis had joined forces with Hugh O'Neill (Atkinson 1893, 143, no.19) – his defection to the side of the confederate forces apparently being the price he paid to Hugh O'Neill in order to secure the Lordship of Iveagh over which O'Neill claimed suzerainty (McCall 1983, 43). With Iveagh in rebellion, maintaining a strong garrison at Dundrum Castle had never been of greater strategic importance, however, unfortunately for the Crown authorities, events dictated that this would not be possible.

2.5.13 In November 1597, as a direct consequence of the death of Sir John Chichester and 180 of his men in an ill-advised charge against Sir James McDonell and a party of Antrim Scots, Dundrum Castle was largely denuded of its garrison as three companies were transferred to Carrickfergus leaving behind a force of only twenty men to defend the castle (Atkinson 1893, 444-445, nos.64, 64.i and 64.iv). Although the reduced garrison was apparently maintained until at least December 1599, when plans were made for placing a 'reasonable garrison' at Dundrum (Atkinson 1899, 330, no.88), the garrison was too small to prevent Dundrum Bay being used for unloading supplies to the rebels, as occurred at least once during the summer of 1599 (Atkinson 1899, 73, no.100). How long the garrison at Dundrum Castle held out for is difficult to assess in the absence of any extant historical references to the castle in the period immediately after December 1599. That a supply ship bound for Carrickfergus, and containing money for the pay of the town's garrison, was forced to put into Dundrum Bay by bad weather and was promptly captured by Magennis in January 1601 (Atkinson 1905, 143, 152, nos.5 and 15), suggests that by this date the castle was in the hands of the Magennises.

2.5.14 By the early summer of 1601, however, the war, in eastern Ulster at least, was beginning to turn in the favour of the Crown's forces and Magennis had been forced to submit cf. Brewer and Bullen 1870, 86. In his account of Mountjoy's campaign in Ireland, Fynes Moryson records that during that summer's campaign in Lecale, Phelim Mac Ever Magennis had been obliged to yield to Lord Mountjoy and surrender Dundrum Castle (Anon. 1907, 400). In his booklet on Dundrum Castle, Phillips referred to this episode citing as his source *'a docket in the Record Office, Dublin'* which described the castle as having *'an outer court surrounded with a ruined wall, within which were eleven "Irish houses"'* (Phillips 1883, 15, 19). Unfortunately, this crucial source for dating Blundell's House (see Paragraph 2.9.4) cannot be traced; presumably the 'docket' was destroyed in the Four Courts Fire of 1922. There is, however, no reason to doubt the veracity of this description of the lower ward at the beginning of the seventeenth century.

2.5.15 Presumably, after its surrender to Mountjoy the castle was re-garrisoned for the remainder of the Nine Years' War. Josias Bodley's account of his visit to Lecale in the winter of 1602-03 indicates that the area between Newry and Downpatrick, including Iveagh and Dundrum, was successfully pacified by this date cf. Anon.1854. Following the submission of Hugh O'Neill and the so-called Treaty of Mellifont in 1603, Dundrum Castle and its associated manor was considered a royal possession suitable for disposal. Initially, in June 1605, *'the lordship or manor of Dondrom, with its appurtenances, in Co. Downe'* was granted to Donat, Earl of Thomond (Erck 1846, 223), however, this grant was apparently never made good as later that year, on the 12th September, as part of a wider division of land-holding in the former Gaelic lordship of Kinelarty, Edward Cromwell, Governor of Lecale, purchased from Phelim McCartan and Donald Oge McCartan of Killenarten 'the

castle of Dondrome, and other partes adjoyninge' (Reeves 1845, 214; Erck 1846, 191, no.37). On the 28th September 1605 Cromwell and Phelim McCartan made a surrender of the territory of Killenarten, on condition of a re-grant being made to them (Reeves 1845, 214; Erck 1846, 203, no.52) and the re-grant was subsequently made on the 4th October formalising the allocation of land (Reeves 1845, 214; Erck 1846, 191, nos.53-54). Edward Cromwell (*c.*1559-1607) was an associate of Robert Devereux, the second Earl of Essex, having served with him at Cadiz (1597) and subsequently in Ireland during the Nine Years' War. He was arrested in London during January 1601 on charges of high treason following Essex's abortive rebellion, but after confessing his guilt and being fined £6000 was released from the Tower of London. His fortunes were partly renewed under James I and VI; he became a Privy Counsellor in 1603 and was made Governor of Lecale in 1605 after he exchanged lands in England for the barony of Lecale (Grummitt 2004; Lunney 2009). At his death Cromwell was not a wealthy man and left a poor estate for his widow and son (cf. Russell and Prendergast 1874, 292-293, nos.381 and 383). Following Cromwell's death, Gerald FitzGerald the Fourteenth Earl of Kildare claimed part of Cromwell's lands (presumably including Dundrum), however, the subsequent inquisition upheld the rights of his son Thomas Cromwell (Gillespie 1985, 100-101) who received in 1617 a grant from James I and VI to the castle, lordship, town and manor of Dundrum, which then consisted of seven townlands adjoining the castle (Anon. 1966b, 336).

2.5.16 Thomas Cromwell, served in a military capacity in Ireland, and was created Viscount Lecale in 1624, however, like his father, he too struggled with debt for most of his life and this, possibly coupled with the need to finance his purchase of lands in Nottinghamshire (Gillespie 1985, 137, 138), was probably the reason that he sold the Dundrum Estate to a member of the Blundell family. Both the date at which Cromwell sold his Dundrum possessions, and the member of the Blundell family he sold them to, is uncertain. Harris recorded that the property was sold to Francis Blundell (1744, 267) and this seems to be the authority for later assertions that the Dundrum Castle and estates were sold to Francis Blundell in either 1627 (Hill 1869, 314), 1636 (Phillips 1883, 15; 1883-84, 161) or 1637 (Hill 1869, 307). Harris's authority for this claim was, once again, apparently derived from notes contained within manuscript papers formerly belonging to Claudius Gilbert (1744, 269). As this would be the same source that produced the spurious Templar association for the site (see Paragraph 2.5.1), then its accuracy can legitimately be questioned. Francis Blundell (*c.*1579-1625) was appointed Vice-Treasurer and Receiver-General in 1619 and was created the first Baronet Blundell in 1620 (Cokayne 1900, 224-225). Given the date of his death, it is unlikely that the various dates proposed by Hill (1869, 307, 314) and Phillips (1883, 15; 1883-84, 161) for his acquisition of Dundrum, all of which were suggested without citing an authority, can be valid. That the transaction took place before August 1629 is suggested by the granting of a licence to a William Blundell at that date to hold a weekly market at Dundrum (Morrin 1863, 452).[1] It has previously been assumed that William Blundell was a son of Francis Blundell (Hill 1869, 313, fn.44), however, Francis Blundell is recorded as having only four sons, none of whom were called William cf. Cokayne 1900, 224-225. That William Blundell was a relation of Francis Blundell is, however, certain as the Dundrum Estates eventually passed from Montague, first (and only) Viscount Blundell (1689-1756), and Francis Blundell's direct descendant, to the Hill family during the last quarter of the eighteenth century (see Paragraph 2.5.19).

2.5.17 The history of Dundrum Castle during the 1641 rebellion and the subsequent war of the 1640s is complicated. An extract of a letter from one Payne to the Earl of Kildare from Stronesse, Perthshire written on the 21st November 1641 records that Dundrum Castle had been captured by the Irish rebels. Payne wrote that he defended Dundrum with vigour, although many of his men deserted, and he at last 'came away with colours flying and drums beating' as he had only thirty men whilst his opponent, Sir Con Magennis, had had 1500 (Mahaffy 1901, 349). On this occasion the Magennises only held onto Dundrum Castle briefly. With a commission from the King, James Montgomery raised a regiment in December 1641 and sustained it with grain and cattle captured from the Irish rebels. The *Montgomery Manuscripts*, written by William

[1] The granting of a licence should not be considered to necessarily indicate that as a settlement Dundrum was capable of fulfilling the function of a market in 1629. The establishment of markets formed part of the 'civilising' strategy adopted by English and Scottish settlers in early seventeenth century Ulster, and as such the granting of market licences was frequently more of an aspirational act, rather than a practical reflection of economic development.

Montgomery between 1697 and 1704, record that the regiment protected Lecale for some months and that James Montgomery had driven the Magennises and MacCartans out of Dundrum Castle and placed a strong garrison there (Hill 1869, 310-313, fn.37). At this time, in the early months of 1642, the castle was described as being in good condition although the garrison apparently 'had no houses but cabins, within the old walls to garrison in' (Hill 1869, 311, 319-320, fn.37). That Dundrum Castle remained a stronghold maintained by the principle local Protestant landowners for a number of years during the war of the 1640s, before being surrendered or taken by Parliamentary forces, is suggested by the few extant historical references which explicitly refer to the castle during this period. The first refers to an incident in March 1644 when a lieutenant garrisoned at Dundrum Castle, who commanded Captain Dromont's Company, arrested a party of fishermen who had been forced to land at Dundrum in bad weather (Anon. 1902, 90-91). Robert Munro, leader of the Scottish army in Ulster and then an ally of Hamilton and Montgomery, is recorded as having been at Dundrum in June and early July 1645 (Stevenson 1981, 221). Following the Battle of Benburb in June 1646, Munro apparently ordered Dundrum to be burnt, although whether the castle was actually slighted at this date is uncertain (Hill 1869, 410, fn.25). Letters written by the Parliamentary Commissioners in late December 1646 indicate that they hoped to replace Lord Claneboy's (i.e. James Hamilton's) garrison at Dundrum with a detachment of Roger Fenwick's regiment 'in order to improve the security of Lecale' (Mahaffy 1901, 570, 571). Whether Hamilton did surrender the garrison at this date is uncertain, although given his and Montgomery's support for the Royalist cause, particularly after the execution of Charles I in January 1649 (O'Sullivan 1997, 187), the subsequent occupation and reputed slighting of the castle by the Parliamentary army is not surprising.

2.5.18 Historical evidence relating to the Cromwellian occupation and slighting of the castle is poor. No contemporary documents describing the incident survive. The earliest reference is Harris who recorded that the castle was slighted by Parliamentary forces (Harris 1744, 15), an event which Hill, on no cited authority, subsequently dated to 1652 (Hill 1869, 311, fn.37). Harris recorded that, following the Cromwellian slighting, the castle had 'ever since been suffered to run entirely to ruin', although the Blundell family still enjoyed the property (1744, 15, 267). That the castle was slighted by Parliamentary forces following the Wars of the 1640s is more than historically plausible, and given the building's potentially defensible position within the lower ward it is also a credible supposition that it was considered necessary to demolish Blundell's House too. There is, however, a notable tendency in Irish folklore and history to frequently attribute both earlier and later acts of destruction to Cromwell, and in the absence of any contemporary historical evidence, the Cromwellian date for the slighting of Dundrum Castle must be considered probable, rather than proven. After the Wars of the 1640s, it can be inferred that ownership of the Dundrum Estate passed to the Baronets Blundell of Edenderry (see Paragraph 2.5.16). It is unlikely that members of the Blundell family ever resided on the estate, which was probably farmed by tenants and managed by a succession of agents. The principal Irish residence of the Baronets Blundell was Blundell Manor in Edenderry, Co. Offaly. The fate of William Blundell, the first member of the Blundell family to apparently own the property and presumably reside in the manor house which now bears his family's name (see Paragraph 2.7.3), is also unclear. It is possible that both he, and any immediate family he may have had, were killed during the initial stages of the rebellion in 1641, or that he died without issue during the 1640s. It is reasonable to speculate, on the grounds of the property's attested subsequent possession by his grandson Montague First Viscount Blundell, that after the end of the Cromwellian occupation, possession of the manor passed to Sir George Blundell (died *c.*1665), the second Baronet Blundell (Cokayne 1900, 225), although there is no direct evidence to indicate that this was the case.

2.5.19 Following the death of Montague First Viscount Blundell in 1756, ownership of the Dundrum Estate was shared between his three daughters: Chetwynd, Mary and Anna Maria, although it was administered as a single unit by Blundell's agent John Hatch (Anon. 2007, 20). The Dundrum Estate passed into the hands of the Hill family between 1787 and 1799 as it was inherited piecemeal by Mary Hill (née Sandys) (1764-1836) who had married Arthur Hill, the Second Marquess of Downshire (1753-1801) in 1786 (Richey 2009, 700). Montague Blundell's daughter Chetwynd was Mary Hill's maternal grandmother and as Blundell's other daughters died without issue she eventually inherited the entirety of the Dundrum

Estate, as well as the other principal Blundell estate of Edenderry, Co. Offaly and Easthampstead Park, Berkshire the possession of her maternal grandfather, William Trumbell (1708-1760) (Cokayne 1900, 225, fn.d; Richey 2009, 700). During this period the Dundrum Estate was enlarged by the purchase of another 2000 acres at Ballykinlar in 1793. Dundrum Castle remained part of the Downshire Estates until placed into State Care in 1954.

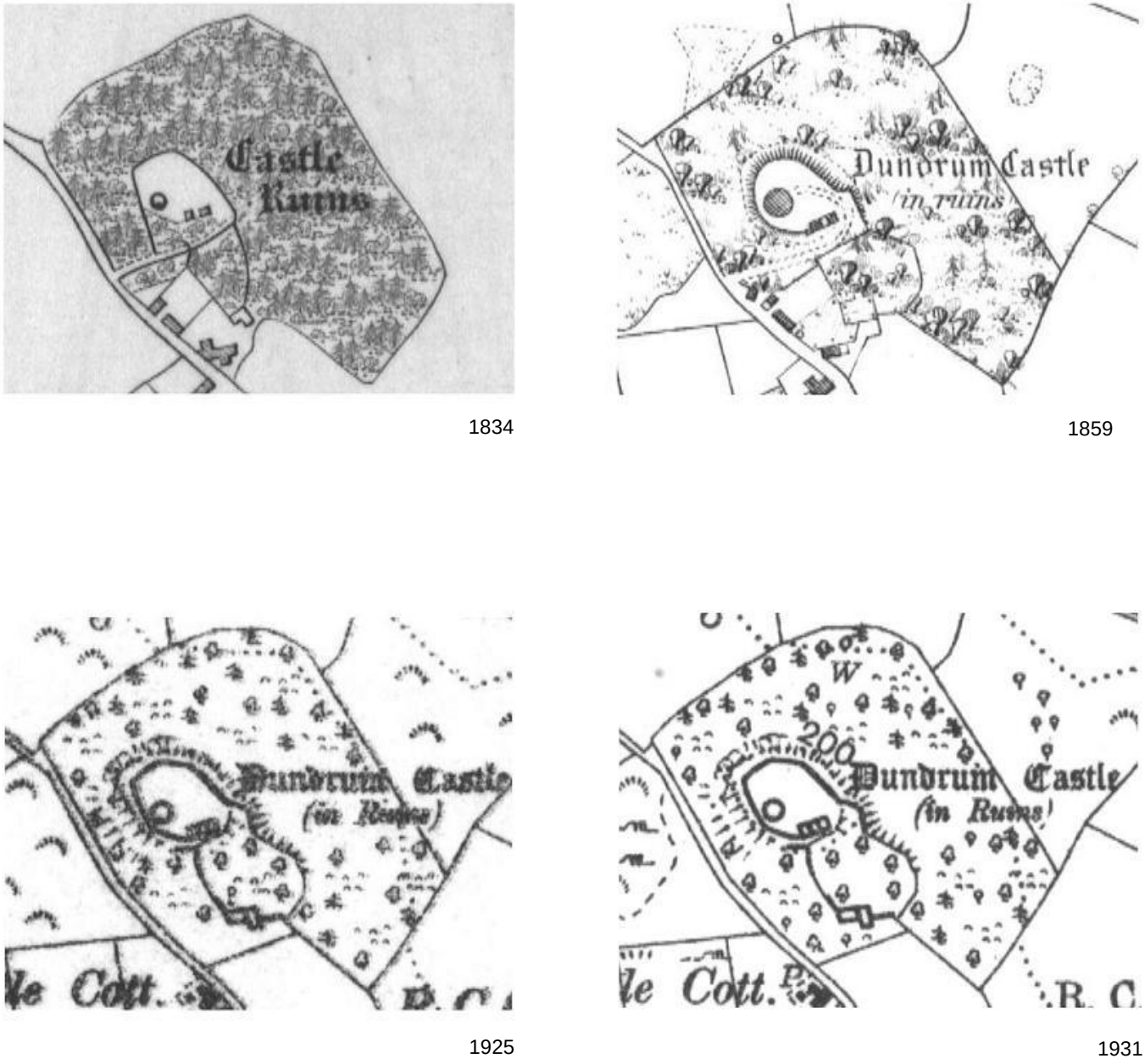

Figure 1: Details of various Ordnance Survey 6" and 1:10000 surveys and revisions of Dundrum Castle and its immediate environs. Top left 1834; top right 1859; bottom left 1925; and bottom right 1931.

2.5.20 Differences between the various Ordnance Survey 6" and 1:10000 surveys (Figure 1) reflect the changes that occurred to Dundrum Castle and its immediate environs whilst the site was part of the Downshire Estates. The nineteenth-century maps show three buildings, each standing within individual garden plots, immediately to the west and southwest of Blundell's House. The maps also show that until at least 1859, access to the upper ward was made from the west via an entrance located where the current toilet block for visitors is presently situated. The first edition map of 1834 also shows that the lower ward was sub-divided by a boundary that ran from the northeastern corner of Blundell's House towards the southeastern angle of the upper ward. This boundary is represented in a number of late eighteenth-century

representations of both Blundell's House and Dundrum Castle (see Paragraph 2.6.4). That the eastern section of the curtain wall of the lower ward is not represented on the first edition map is consistent with this section of the wall having been rebuilt during the nineteenth century (cf. Anon. 1966a, 211). The presence of the eastern part of the curtain wall of the lower ward on the 1859 revision indicates that this episode of restoration took place between 1834 and 1859. Waterman argued that the presence of a possible latrine opening in this section of the wall, as revealed by his excavations, suggested that the lower courses of the original curtain wall, although not surveyed by the Ordnance Survey in 1834, survived intact and that the wall's current line probably reflects its original alignment (Anon. 1966a, 211). This evidence for the rebuilding of the wall is consistent with Phillips' plan of the site (*c.*1883) in which the curtain wall is labelled 'modern' (Figure 5). The second edition map of 1859 does not included a clear representation of Blundell's House, but apparently shows a large rectangular enclosure with a small northward annexe upon the site of the building. It is unclear whether this 'enclosure' is an attempt to represent the building or some other landscape feature.

2.5.21 The Third Marquess of Downshire (1788-1845) undertook significant improvements at Dundrum apparently after residing upon the Dundrum Estate during the summer of 1825 (Brett 1973, 18). These improvements must have been undertaken between 1825, when the Marquis published an announcement of his intention to improve the town in the *Belfast News Letter*, and 1837 when Lewis described the transformed town (Brett 1973, 18; Lewis 1837, 573). That Lord Downshire's announcement describes much of the work as being 'now in progress' (cf. Brett 1973, 18) suggests that the majority of the work was completed shortly after 1825. The improvements included the widening of the town's Main Street, the laying out of several new roads, the building of a number of dwellings as well as the construction of the Downshire Arms Hotel, a Bath-House and a lodging house intended for the use of the family of the Marquis and Marchioness of Downshire. Interestingly, there is a local tradition that one morning the Marquis had some 'boys' remove the roof of Blundell's House because it was spoiling his view of the ruin (Mark Davis pers.comm.). That the earliest representation of Blundell's House, which dates to 1758, depicts the building's east wing as a roofless ruin (see Paragraph 2.6.1), indicates that, whilst this local tradition may preserve in memory an episode of restoration or deliberate modification of the ruins which coincided with the improvements of the 1820s, the removal of the roof of Blundell's House did not form part of these alterations. An engraving based upon a 1789 or 1790 drawing of the castle by T.Cocking (Grose 1791-95, pl.5; cf. Elmes 1975, 133, no.1976TX(13)) shows that the hill around the castle had not been planted with trees at this date, although the plantation is depicted on the first edition Ordnance Survey 6" map of 1834 (Figure 1). Although it is reasonable to suggest that a likely context for the plantation is Lord Downshire's improvements of the 1820s, not all of the nineteenth-century alterations to the castle can be dated to this episode. As noted above, cartographic evidence suggests that an internal wall within the lower ward was removed and part of the curtain wall of the lower ward was rebuilt, presumably under the direction of either the Third or Fourth Marquess of Downshire, at some point between 1834 and 1859 (see Paragraph 2.5.20).

2.5.22 A large collection of documents relating to the management of the Downshire Estates is now held by the Public Record Office of Northern Ireland (Public Record Office Northern Ireland Ref. Nos. D607 and D671). In addition to casting light upon the period of ownership of the Dundrum Estate by the Blundell and Hill families, study of the Downshire Papers potentially enables aspects of the medieval history of the manorial estate to be reconstructed, For example, study of a *c.*1880 a map of the Dundrum Estate (Public Record Office Northern Ireland Ref. No. D671/M5/22C/1) indicates that the estate consisted of the townlands of Aghlisnafin, Ballybannon, Ballylough, Dundrum, Magherasaul and Moneylane. Given the apparent continuity in land holding of the manorial estate of Dundrum from the medieval period until it was incorporated into the Downshire Estates between 1787 and 1799, it is likely that these six modern townlands represent *"Macgyllemghells syx townes"* which were identified in 1540 as making up the later medieval manorial estate of Dundrum (Quinn 1932-34, 76; see Paragraph 2.5.8). Although it has not been possible to undertake anything other than a brief study of the Downshire Papers whilst preparing this report, it is recommended that additional research is undertaken upon this valuable resource for appreciating the history of both Dundrum Castle and Blundell's House (see Paragraph 6.4.2).

2.6 Three Early Representations of Blundell's House

2.6.1 A study of early pictorial representations of Blundell's House informs both the historical background of the site (see Section 2.5) and the architectural description of the surviving remains (see Section 2.8). The earliest known representation of Blundell's House is contained within a sketch of Dundrum Castle produced by Mary Delaney and dated to 1758 (Day 1991, 226; the image is reproduced below as Figure 2). Mary Delaney (née Granville; other married name Pendarves) (1700-1788) was a Court favourite and original member of the Blue Stocking Society, who was famous for her correspondence, art, gardening and interest in botany (Brandon Schnorrenberg 2004). She married her second husband, Patrick Delaney (*c.*1685-1768), in 1743 and the couple resided periodically at Holly Mount and Mount Panther in County Down following Patrick's appointment as Dean of Down in 1744 (Brandon Schnorrenberg 2004, 712; Minch 2009, 150). As an artist Mary Delany was variously taught by William Hogarth, Bernard Lens and Louis Goupy, and encouraged by her friend, the fellow amateur artist, Letty Bushe (Crookshank and the Knight of Glin 1994, 30-31). Delany produced a number of pencil, ink and watercolour sketches of Irish landscapes in a style that could be highly competent and pictorial, but generally tended towards the naive (Butler 1990, 34). A collection of her landscapes, which includes several important early representations of historic gardens and buildings, survives in a sketchbook in the National Gallery of Ireland's collections (National Gallery of Ireland accession number NGI.2722). Delany's watercolour of Dundrum Castle, which is included within this sketchbook, may have been produced during a trip on the 2nd September 1758, which she recorded in a letter to her sister. In her letter the destination of the excursion is described as 'the castle of Dundrum ... a ruin on a very steep rude shapen hill', from which could be seen 'a vast extent of the sea on which were several vessels, chiefly fishing-boats; and the vast mountains of Moran, which are so near to us that we can perceive the rivers which run down the sides of them' (Llanover 1861, 508; Day 1991, 226). This description matches so closely the subject of Delaney's sketch (Figure 2) that it is probable that the illustration and letter describe the same scene. The sketch depicts the east wing of Blundell's House as a ruin, without a roof, but with both its gables in good condition, the south gable being slightly larger than the north gable. The perspective of the illustration obscures both the west wing of the building and the area immediately to the north of the east wing. The depiction of the gables of the east wing suggests a degree of vertical exaggeration. A large opening, or possibly the remains of the attached curtain wall of the lower ward, is also depicted on the eastern side of the building, however, given the naive style of the sketch, the interpretive weight that can be put on this feature is limited. Mary Delany's illustration provides a *terminus ante quem* of 1758 for the loss of the roof of the east wing and, by extension, the end of occupation of Blundell's House – a date which is consistent with both the traditional historical narrative (see Paragraph 2.5.18) and the findings of the excavation (see Paragraphs 3.3.5 and 3.6.1).

2.6.2 Blundell's House is also depicted in an engraving by W.Thomas published in 1791 and based upon a drawing, by an unknown artist, prepared the previous year (Elmes 1975, no.344TA; the engraving was produced for the first volume of Grose's *The Antiquities of Ireland* (1791-95, pl.6) and is reproduced below as Figure 3). There are at least two demonstrable discrepancies between the 1791 engraving and the surviving ruin (Plate 1), which indicate that the illustration's accuracy is questionable. Firstly, the chimney on the eastern side of the east wing appears to extend beyond the southern gable of the east wing, when in reality it is positioned midway along the east wing's eastern wall. Secondly, and more significantly, the illustration misrepresents the western end of the building's western wing. In the engraving the form of this gable is incorrectly shown as a square, tower-like ruin, whilst even a cursory study of the present day ruin shows that it was a conventional gable end that was embellished with a gun loop in its centre. The most likely explanation for these inaccuracies is that Thomas misinterpreted the perspective of the original drawing and depicted the chimney in the wrong position and the western gable as if it were two walls meeting at a right-angle. It was not unknown for engravers to add figures and other embellishments to the sketches that formed the illustrations for *The Antiquities of Ireland* (De Paor 1993, 125). Unfortunately, the original drawing has, at present, not been located (it is not catalogued as part of the Grose Collection in the National Library of Ireland cf. Elmes 1975, 132-138, no.1976TX) and, therefore, has not

been available for study. Consequently, the possibility that the inaccuracies noted above originated with the original drawing cannot be entirely dismissed.

Figure 2: The ruins of Dundrum Castle, County Down by Mary Delany (1758) *(ink, graphite and wash on paper reproduced from Day 1991, 26)*. National Gallery of Ireland Accession Number NGI.2722.67.

2.6.3 The occurrence of demonstrable inaccuracies within the 1791 engraving makes it difficult to accept the validity of other features within the illustration whose veracity cannot be independently confirmed. For example, when compared to its current position, the relationship of the short, surviving length of curtain wall immediately to the east of the east wing's chimney, and by extension the rest of Blundell's House, as depicted in the 1791 engraving, appears to be incorrect. The engraving appears to show the curtain wall of the lower ward either aligned directly with the southern gable of the east wing or passing in front of it, whilst the present curtain wall butts against the chimney which is located approximately mid-way along the eastern wall of the east wing. That the 1834 edition of the Ordnance Survey 6" map does not represent this section of the curtain wall, and that at least part of the eastern section of the lower ward's curtain wall was demonstrably rebuilt between 1834 and 1859 (see Paragraph 2.5.20), raises the possibility that the section of wall depicted in the 1791 engraving was demolished or collapsed before 1834 and then rebuilt, potentially on a different alignment, before 1859. This possibility is, however, considered inherently unlikely. As previously noted, Waterman argued that the possible latrine opening in this section of the wall suggested that the lower courses of the original curtain wall, although not surveyed by the Ordnance Survey in 1834, survived intact and that the wall's current line reflects its original position (Anon. 1966a, 211). Furthermore, it has already been demonstrated that, independent of the representation of the curtain wall, the east wing's chimney has been incorrectly depicted in the engraving (see Paragraph 2.6.2). Consequently, it is

not possible to confidently place any interpretive weight upon the apparent position of the adjacent surviving stub of the curtain wall in the engraving.

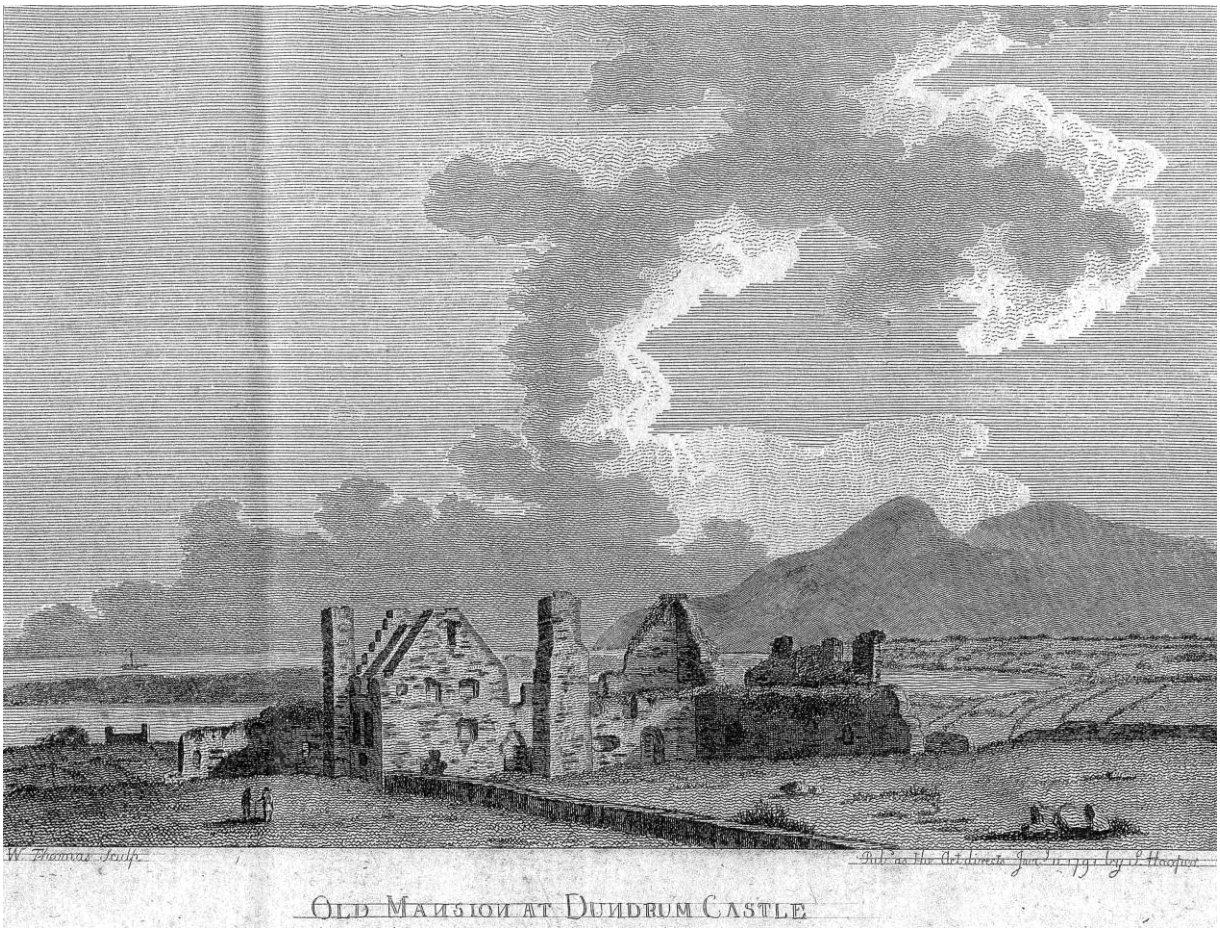

Figure 3: 1791 engraving (based upon a 1790 drawing). First published in the first volume of Grose's *The Antiquities of Ireland* (1791-95, pl.6).

2.6.4 Other features of note within the 1791 engraving whose accuracy it is difficult, if not impossible, to independently verify, include the depiction of the southern gable of the east wing as having crow-steps, and the fact that the stone work of the east wing is represented as being in far better condition than that of the west wing. It could be argued that Delaney's representation of the east wing of Blundell's House, in which the southern gable appears to be larger than the northern gable (see Figure 2), might be corroborative evidence that the southern gable was originally furnished with crow-steps, however, given the naive style of Delaney's sketch this is far from certain. The relatively better condition of the fabric of the ruined east wing within the 1791 engraving suggests that the west wing may have fallen into ruin whilst the east wing was either still occupied or actively used for some non-domestic purpose, such as storage. In comparison to these features, the low wall extending towards the north from the northeastern corner of the east wing can be identified with reasonable confidence as being a genuine feature, because it is both represented in the 1834 Ordnance Survey map (albeit on a slightly different alignment cf. Figure 1), and two separate engravings of the Anglo-Norman castle (Grose 1791-95, pl.5; Dubourdieu 1802, pl.opp.p.294), both apparently based upon a 1789 drawing by T.Cocking (Elmes 1975, no.1976TX(13)), depict the northern end of the low wall running up to, and abutting, the low cliff immediately below the gatehouse to the medieval castle.

2.6.5 Perhaps the most intriguing feature of the 1791 engraving is the detail visible on the upper part of the western section of the curtain wall of the lower ward, located immediately to the north of the western wing of Blundell's House. Today this

wall has been deliberately reduced in height, but the engraving appears to show at least one window at a (now removed) first floor level. Given that the gun loops known to be present at ground level in this wall are also represented in the engraving, then it is difficult to dismiss this detail as an inaccuracy. Although the image may represent nothing more significant than a later opening inserted into the curtain wall at a point above the level of an original wall-walk (T.McNeill pers.comm.), it does raise the possibility that Blundell's House may have been greater in extent than the footprint of the surviving structural remains suggests, and that a courtyard or northern wing could have adjoined the west wing of the building (P.Smith pers.comm.). Although the demonstrable inaccuracies contained within the 1791 engraving (see Paragraph 2.6.2) significantly reduce the interpretive weight that can be placed upon this potential evidence for a courtyard or northern wing, support for such a structure is apparently provided by an undated, and hitherto unpublished, pencil and chalk sketch of Blundell's House prepared by James Stark Fleming.

2.6.6 The unpublished sketch by James Stark Fleming forms part of the collections of the National Library of Ireland (Call Number PD 1974TX (iv) 49). It is a pencil and chalk drawing prepared by Fleming for his planned, but never published, volume on castellated structures in Ireland, which would have formed a successor volume to his *The Town-Wall Fortifications of Ireland* (1914). Apparently a prospectus for the planned volume was issued, but Fleming died before the project could be completed. Fleming, a Fellow of the Society of Antiquaries of Scotland and a member of the Royal Society of Antiquaries of Ireland, was by profession a solicitor based in Stirling, but also maintained a keen amateur interest in architectural history. In addition, to the 1914 volume on Irish town walls he also published a small number of papers and notes on Irish castles and other buildings in the *Journal of the Royal Society of Antiquaries of Ireland* (1908; 1909; 1910). Fleming's image of Blundell's House is preserved in one of nine volumes of sketches of castellated structures in Ireland, some of which were executed in the field and others of which were copied from earlier drawings held in the collections of the Royal Irish Academy (Elmes 1975, 114, no.1974TX). The illustration, which is indexed within the volume as 'ancient ruined mansion Dundrum', is undated, however, most of Fleming's work in Ireland dates to either the last decade of the nineteenth century or the early decades of the twentieth century. It is almost certain that the sketch was either drawn, or more likely copied, during this period.

Plate 1: Blundell's House viewed from the same approximately northeast perspective as the Fleming and Thomas illustrations. Note the evidence for spade cultivation ridges in the foreground.

2.6.7 Fleming's illustration is drawn from a similar approximately southwest-looking perspective to the 1791 engraving, however, this does not necessarily indicate that Fleming's drawing is a copy of the 1791 engraving, or that both images are based upon the same, unidentified original. The perspective chosen by both Fleming and Thomas is undoubtedly the best for representing the ruin in its entirety and, consequently, little significance should be placed upon two different artists choosing the same perspective to draw the remains of Blundell's House. What is of potential significance, however, is that Fleming's sketch shows a number of features which are no longer extant or represented in the 1791 engraving (compare Figure 4 with Figure 3 and Plate 1). Most importantly, Fleming's sketch appears to show a courtyard attached to the north of the surviving ruins. This courtyard has entrances on its northern and eastern sides; the entrance on the northern side having a Romanesque appearance. Fleming's sketch also depicts a relieving arch in the wall above the eastern entrance into the courtyard and a small square window or armorial panel in the courtyard's northern wall. Furthermore, a tall structure apparently rises up from the northeastern corner of this courtyard. Although its position and profile suggests that it might be a confused attempt to render the projecting chimney breast still extant in the northern wall of the building's west wing, the apparent representation of a window within this structure suggests that this was not the case. If accepted as genuine, these features suggest that either Blundell's House was built upon the site of an earlier, medieval structure or that it had a hitherto unrecognised northern extension in which a medieval doorway had been reused. Fleming's sketch also shows dressed stone surviving in the windows of the northern gable of the east wing and the western gable of the west wing. If accurate, this indicates that the dressed stone was not robbed out of the ruin until after the building's roof collapsed or was dismantled. The sketch also apparently shows a lean-to structure attached to the eastern side of the east wing adjacent to the chimney, which is not represented in the 1791 engraving.

2.6.8 Fleming's illustration, however, presents a number of interpretive difficulties that undermines the interpretive weight that can be placed upon its study. These problems are especially apparent when it is compared with the 1791 engraving. For example, that neither the lean-to structure or the courtyard are represented in the 1791 engraving would suggest, if these features are accepted as genuine, that Fleming's sketch is based upon an earlier original, however, the condition of the east wing's gables appear to be more ruined in Fleming's sketch than in the 1791 engraving, suggesting the opposite order of relative dating. These inconsistencies may well be a product of inaccuracies with the 1791 engraving rather than Fleming's sketch or the original drawing it was based upon. That the demonstrable inaccuracies in the 1791 engraving, that is the position of the chimney on the eastern side of the east wing and the misrepresented form of the west wing's western gable (see Paragraph 2.6.2), are not replicated in Fleming's sketch suggests that Fleming's sketch was not produced by copying the 1791 engraving. In this context it is notable that the apparent window opening in the western curtain wall that was present in the 1791 engraving, and which suggested the possibility that Blundell's House originally had either a northern wing or courtyard (see Paragraph 2.6.5), is also represented in Fleming's sketch.

2.6.9 It is possible that Fleming simply made up the northern courtyard, although a limited literature search indicates that although the accuracy of his work has occasionally been questioned, no evidence has previously been identified to suggest that he falsely created architectural details or features to embellish his drawings. For example, Avril Thomas noted some inaccuracies in the accompanying text of Fleming's *The Town-Wall Fortifications of Ireland* (1914), however, she did not question the accuracy of his illustrations, but actually described them as 'valuable' (Thomas 1992, 5-6). Similarly, although Siobhan de hÓir noted some inaccuracies in three previously unpublished Fleming sketches of antiquities in Donegal (1987, 147), these related only to omissions of particular architectural details, which Fleming presumably had not noticed, rather than the deliberate misrepresentation of non-existent structures and inauthentic features.

2.6.10 If Fleming's drawing is accepted as an honest attempt to render an accurate representation of the site, then the key to interpreting it is to establish whether it was produced in the field or copied from an earlier image. The Ordnance Survey first edition 6" sheet of Dundrum (1834) shows the L-shaped ruin of Blundell's House as it stands today (albeit with the field wall attached to the ruin's northeast corner still surviving - as depicted in the 1791 engraving). Unless the apparent northern courtyard was a fictitious product of his imagination, this would suggest that Fleming's sketch was based upon an earlier image of the site that pre-dates 1790 (this being the date of the drawing upon which the 1791 engraving was based and which does not depict a northern courtyard). Pencil annotations in Fleming's hand on the sketch apparently refer to 'Newark Cas Co D Jul 95' (i.e. Newark Castle, Co. Down, July 1895) and 'on to Dundrum'. The Newark (new work?) was the original name of the nearby site of Ardglass Castle cf. Anon. 1966a, 220-222, no.401.1, fig.140, pls.48-49. These annotations may have been made by Fleming during an excursion to visit and sketch the two sites in July 1895, however, it seems unlikely that he would have scribbled such comments on his drawing paper whilst sketching. It is more likely that they represent later notes made when deciding upon which drawings to have engraved and the running order of illustrations in the planned volume that Fleming may have been intended to be presented as a travelogue. Another drawing of Dundrum Castle by Fleming in the same collection (National Library Call Number 1974TX (ix) 5) is dated to 1833 indicating that even if he had visited the site for the purposes of sketching, he was happy to produce copies in his own style of earlier prints and drawings, which he may have finished in the field. These observations suggest that Fleming's image of Blundell's House was also, at least in part, a copy of an earlier image.

2.6.11 It is debatable whether the apparent evidence for a northern wing or courtyard should be accepted or not. Even if the illustration is accepted as an honest attempt to accurately depict the ruin then it still remains possible that Fleming could have made a series of unintentional errors in copying from an original drawing that resulted in the 'creation' of a non-existent northern courtyard. Alternatively, it is also possible that his source drawing contained a number of fictitious elements, such as the courtyard and its Romanesque doorway, which Fleming unwittingly reproduced. The interpretive

contradictions raised by a comparison of Fleming's image and the 1791 engraving (see Paragraph 2.6.8) do not inspire confidence in the reliability of either image. Key to assessing the veracity of the extant early images of Blundell's House is the identification, and study, of the original drawings that both Fleming's sketch and the earlier 1791 engraving are based upon. In the case of Fleming's sketch, a search through the collections of the Royal Irish Academy, the acknowledged source for many of his copies, should be considered a priority for further research (see Paragraph 6.4.3). Until such work is undertaken the case for a northern courtyard or extension to Blundell's House must be considered, at best, unproven.

2.7 Past Archaeological Investigations and Excavations at Dundrum Castle

2.7.1 The earliest ground plan of Dundrum Castle and its immediate environs was produced by James Phillips and published in both a privately-published booklet on the castle (1883, pl. opp.17) and in a closely-related paper, nominally on early military architecture in Ireland, but in reality an edited version of the booklet (1883-84, pl. opp.160). Phillips' plan, which is reproduced below (Figure 5), is inaccurate even by the standards of nineteenth-century, amateur surveying, and it contains at least one conjectural element, that is the stubs of a semicircular projection from the western tower of the upper ward's gatehouse, which subsequent research has demonstrated to be non-existent cf. Waterman 1951, 20. With reference to Blundell's House, Phillips' plan provides a fairly accurate representation of the east wing, however, the character of the west wing and the angle at which it is joined to the curtain wall of the lower ward is completely erroneous. Despite its inaccuracies, prior to Waterman's 1955 survey of the site (Anon. 1966a, fig.133), Phillips' plan remained the only detailed representation of Dundrum Castle and was periodically reproduced despite its significant flaws (e.g. Leask 1936, 162, fig.8). Phillips' writings were mostly concerned with the Anglo-Norman elements of the castle, and in particular the circular great tower. He did, however, describe Blundell's House as 'an Elizabethan mansion', although inexplicably he attributed its construction to the Blundell family after they had acquired possession of the castle in 1636 (Phillips 1883-84, 157, 161-162). Apparently aware of the contradiction between his architectural and historical dating (Elizabeth I having died in 1603), Phillips suggested that the Blundell family had built the mansion in an 'Elizabethan style' (1883-84, 162). It is possible that Phillips genuinely believed that the Blundell family had deliberately built the house in an anachronistic style, however, it seems more likely that he completed his plan of the site, in which the building is labelled the 'Ruin of Elizabethan Mansion', prior to finishing his historical research. Presumably, after concluding the building had been constructed in the 1630s, Phillips was reluctant to bother undertaking a revision of a plan that had already been prepared for publication and so, in order to keep his text and illustration consistent, he described Blundell's House as having been built in an 'Elizabethan style'.

2.7.2 Lawlor attempted a concise description of the castle integrated with a number of relevant historical references in a contribution to the *Preliminary Survey of the Ancient Monuments of Northern Ireland* (1940). Although Lawlor's attempt to incorporate a historical narrative into his description of the monument is laudable, much of his dating of individual elements of the site's architecture is questionable. For example, his suggestion that the 1210 reference to the payment of artisans 'clearly' indicated that the castle was still a motte-and-bailey fortification at the beginning of the thirteenth century can be rejected. Lawlor had made this suggestion, based on the absence of any reference to 'masons' within the 1210 pipe roll, a number of years previously (1928, 126-127) and it had already been dismissed by Leask (1936, 161-162). As previously noted (see Paragraph 2.5.3), the small size of the payments suggests the artisans work related to only minor repairs (Orpen 1909, 24), and that King John made payments to the same craftsmen eleven days later whilst at Carrickfergus Castle (Hardy 1844, 206; Sweetman 1875, 63, no.406) indicates that the 'quarriers, ditchers and carpenters' recorded in the 1210 pipe roll could be usefully employed on repairs to stone castles (see Paragraph 2.5.3). Furthermore, as has long been recognised, the short vogue for building circular donjons indicates that the great tower at Dundrum was probably built by the early thirteenth century (Leask 1936, 161-162), although whether the tower was built by de Courcy or de Lacy is uncertain cf. McNeill 1980, 7. There is, in fact, no evidence to suggest that Dundrum was ever a motte-and-bailey castle (*pace* Lawlor 1928, 126-127; 1940, 126; McKeown 1937, 32). Of more relevance to the current discussion is

Lawlor's suggestion that Bundell's House can be dated to about 1660, however, this idea is undermined by the Scottish parallels for the triangular pediments of the east wing that date to the 1630s (see Paragraph 2.9.1; *pace* Roulston 2007, 328). Historically, it is more plausible to suggest that occupation of the house ended in the mid seventeenth century, rather than when the estate passed to the Hill family in the late eighteenth century (*pace* Lawlor 1940, 127; see Paragraphs 2.5.18-2.5.19).

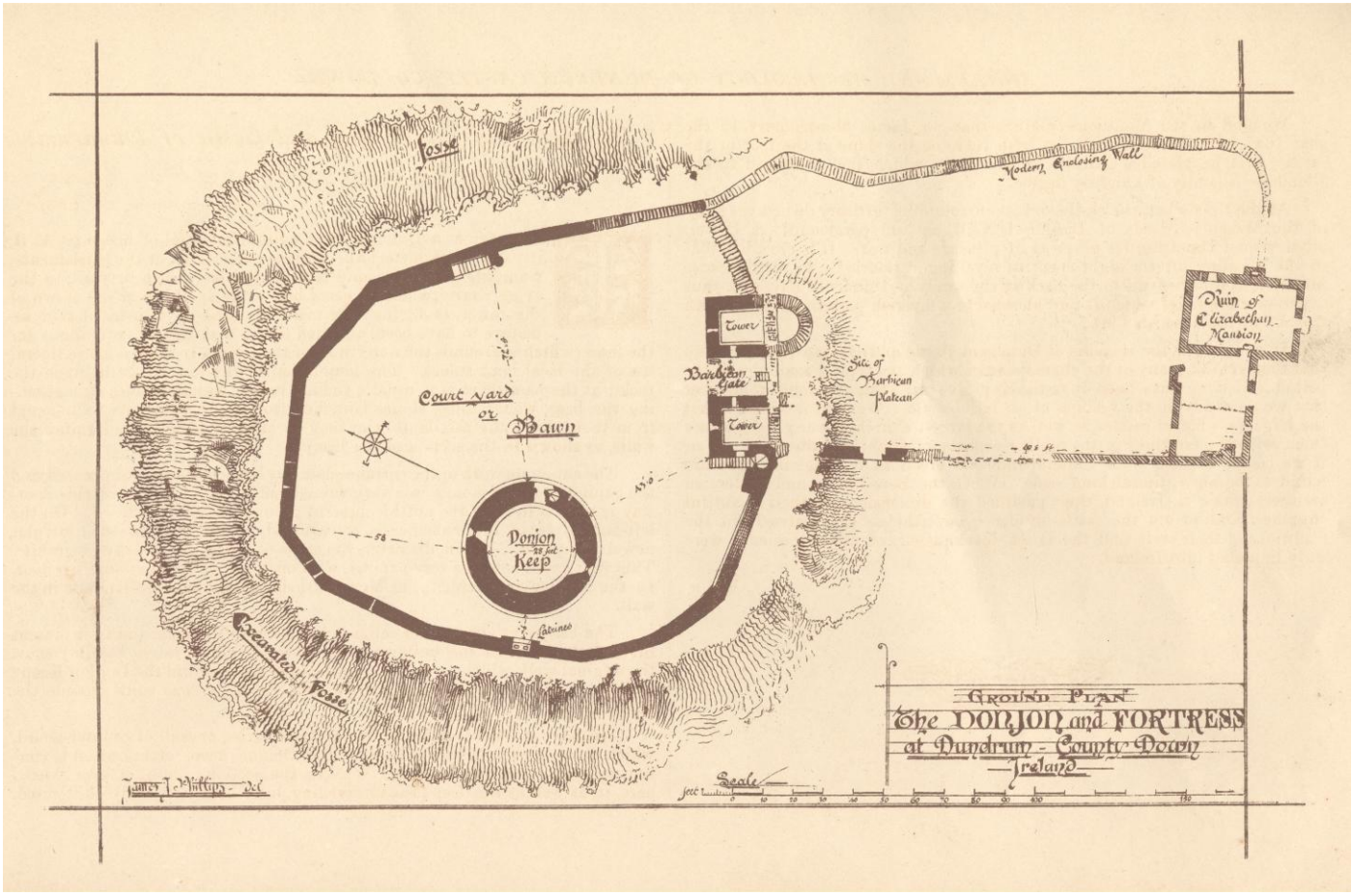

Figure 5: Ground plan of Dundrum Castle and its immediate environs produced by James Phillips (1883, pl. opp.17; 1883-84, pl. opp.160).

2.7.3 Significant archaeological study of Dundrum Castle did not begin until the 1950s when a series of excavations were undertaken at the site by Dudley Waterman. These excavations were in part intended to resolve the architectural history of the site in advance of publication of the *Archaeological Survey of County Down* (Anon. 1966a), but after the monument was brought into State Care in 1954 they were also prompted by the repair and consolidation work being undertaken on the fabric of the castle. In 1950 Waterman excavated a number of narrow trenches within the interior of the upper ward that were principally intended to establish the date and character of the circular great tower, curtain wall and gatehouse (Waterman 1951). Although a careful reading of Waterman's report indicates that he was confused by a number of the stratigraphic relationships he uncovered, the excavation results were positive. In places the stratigraphic sequence was over two metres in depth and the narrow width of his trenches inevitably presented Waterman with considerable interpretive difficulties. Nevertheless Waterman convincingly demonstrated that the construction of the curtain wall predated the circular great tower, and that the foundations of the curtain wall cut through at least two earlier horizons containing occupation material (1951, 17-19, 21). He also established that the gatehouse only had a single semicircular projection (1951, 20) and uncovered evidence for a number of medieval structures, represented by the remains of beaten-earth floors within the upper ward, as well as a dry-stone revetment that may have been pre-Norman in date (1951, 21,

22). Waterman's investigations in the west tower of the gatehouse suggested that it may have been re-occupied after its abandonment for defensive purposes (1951, 20), however, excavation only uncovered a sequence of disturbed soil horizons and Waterman's inference was based upon the insertion of openings on the tower's eastern and northern walls. In one of his trenches, located between the great tower and the curtain wall, Waterman uncovered part of an apparent earth and rubble bank, which he speculatively interpreted as representing the earliest Anglo-Norman fortification of the site thrown up by de Courcy prior to the construction of the curtain wall of the upper ward (1951, 19, 23-24). Waterman's report on the 1950 excavations did not consider Blundell's House in any detail, although in a passing reference to the ruin Waterman is the first to use the name 'Blundell's House' to denote the ruin (1951, 15). Although both Phillips and Lawlor had previously attributed the construction of the building to the family, previously it had been described only as 'an Elizabethan mansion' or a 'Jacobean house' (Phillips 1883-84,157, 162; Lawlor 1940, 127).

2.7.4 The desire to confirm the existence of the apparent early Anglo-Norman earth and rubble bank uncovered in 1950, and further investigate its character, prompted Waterman in 1954 to excavate a single trench located between the great tower and gatehouse (Waterman 1958). This excavation confirmed the presence of the bank and demonstrated that it overlay a buried soil horizon containing Souterrain ware and was sealed by a deposit containing thirteenth-century, wheel-thrown, glazed pottery (1958, 64). Although the exposed part of the bank had been disturbed by an eighteenth-century pit that had been dug against the curtain wall, Waterman argued that the excavation results confirmed his earlier interpretation that the bank represented the remains of an Anglo-Norman campaigning castle dating to the early years of de Courcy's enterprise in Ulster (1958, 64-65). Recently, Sweetman has reiterated Waterman's interpretation by plausibly suggesting that the bank may represent the remains of some type of a ringwork castle (1999, 36-37), although given that the feature has only been uncovered in two narrow trenches any certainty in its interpretation is not possible.

2.7.5 In the winter of 1959-60 the great tower was cleared of debris prior to conservation of the tower's fabric. This clearance resulted in the 'discovery' of a massive, vaulted, rock-cut cistern (Waterman 1964, 136), although the feature had been at least partially open and accessible during the first half of the nineteenth century (cf. Lewis 1837, 573) and, despite being filled with building debris by the 1880s, Phillips had correctly identified it as a cistern or well (1883, 16; 1883-84, pl. opp.8). Waterman's investigations demonstrated that the cistern had a depth of approximately six metres and contained a platform faced in dry-stone rubble that would have facilitated the drawing of water. The clearance also exposed fragments of masonry which Waterman plausibly interpreted as the remains of the springing of a barrel vault which had covered the cistern below the level of the castle's basement. The excavations demonstrated that the cistern was filled with rubble which contained finds of thirteenth to seventeenth century date.

2.7.6 During 1960 limited excavations were undertaken by Waterman in the lower ward of Dundrum Castle. Although these excavations have not been published, they are briefly noted in the *Archaeological Survey of County Down* (Anon. 1966a, 210). The excavations consisted of six small trenches cut against the eastern section of the curtain wall of the lower ward. The locations of the trenches are preserved in a plan which has been digitised and incorporated into the on-line Sites and Monuments Record (http://apps.ehsni.gov.uk/ambit/Details.aspx?MonID=8533). To date, it has not been possible to consult the SM7 File, maintained by the Northern Ireland Environment Agency, which relates to Dundrum Castle in order to assess how much of this excavation archive remains extant. Given that only a single, and fairly oblique, reference to the 1960 excavations has ever been published, it is also possible that Waterman conducted other unpublished investigations at Dundrum which have not been noted in print. That the 1960 excavations were not identified in a recent survey of unpublished State-funded excavations in Northern Ireland (McHugh and Beer 2006) indicates that paperwork relating to Waterman's interventions at Dundrum was not necessarily incorporated into official records relating to the granting of excavation licences. Consequently, a comprehensive archival search is required to confidently establish whether or not other excavations were conducted at the site by Waterman (see Section 6.2).

2.7.7 Waterman contributed a detailed account of Dundrum Castle to the *Archaeological Survey of County Down* that forms the most complete, published description of both the castle and Blundell's House, but which should probably not be considered a definitive narrative of the site's architectural sequence (1966a, 207-211). Waterman integrated the results of his excavations into the description of the site with relatively little revision of his earlier interpretations, apart from the decision to attribute a definite pre-Norman date to the dry-stone structure within the upper ward that had been excavated in 1950. Since the publication of the *Archaeological Survey of County Down* (Anon. 1966a), relatively little archaeological work has been undertaken at Dundrum Castle. The site has been considered in a number of general surveys of Irish Castles (e.g. McNeill 1997; 26-28, 53, 91-92, 194-196, 198; Sweetman 1999, 36-37, 40, 58-59, 88, 105), but has not been the subject of a specific or detailed study. Blundell's House itself has also remained unstudied.

2.7.8 The only fieldwork of note that has been undertaken at the site in recent years has been a single episode, in January 2007, of archaeological monitoring of ground works associated with the replacement of the kiosk at the entrance to the castle site and the laying of a service pipe between the toilet block and the kiosk (Logue 2007). These ground works disturbed an alignment of mortared stones, at least two courses deep, located approximately 6.5 metres to the southeast of the toilet block (Logue 2007, 3, pl.4). Although the limited scale of the excavations discouraged the monitoring archaeologist from attempting to date or interpret this feature (Logue 2007, 3), when superimposed on the first edition Ordnance Survey 6" map of 1834 it is revealed that the position of the feature coincides with the southern boundary of a small orchard depicted on the map. This indicates that the mortared stone alignment uncovered in 2007 was almost certainly the remains of a boundary wall which was demolished at some point in the middle decades of the nineteenth century.

2.8 Architectural Description of Blundell's House

2.8.1 On the basis of both the results of Waterman's excavations and architectural analogy, a consensus opinion has emerged that the main phases of the building sequence at Dundrum are an earthwork bank that possibly represents a temporary Anglo-Norman ringwork defence, followed by the present curtain wall of the upper ward, the circular great tower, the inner gatehouse, the curtain wall of the lower ward and finally Blundell's House (see Donnelly 1997, 84-86 for the most recent articulation of this sequence). The surviving Anglo-Norman elements of the site's architecture are discussed in detail elsewhere (McNeill 1980, 7-9; 1997, 26-28, 53, 91-92, 194-196, figs. 34 and 50; Sweetman 1999, 58-59, fig.46), what is considered below is the architectural sequence of Blundell's House with some reference to the context of later medieval building and occupation at the site. The character of the building's roof is considered in more detail in Chapter 4, although some comments on the roof are offered below. Regrettably, interpretation of the different phases of construction and alteration witnessed in the fabric of Blundell's House is compromised by a number of apparent, but inadequately recorded, episodes of reconstruction and repair in the modern period.

2.8.2 Today, Blundell's House is a ruined, L-shaped structure, consisting of a western and eastern wing, located in the southwestern corner of the lower ward of Dundrum Castle. Waterman's description of the ruin is the most comprehensive and accurate account of its surviving fabric (Anon. 1966a, 210-211) and the following discussion is greatly indebted to his analysis. Blundell's House is incorporated into the western curtain wall of the lower ward, however, part of the southern curtain wall has apparently been removed to accommodate the building and the southern part of the east wing projects beyond the line of the curtain wall. Both wings of the building are built from harled random rubble masonry, which for the most part has been laid in distinct courses. Any dressed stone that once surrounded the doors and windows of the building has been robbed and apparently been crudely replaced by blocks of harled rubble, which frequently serve to narrow the openings and, on the southern gable of the east wing, have created an asymmetrical appearance that does not reflect the original, symmetrical layout of the windows. That said, the evidence for rebatements to accommodate window frames that is preserved in the harling of both the west wing (see Paragraph 2.8.4) and the east wing (see Paragraph

2.8.9) suggests that not all of the windows would necessarily have been furnished with dressed surrounds and the degree to which the building would have been furnished with dressed stone is questionable. Inspection of the fabric of the ruin indicates that the house is the product of two principal phases of construction. Firstly, that part of the building now known as the west wing was built. Although it appears to have originally formed a relatively small, stand-alone structure (internal dimensions 8.1-10.1 metres x 6.2 metres), the previously discussed evidence for a possible northern extension (Section 2.6) cannot be completely dismissed and may even explain the relatively high number of doors (two or three – see Paragraph 2.8.4) in the west wing's northern wall. The second principle construction phase is represented by the addition of the east wing, which formed the subject of the excavations in 2009. A number of minor alterations to the fabric of both wings are visible and, in the case of at least the east wing, represent modifications to the building which post-date the second principle phase of construction.

The West Wing

2.8.3 The westernmost wall of Blundell's House incorporates the curtain wall of the lower ward. The curtain wall was partly reduced and then had a gable subsequently built upon it, indicating that the west wing of Blundell's House post-dates the creation of the lower ward. The observations that the western gable does not form a right-angle with the northern and southern walls of the west wing, and that the northern wall of the west wing forms a butt join with the curtain wall, are also consistent with the west wing having been built on to a pre-existing curtain wall. The gable formed the western end of an east-west aligned roof that covered what is now known as the west wing of Blundell's House. No trace of the eastern gable of the west wing's roof survives, although it presumably surmounted the current dividing wall between the two wings of the building.

2.8.4 The west wing was entered from the lower ward by at least two doorways, one still extant (Figure 6.AA) and the other now blocked (Figure 6.AB). The extant doorway is located close to the point where the north wall joins the curtain wall, whilst the now blocked entrance was located immediately to the west of the projecting chimney breast. The profile of an angled roof is preserved in outline in the harling (i.e. lime coating applied as an external finish) of the western external face of the west wing's projecting chimney, suggesting that the blocked entrance was at some point furnished with a porch. It is uncertain whether these two entrances were contemporary, or whether the extant doorway replaced the blocked entrance. Waterman considered that the present opening in the north wall, located immediately to the east of the projecting chimney breast and adjacent to the east wing (Figure 6.AC; Plate 4), was originally a window on the strength of the survival of a rebate for a wooden frame (Anon. 1966a, 211; see Plate 2). Given the scale of reconstruction work to the walls it is possible, however, that this rebate may have originally formed part of a larger feature which accommodated a doorframe. A blocked opening that extends to ground level, and which was presumably a doorway, is visible in the west wing's eastern wall (Figure 6.AD; Plate 3). The doorway in the southern wall of the west wing (Figure 6.AE) is inserted in a section of the wall identified as modern in date by Waterman (Anon. 1966a, 211). That the internal face of this wall meets in a butt join with the section of curtain wall which forms the western end of Blundell's House, and that the lintel above the doorway itself consists of three narrow, neatly-quarried, joist-like pieces of granite which appear to be either nineteenth or twentieth century in date, is consistent with Waterman's assertion that this wall had been 'recently' rebuilt. That the southern wall and its present day openings are represented in Phillips' plan of the early 1880s (1883, pl. opp.17; 1883-84, pl. opp.160; see Figure 5), indicates that this episode of rebuilding occurred in the nineteenth century. Whether a doorway existed in this wall prior to the reconstruction is impossible to assess in the absence of either any record of this restoration

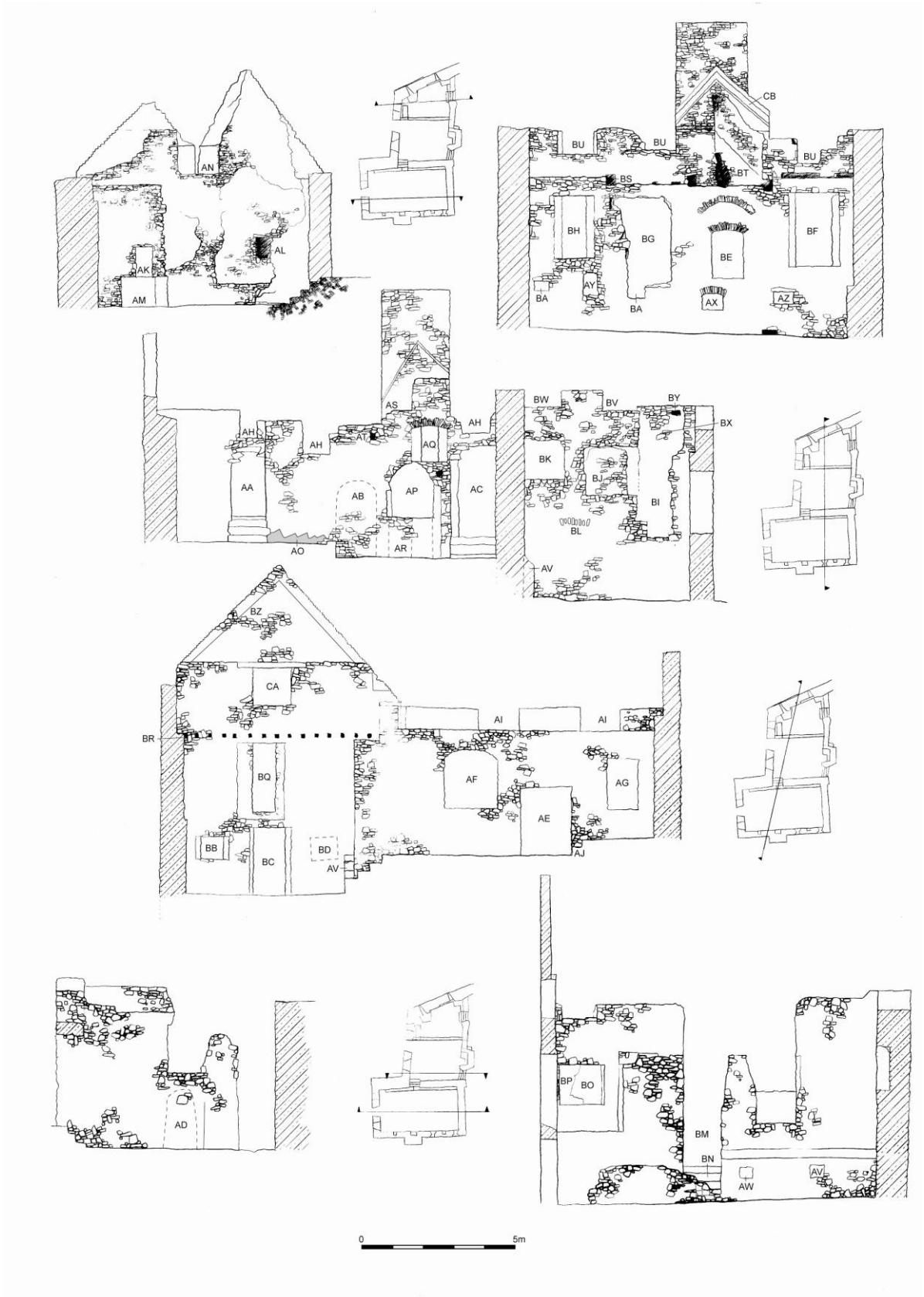

Figure 6: Elevation drawings of the internal walls of Blundell's House, with the principal architectural features annotated. Adapted from an original set of illustrations kindly provided by the Northern Ireland Environment Agency: Built Heritage.

work or any early representations of the southern side of the building. The southern wall of the west wing also contains two windows located either side of the doorway. Waterman considered the eastern window (Figure 6.AF) to be original (Anon. 1966a, 211), whilst he presumably considered the western window (Figure 6.AG) to be a nineteenth-century reconstruction. The attic floor of the western wing was apparently lighted by three splayed openings in the north wall (Figure 6.AH; Plate 4) and two splayed openings in the southern wall (Figure 6.AI). Given Waterman's view that the southern wall was largely rebuilt, it should be borne in mind that neither of the southern attic windows may be original. If they are original, then the relatively shallow, surviving height of their openings (0.55 and 0.65 metres) suggests that they may have formed the lower parts of either gabled or catslide (a.k.a. 'trunk-lift') lucarne windows which were raised directly from the wall, as is depicted in a 1625 view of Killyleagh Castle incorporated into one of Thomas Raven's Estate Maps (Anon. 1966a, 236, no.415.1, pl.56).

2.8.5 Internally, the west wing is bisected by a thin, north-south aligned wall (Figure 6.AJ; Plate 4), which demarcates a change in the height of ground level of approximately 0.55 metres. Waterman did not note this narrow wall, nor is it represented on his plan of Dundrum Castle (Anon. 1966a, fig.133), suggesting that he may have considered it to be a modern feature. The wall, or at least the change in ground level, is, however, represented on Phillips' earlier plan (1883, pl. opp.17; 1883-84, pl. opp.160; see Figure 5), suggesting that even if it was rebuilt during the 1950s restoration work, the wall marks the line of a genuine change in floor level that would presumably have marked the position of an internal partition within the west wing.

2.8.6 The lower part of the west wall, which was originally part of the curtain wall, has had two narrow gun loops the southernmost of which (Figure 6.AK; Plate 5) was apparently inserted into it. Not enough of the northern loop (Figure 6.AL) survives to evaluate whether it is an original feature or a later insertion, however, it is reasonable to assume, by analogy with the southern example, that it was also probably inserted. A block of masonry adjacent to the southern gun loop projects into the interior of the west wing (Figure 6.AM; Plate 5). The function of this apparently inserted block of masonry is uncertain, although given its position and the fact that the top of the block is flush with the sill of the loop, it may have been used to support a firearm. The gun loop in the centre of the western gable at attic level (Figure 6.AN) appears to have been an original feature rather than a later insertion. The inner face of the west wing's northern wall is built directly upon a near vertical exposure of bedrock (Figure 6.AO; Plate 4), which presumably forms the back end of a rock-cut terrace upon which the west wing has been constructed. The northern wall of the west wing contains an externally projecting chimney breast that was connected to fireplaces located in both the lower (Figure 6.AP; Plate 4) and upper (Figure 6.AQ; Plate 4) storeys. The lower fireplace has been both raised and reduced in size by the insertion of a block of masonry (Figure 6.AR). The low arch of the upper fireplace survives intact (Plate 4). The profile of a small gabled roof is preserved in outline in the harling of the inner face of the chimney projection on the west wing's northern wall (Figure 6.AS; Plate 4). Similar small, dormer-like gable roofs extending, perpendicular to the main alignment of the roof, towards the inner face of chimney projections are known from the northern wall of Cairsluith Castle, Galloway (RCAHMCS 1914, 151-154, no.282) and Terregles Castle, Dumfries (cf. Maxwell-Irving 2000, fig.344). The function of these, not uncommon, features appears to have been to prevent water gathering at the base of the chimney projection where it emerges from the roof (S.Stevenson pers.comm.). A small opening of uncertain purpose (Figure 6.AT) is present in the northern wall of the upper storey to the west of the fireplace.

Plate 2: Surviving rebate for a wooden frame preserved in the western edge of the eastern opening in the north wall of the west wing (AC), looking southwest. Scale divisions 0.5 metres.

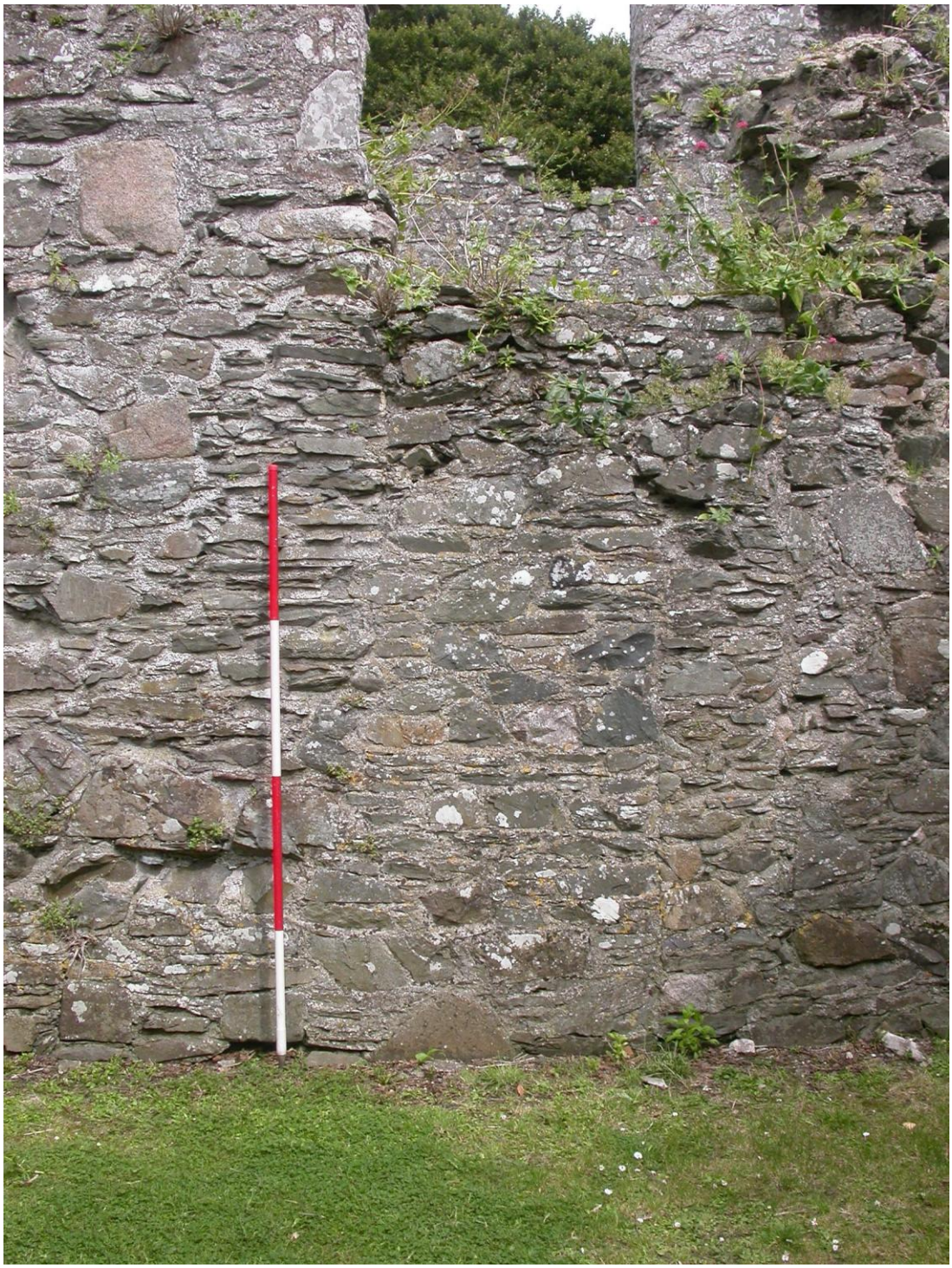

Plate 3: Blocked opening that extends to ground level in the west wing's eastern wall (AD), looking east. Scale 2.0 metres.

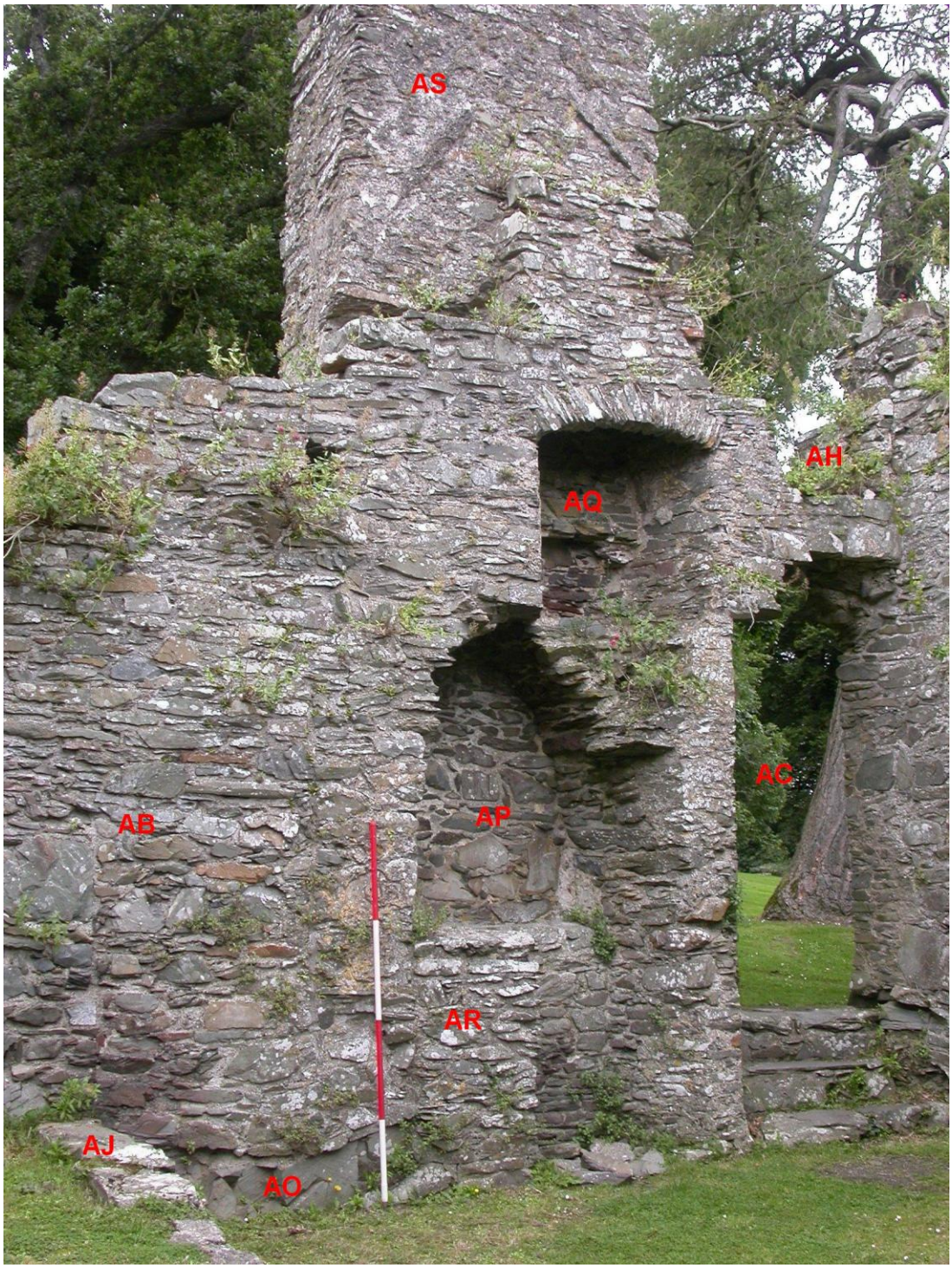

Plate 4: Part of the northern wall of the west wing of Blundell's House, looking northeast. Scale 2.0 metres.
[AB: blocked doorway; AC: window or door frame; AH: splayed window opening; AJ: internal revetment wall; AO: exposed bedrock; AP: narrowed and raised fireplace; AQ: fireplace; AR: inserted block of masonry; AS: profile of small gabled roof].

Plate 5: Gun loop (AK), apparently inserted into the lower part of the west wall of the west wing, and associated projecting block of masonry (AM), looking southwest. Scale 2.0 metres.

The East Wing

2.8.7 Waterman identified four pieces of evidence which indicated that the construction of the west wing predated that of the east wing (Anon. 1966, 210-211). Firstly, he noted that the external face of the north wall of the east wing is set back from that of the west wing, and that both walls are built upon a slightly different alignment (see Figure 7). Secondly, he identified that the northern wall of the east wing forms a butt join with the present dividing wall between the two wings.

Thirdly, he stated that the blocked openings in the present dividing wall of the two wings were probably windows for lighting the west wing, and that this wall had originally been the external eastern wall of a building that subsequently formed the west wing. Finally, he argued that the off-set in the eastern face of this dividing wall (Figure 6.AU) represented a revetment that prevented the undermining of this pre-existing wall during the excavation of the rock-cut platform upon which the east wing was built. Of these four points, only the third might be considered problematic. Today only a single blocked opening is visible in the dividing wall (Figure 6.AD) and this extends down to the ground surface within the west wing suggesting that it was originally a door (as noted in Paragraph 2.8.4). In the southern part of the east wing, the short southwards extension of the revetment (Figure 6.AU; Plate 6), that forms the off-set upon the eastern face of the dividing wall, superficially appears to be the reduced wall of an earlier structure upon which the west wall of the east wing was built. This has previously led to the suggestion that Blundell's House may have been constructed upon the site of a late medieval building (Macdonald *forthcoming*). Careful study of the surviving fabric demonstrates, however, that this superficial impression is incorrect. That the off-set in the eastern face of the dividing wall is a secondary construction can be demonstrated by studying the northernmost cupboard (Figure 6.AV) that is built into it. The back of this cupboard is formed by the original external face of the dividing wall – an arrangement which would only be possible if the off-set was a secondary feature (see Paragraph 2.8.9; the southern cupboard (Figure 6.AW; Plate 6) is too badly damaged to demonstrate how it was constructed). Waterman's suggestion that the off-set functioned as a revetment to prevent the eastern end of the west wing being undermined must be accepted as the only plausible interpretation of this feature.

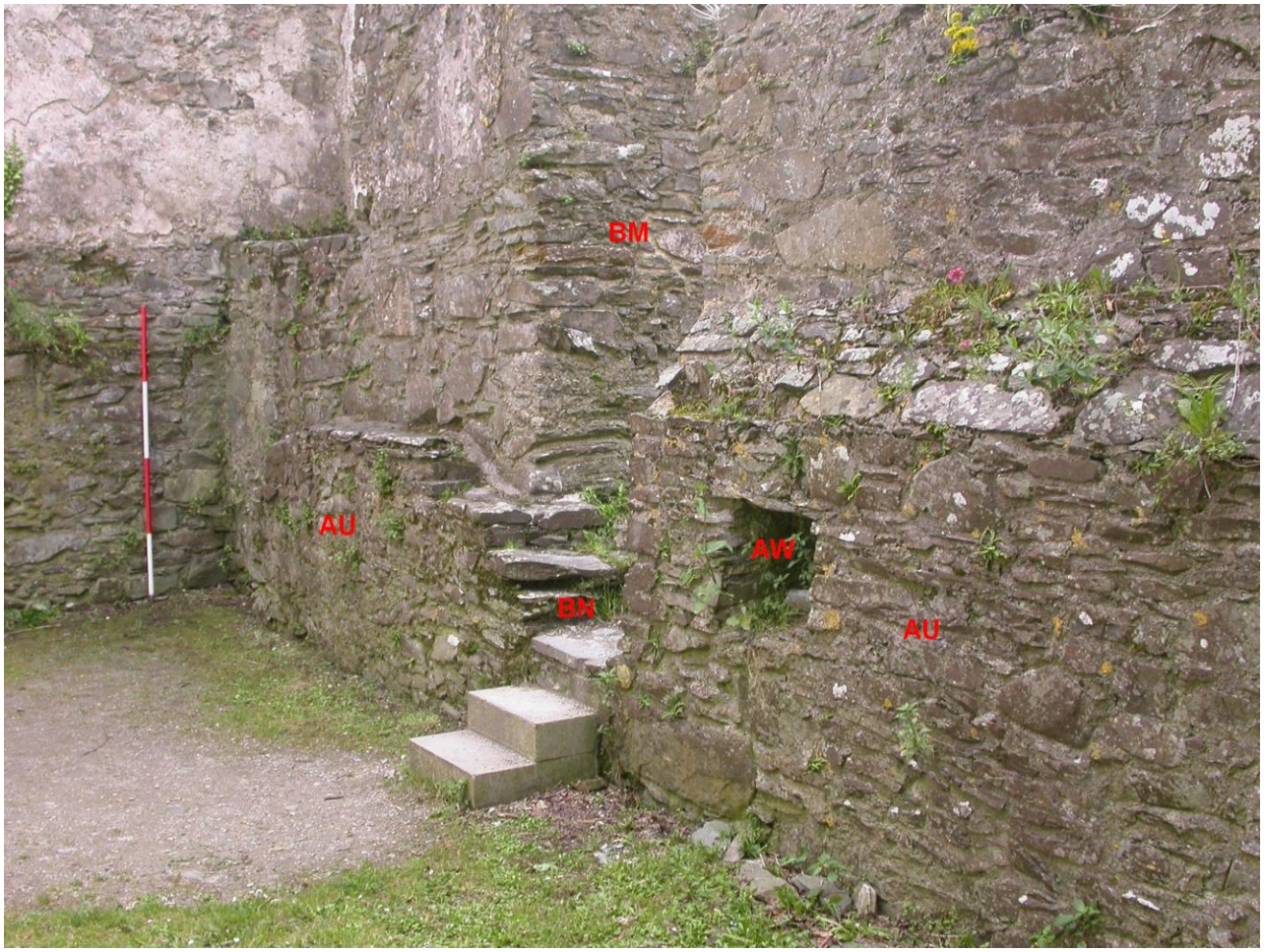

Plate 6: The western wall of the east wing, showing revetment wall that forms the off-set upon the eastern face of the dividing wall between the two wings (AU), the southern cupboard (AW) built into this off-set, the opening (BM) in the middle of the wall which enabled egress between the two wings and the modern cut through this opening (BN), looking southwest. Scale 2.0 metres.

2.8.8 Waterman considered that the difference in date between the construction of the west and east wings was 'but slight' and that 'the sequence may indicate no more than an alteration during construction' (Anon. 1966a, 211). It is unlikely, however, that such a considerable way through completing the construction of a building that a decision would be taken to effectively double the size of its floor plan (and by extension cost) by adding an additional wing. The absence of evidence for any sophisticated decorative architectural features in the west wing that could be comparable with the triangular pediments present on the east wing (see Paragraph 2.9.1), also suggests that the two wings are more likely to be works undertaken in different circumstances, possibly commissioned by different men, rather than the product of near contemporary building activity.

2.8.9 As Waterman observed, the lowest level within the east wing was formed by a low basement (Anon. 1966a, 210). If, as the excavation results suggested (see Paragraphs 3.4.6 and 3.5.8), it is assumed that the present day ground surface within the east wing approximates to the original level of the basement's floor, then it would have had a height of approximately 1.35 metres. Presumably, the reason why the basement was so low is because the builders were constrained by both the close proximity of the bedrock (the rock-cut terrace that the east wing is built upon lies a maximum of 0.25metres below the present-day ground surface) and the desire to keep the ground floor within the east wing at the same level as that in the pre-existing west wing, despite the evidence to suggest that the ground floor of the west wing was split onto two levels (see Paragraph 2.8.5). Excavation demonstrated that no evidence for how the basement was originally floored survives (see Paragraph 3.4.6). The basement's east wall contains a now internally-blocked fireplace (Figure 6.AX; Plate 8), flanked by cupboards to the north (Figure 6.AY) and south (Figure 6.AZ). The northernmost cupboard is, in turn, flanked by two splayed gun loops (Figure 6.BA). That these two gun loops point into the interior of the lower ward suggests that either when the east wing was built, or the gun loops inserted into its fabric, that at least the eastern section of the curtain wall of the lower ward was slighted. As previously noted, two cupboards (Figure 6.AV and AW) are also present in the west wall of the east wing, the northern example of which (Figure 6.AV) survives largely intact (see Paragraph 2.8.7). Waterman considered that the basement was lit by three windows within the southern wall. Of these three windows the easternmost (Figure 6.BB; Plate 7) survives intact, and contains evidence of having been rebated in order to accommodate a window frame, the central window (Figure 6.BC; Plate 7) has apparently been extended to ground level to form a doorway, and the western window (Figure 6.BD; Plate 7) has been blocked. Whether the central opening in the southern wall (Figure 6.BC) was a converted window, or was always a doorway is impossible to assess; Waterman offered no evidence to support his suggestion that it had originally been a window. A blocked opening in the northern wall of the basement noted by Waterman (Anon. 1966a, 211) is no longer visible. No evidence relating to the form of the floor between the basement and ground floor survives.

2.8.10 The ground floor of the east wing contains the remains of a fireplace in its east wall (Figure 6.BE; Plate 8) that is serviced by a projecting chimney breast. The fireplace has, at some point, been reduced in both height and width - presumably to improve its ability to draw smoke. The east wall also contains three openings, probably windows, set in embrasures which extend to floor level. The southernmost window is blocked (Figure 6.BF), the central window badly damaged (Figure 6.BG), and the northernmost window (Figure 6.BH) reduced in width. Waterman plausibly interpreted the secondary feature (Figure 6.BI; Plate 9) at ground floor level in the eastern side of the northern wall as a roughly-inserted fireplace. At ground floor level the northern wall also contains a now blocked central window (Figure 6.BJ; Plate 9) and a smaller window to the west (Figure 6.BK; Plate 9) which butts against the dividing wall between the two wings. Also situated in the north wall at ground floor level, but located approximately 0.4 to 0.5 metres below the level of the windows, are the apparent traces of the relieving arch (Figure 6.BL; Plate 9) whose investigation prompted the location of Trench 2 (see Paragraph 3.1.1). Excavation failed to demonstrate whether this feature was originally related to a barrel vault, stairwell or entrance in the northern part of the east wing. Apart from the already noted blocked opening (Figure 6.AD) in the dividing wall between the two wings (see Paragraph 2.8.4), the east wing's west wall also contains an opening (Figure 6.BM; Plate 6) in the middle of the wall which would originally have enabled egress between the two wings at ground floor level. This

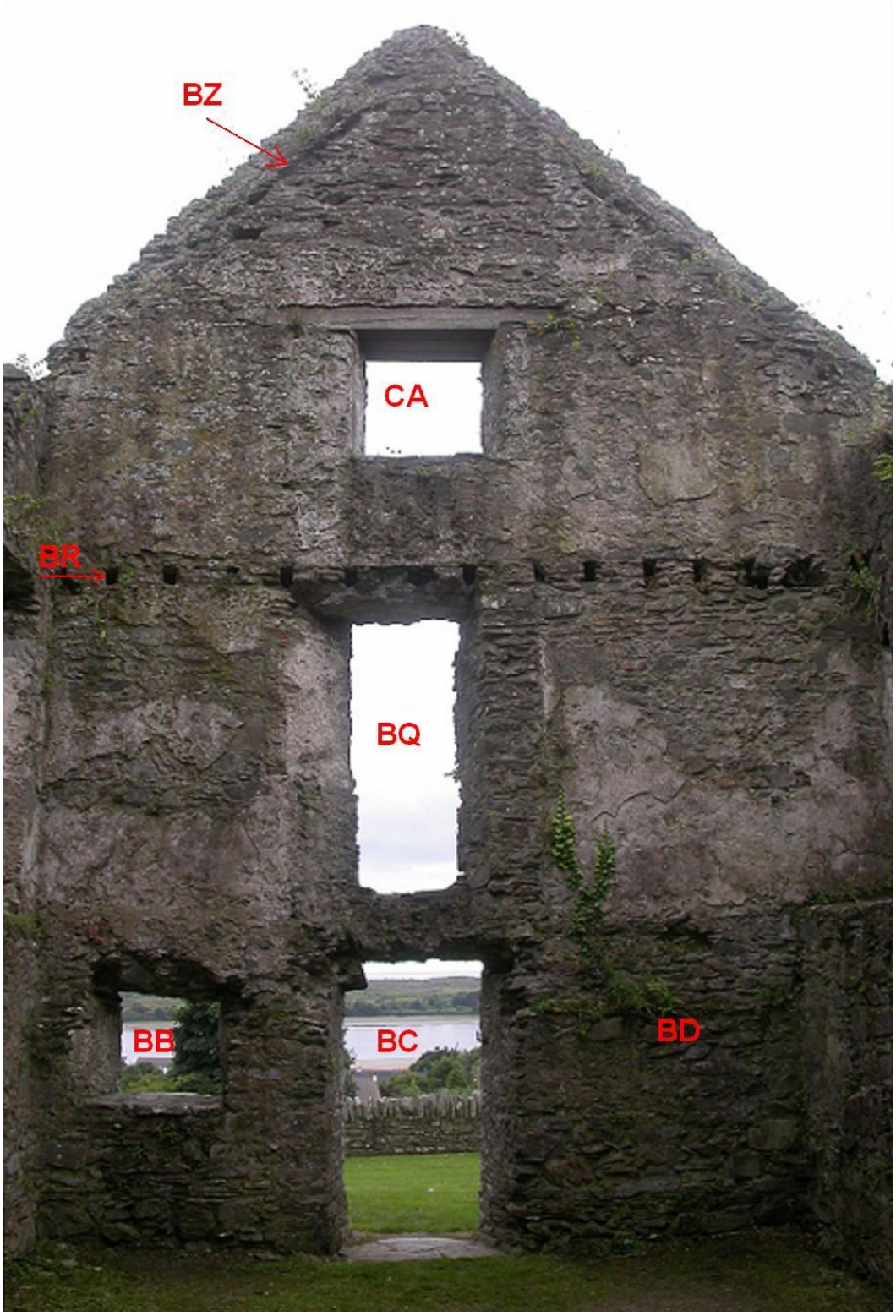

Plate 7: Southern wall of east wing, showing eastern basement window (BB), central basement window apparently extended to form a doorway (BC), blocked western basement window (BD), ground floor opening (BQ), supporting holes for joists (BR), preserved line of roofing 'slates' (BZ) and attic window (CA), looking south.

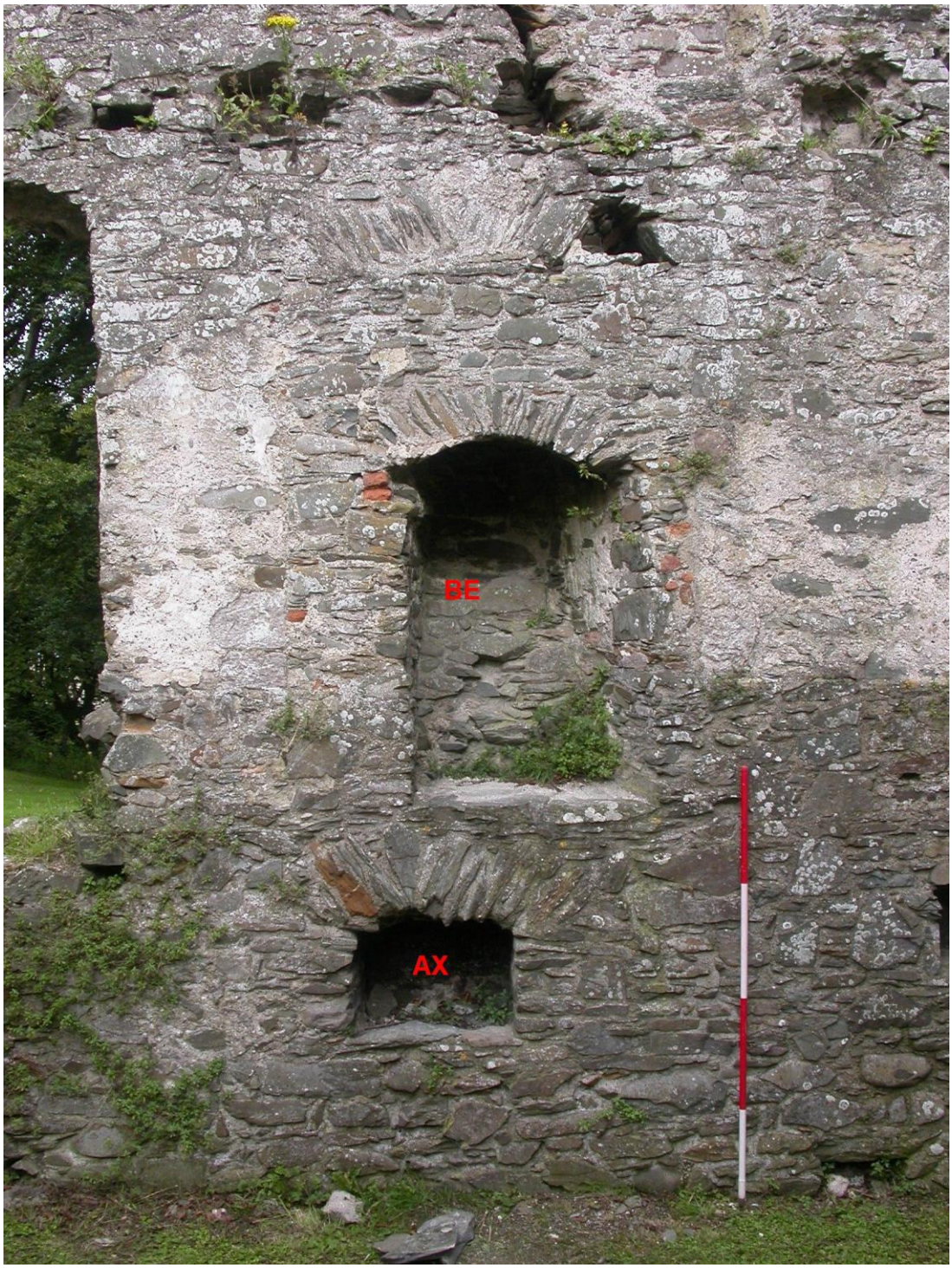

Plate 8: Part of the eastern wall of the east wing, showing internally-blocked fireplace (AX), ground-floor fireplace (BE), looking east. Also visible in the top of the photograph are the supporting holes for the crossbeams that carried the attic floor. Scale 2.0 metres.

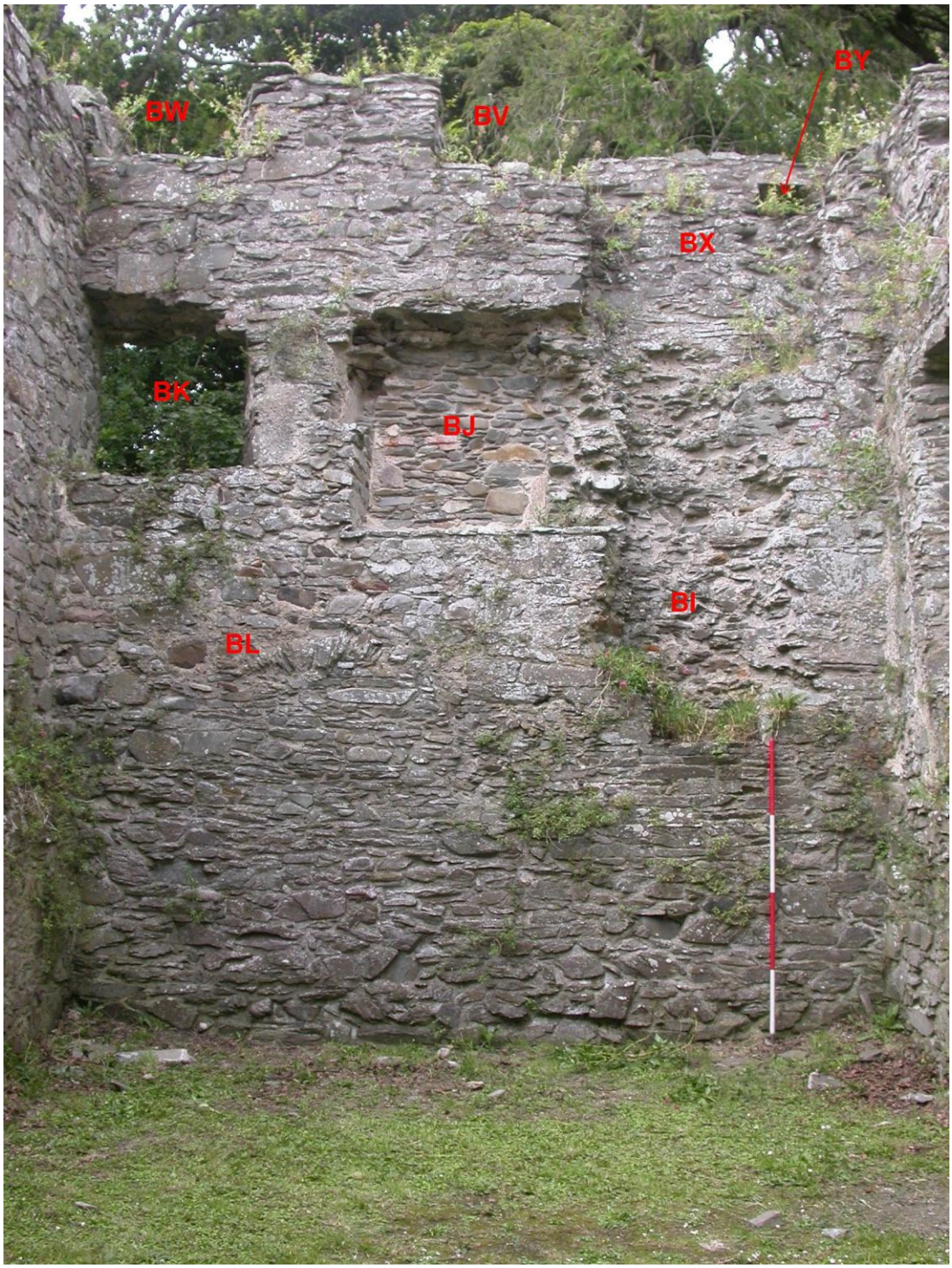

Plate 9: Inner-face of the north wall of the east wing, looking north. Scale 2.0 metres.
[BI: crudely-inserted fireplace; BJ: blocked window; BK: small window; BL: possible relieving arch; BV: window; BW: window; BX: recess of unknown purpose, possibly converted for use as chimney flue; BY: opening of unknown purpose].

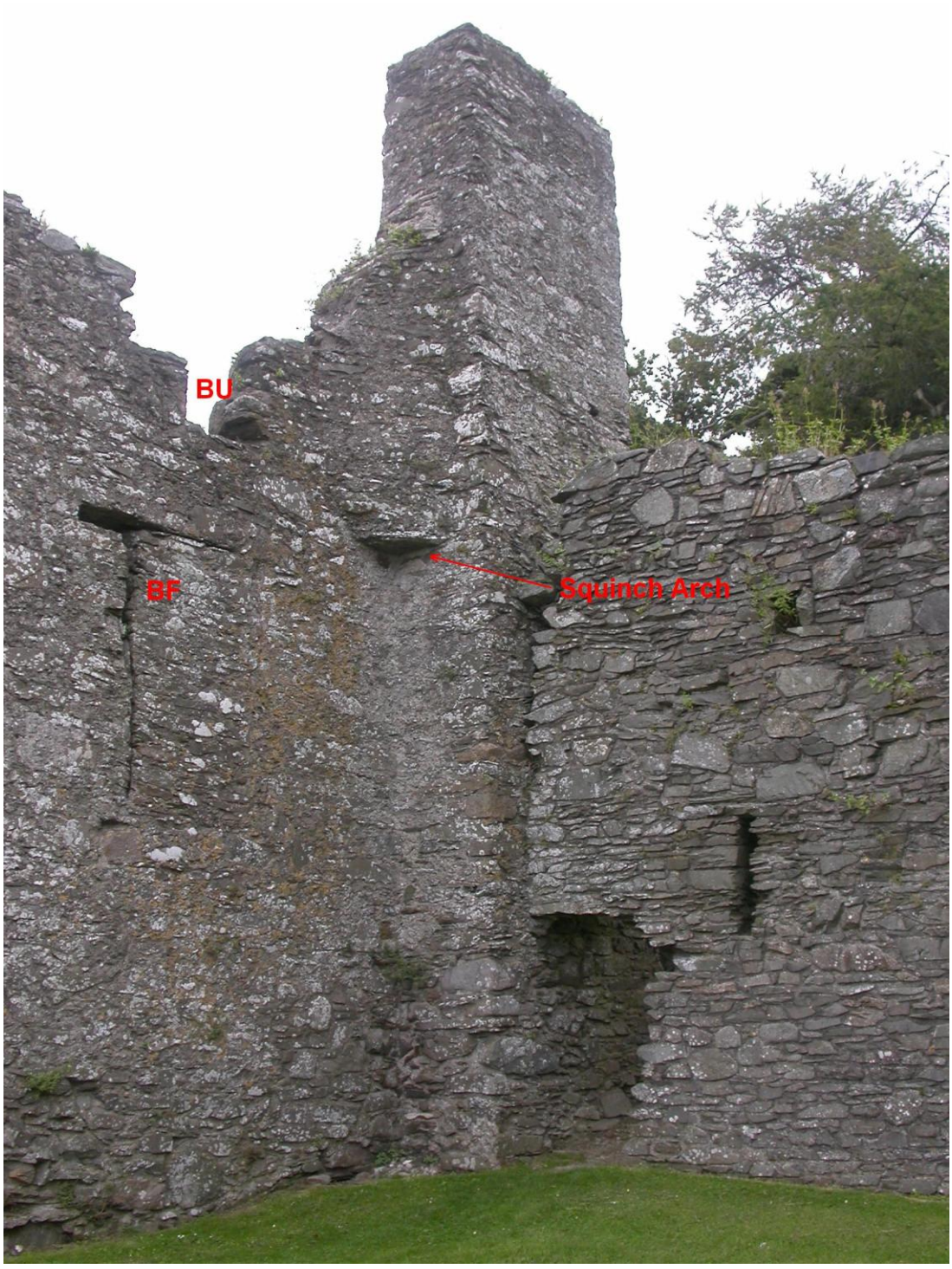

Plate 10: The external face of the eastern wall of the east wing, showing blocked window (BF), attic-floor window (BU) and the squinch arch which bridges the angle between the east wall and the southern face of the chimney, looking northwest. Scale 2.0 metres.

opening has been deepened by the cutting of a number of steps (Figure 6.BN; Plate 6) in order to directly connect the ground floor of the west wing with the basement of the east wing. Presumably, the cutting of these steps occurred in the nineteenth or twentieth century, but it certainly post-dates the occupation of Blundell's House. In that part of the east wing which projects beyond the line of the west wing's southern wall, the west wall also contains a single window set in an embrasure (Figure 6.BO). It is uncertain from a study of the surviving fabric whether this embrasure originally extended to floor level, however, the window has been certainly narrowed by the insertion of a block of rubble masonry (Figure 6.BP). The southern wall contains only a single opening at ground floor level (Figure 6.BQ; Plate 7): an apparent window set in an embrasure which extends to floor level.

2.8.11 Supporting holes for the joist (Figure 6.BR; Plate 7) and cross beams (Figure 6.BS) that carried the timber floor of the attic are preserved in the southern and eastern walls of the east wing respectively. That the top of both sets of holes are apparently set at the same level suggests that some form of full crossed lap joint was used to join the supporting cross beams to the joists. The east wall at attic level contains a fireplace (Figure 6.BT) and the remains of three windows (Figure 6.BU). The northern wall has a central window (Figure 6.BV; Plate 9), flanked to the west by a smaller light (Figure 6.BW; Plate 9) and to the east by a recess (Figure 6.BX; Plate 9). The original purpose of this recess (Figure 6.BX) is uncertain, however, it appears to have subsequently formed the upper part of the chimney flue serving the fireplace (Figure 6.BI) roughly inserted into the north wall at ground floor level (see Paragraph 2.8.10). The upper part of the recess in the north wall also contains a small opening (Figure 6.BY; Plate 9) whose purpose and date is unclear. The southern gable of the east wing survives intact. In addition to a preserved line of roofing 'slates' (Figure 6.BZ; Plate 7) (see Paragraph 4.4.2; Plate 22), it contains a central window (Figure 6.CA; Plate 7) supported by a modern lintel consisting of three timbers. The gabled northern and southern walls of the east wing indicate that it was surmounted with a gable roof that was aligned north-south. As with the chimney in the west wing (Paragraph 2.8.6), the profile of an east-west aligned dormer roof (Figure 6.CB) is preserved in outline in the harling on the inner face of the chimney projection on the east wing's eastern wall. The character of the roof of Blundell's House in its final structural phase, and in particular how the roofs of the west and east wings were conjoined, is considered in detail elsewhere (see Section 4.2). At the attic level the angle between the east wall and the southern face of the chimney is bridged by a squinch arch (Plate 10).

2.8.12 The most striking architectural feature of the east wing are the two triangular panels, set above the first and attic floor windows on the external face of the southern gable. These panels presumably held either stone or plaster armorials and relief sculptures. The lower of the two panels (height 0.95 metres; maximum width 1.45 metres) is fronted with seven courses of narrow brick of seventeenth-century type, whilst the remainder of the panel, and the entirety of the upper panel (height 1.05 metres; maximum width 1.25 metres) are infilled with coursed rubble. The purpose of using brick in this way is uncertain, although it may be related to forming a better key for the application of a plaster panel. These triangular tympana or pediments provide the best architectural dating for the second principle construction phase of Blundell's House and are discussed in detail below (see Paragraph 2.9.1).

2.9 Dating Blundell's House

The Second Phase of Construction

2.9.1 As previously noted, the triangular pediments on the external face of the southern gable of the east wing of Blundell's House provide the best dating evidence for the second principle structural phase of construction. They are paralleled at a three-storied property called Amisfield House (1631) at Nithsdale, Dumfries, which has been absorbed into a nineteenth-century mansion (Grose 1797, 157, pl.opp.155; Stell 1986, 89; RCAHMCS 1920, 198) and the three-storied range (1634) known as Nithsdale's Lodging which was added to the fabric of Caerlaverock Castle, Dumfries (RCAHMCS 1920, no.33 (2), 20, figs.17, 21, 23, *frontispiece*; O'Neil 1952, 8, 15-16, pl.5; Hunwicke 1993; Grove and Yeoman 2006, 12-13). These

closely-dated, architectural parallels suggest that the east wing of Blundell's House, which represents the second principle phase of construction of the building, was built around the 1630s. If genuine, the crow-stepped gable of the east wing depicted in the 1791 engraving (see Paragraph 2.6.4) would be architecturally consistent with this date cf. Jope 1951, 38; Reeves-Smyth 2007, 294. Presumably, this second phase of construction occurred after Dundrum Castle came into the possession of William Blundell *c.*1629 (see Paragraph 2.5.16) and would have been completed prior to the 1641 rebellion. That the Blundells were an English family is interesting given the apparent Scottish architectural influences on the east wing. This may simply be a result of the employment of Scottish masons and builders, however, it might also reflect a deliberate attempt by William Blundell to partly conform to the perceived lowland Scottish culture of more affluent, neighbouring landowners such as the Hamiltons and Montgomerys. Another surviving example of the use of Scottish architectural feature by an English settler is the presence of crow-stepped gabling on the back gable of the rear building attached to the northeast turret at Dalway's Bawn, Co. Antrim (Jope 1951, 38; McGranaghan 2007, 144, pl.5). Interestingly, relatively little Scottish influence is present in the architecture of late sixteenth and early seventeenth century tower houses in County Down – although the tower house at Killyleagh built for James Hamilton sometime after 1610 was built in a markedly Scottish Style (Lawlor 1939, 18-19, fig.2a; Jope 1951, 45; Anon. 1966a, 236, no.415.1), whilst the Customs House, Bangor, built *c.*1637 for James Hamilton incorporates a corbelled-out stair and a crow-stepped gable (Jope 1951, 44, fig.5; Anon. 1966a, 227-228, no.404.1, fig.146, pl.64). The destroyed tower house in Newcastle had corbelled turrets (Jope 1951, 44), although the validity of the tradition, noted by Harris, that it was built for Felix Magennis in the late sixteenth century is uncertain cf. Harris 1744, 44. Newtown House, Hugh Montgomery's residence in Newtownards, was built upon the ruins of the Dominican Priory in the early seventeenth century, but was destroyed in a fire in 1664 (Anon. 1966a, 260, no.418.1; McCavery 1994, 55, 76). Although described in 1611 by the Plantation Commissioners as 'a princely mansion' (Anon. 1966a, 260, no.418.1; Public Record Office Northern Ireland Ref. No.T/811/3), it is unknown to what degree Montgomery's residence was built in a Scottish style, however, the surviving door of the porch at Newtownards Priory, which was built at the same time (Anon. 1966a, 286-287, no.418.3, fig.186; McCavery 1994, 55), is surmounted with a semi-circular panel comparable with those adorning Nithsdale's Lodging at Caerlaverock Castle suggesting that Montgomery's house may also have contained elements built in the Scottish style. On architectural grounds the east wing is the only part of Blundell's House that can be closely dated with any confidence, however, it provides a fixed point from which more speculative dating, consistent with the site's historical sequence, can be extended to both the earlier, primary phase of construction and the subsequent episode, or episodes, of alteration to the east wing.

The Primary Phase of Construction

2.9.2 The primary phase of construction of Blundell's House, that is the building of the west wing, post-dates the construction of the curtain wall of the lower ward (see Paragraph 2.8.3). Unfortunately, close dating of the lower ward is not possible. Waterman initially suggested that it was 'considerably later' in date than the inner ward because he believed that the curtain of the upper ward was in a ruinous condition at the time the wall of the lower ward was constructed (1951, 15). This argument was based upon the mistaken belief that the thinner curtain of the lower ward had been superimposed upon 'a considerable length of the N.W. wall of the enceinte' (Waterman 1951, 15). In presenting this flawed argument, Waterman mistakenly refers to the eastern part of the upper ward's curtain wall as being the 'N.W.' part of the wall. Waterman subsequently recognised that the apparently superimposed length of the lower ward's curtain wall was a nineteenth-century reconstruction (Anon. 1966a, fig.133; as previously indicated in Phillips' plan 1883, pl. opp.17; 1883-84, pl. opp.160) and therefore the superimposition cast no light on the condition of the upper ward's curtain wall when the lower ward was built. Waterman's phased plan of Dundrum Castle, prepared in 1955, but first fully published eleven years later in the *Archaeological Survey of County Down*, indicates that, following the rejection of his initial interpretation, he dated the curtain wall of the lower ward to the thirteenth century (Anon. 1966a, fig.133). The accompanying written description of the monument indicates, however, that subsequently he once again revised his dating of the curtain wall -

this time to the fifteenth century (Anon. 1966a, 211). Although Waterman provided no justification for this second revision in his dating, it was presumably prompted by analysis of the fabric of the wall undertaken during the course of his unpublished excavations against the eastern part of the lower ward's curtain wall in 1960 (see Paragraph 2.7.6). Apparently unaware of the final revision in Waterman's dating, and the inconsistency between the plan and text of the *Archaeological Survey of County Down*, McNeill critiqued the dating of the outer ward to the thirteenth century. He dismissed the value of the (unpublished) dating evidence found in the outer ward and its stratigraphic relationship with the outer curtain, before convincingly rejecting the idea that the curtain wall represented two periods of construction and arguing that the relatively thin form of the curtain wall indicated that it was unlikely to be thirteenth century in date (McNeill 1980, 36, fn.14). By analogy with Carrigogunnell, Co. Limerick, McNeill persuasively suggested that the absence of projecting towers and the simple form of the gate into the lower ward indicated that the lower ward post-dated the Anglo-Norman period (1997, 194). McNeill attempted to refine the dating of the lower ward with reference to the gun loops present in the southwest section of the curtain wall adjacent to Blundell's House. He identified these two gun loops as being both original features, rather than later insertions, and of a double-splayed type which he dated to the fifteenth century (1980, 36, fn.14; 1997, 194), but for which others would prefer a floruit which extended from the fifteenth to the middle decades of the sixteenth century (Kerrigan 1995, 28). Ironically, this appears to have also been Waterman's largely unarticulated opinion by the time he wrote the account of Dundrum Castle published in the *Archaeological Survey of County Down* (Anon.1966a, 207-211). Unfortunately, it is not possible to demonstrate that these gun loops are either original features or examples of the late medieval double-splayed type.

2.9.3 It is frequently difficult to use the presence of a gun loop to closely date the construction of a wall or an associated building with confidence because it can be hard to ascertain whether the loop is an original feature or a later insertion. Although in some cases it is possible to confidently demonstrate that a gun loop is a later insertion, for example at Carrickfergus Castle where on the south side of the inner ward two medieval windows were crudely converted in the 1560s into brick-lined gun ports for cannons (McNeill 1981, 47-48, fig.6, pl.7), it is generally much more difficult to unequivocally ascertain that a gun loop is an original feature, particularly when it is a smaller feature designed for use with handguns. This problem of differentiating between later insertions and original features is greatly exacerbated at sites, such as Blundell's House and the lower ward, for which there are few historical sources relating to episodes of construction, and where the walls are rubble-built, in a partially-ruined state and have been subjected to episodes of unrecorded restoration. Despite the confidence of past assertions on the subject, it is not possible to identify with certainty whether any of the other gun loops associated with either Blundell's House or the adjacent section of curtain wall are original or secondary features. Study of the surviving fabric of Blundell's House suggests that both the northernmost loop in the east wall of the east wing's basement and the southern ground-floor loop in the west wing are probably later insertions, whilst the attic-level gun loop in the west wing is probably an original feature. It is not possible to ascertain the relative date of any of the other loops in either the house or the adjacent section of curtain wall. Inspection of the gun loops in the curtain wall indicates that they have a simple, splayed form and are not examples of a double-splayed type (*pace* McNeill 1980, 36, fn.14). Frequently, as is the case with Blundell's House, the most functionally- and chronologically-diagnostic aspect of a gun-loop, that is its shaped aperture, is missing or was never present, and all that survives is part of the opening's splayed internal sill. In Britain the earliest identified examples of gun loops, usually with openings of the inverted-keyhole type and intended for close defence, date to the latter half of the fourteenth century (Saunders 1989, 18-19; Kerrigan 1995, 24-25), however, it is not possible to confidently identify Irish examples of this date. Historical sources do not show the use of guns by the Irish, as opposed to the English in Ireland, until the final quarter of the fifteenth century and, in Ireland, firearms remained a minority weapon until early in the sixteenth century (de hÓir 1982, 81-82). Early firearms tended to be heavy and large in their design and, when used defensively, were invariably fired from close to ground level where they were supported by timber beds positioned directly upon the floor. Technical advances led to the development of lighter firearms and handguns that could be fired from a standing position. Consequently, gun loops positioned about a metre above ground level or from first-floor positions that were not supported by vaulted floors, such as all the examples present

at Blundell's House and the adjacent section of the curtain wall, are likely to be later in date. Consequently, the gun loops at Blundell's House, whether they are original features or later insertions, are unlikely to pre-date the sixteenth century.

2.9.4 Although it has been plausibly argued that it dates to the late medieval period, it is not possible to closely date the lower ward on the basis of the gun loops or any other feature. This uncertainty over the precise date of the lower ward emphasises the potential significance of Waterman's unpublished excavations against the curtain wall of the lower ward (see Paragraph 2.7.6), and the importance of locating his archive for the purposes of analysis and publication (see Paragraph 6.2.1). Although not of direct relevance to the present study of Blundell's House, the late medieval period of Gaelic occupation of Dundrum Castle is one of particular historical interest.[2] The 1601 description of the lower ward cited by Phillips (1883, 15, 19; see Paragraph 2.5.14) as being *'surrounded with a ruined wall, within which were eleven "Irish houses"'* (Phillips 1883, 15, 19) indicates that the curtain wall of the lower ward had been, at least partially, demolished by the end of the Nine Years' War. There are no extant historical sources which suggest that it was ever rebuilt after this date, although enough of the wall must have remained standing in order to have formed the western gable wall of the west wing.

2.9.5 Although the vague *terminus post quem* provided by the dating of the curtain wall of the lower ward (see Paragraph 2.9.2) suggests the possibility that the west wing dates to the late medieval period of Gaelic occupation, the absence of any mention of a stone-built gabled house, as opposed to the *'Irish houses'* which were noted in the 1601 reference cited by Phillips (1883, 15, 19; see Paragraphs 2.5.14 and 2.9.4) suggests that the west wing of Blundell's House does not pre-date the seventeenth century. This conclusion is consistent with our understanding of late medieval, Gaelic building traditions. The construction of stone buildings by the Irish during the late medieval period was almost exclusively restricted to tower houses and ecclesiastical structures. Late Tudor cartographic evidence suggests that other domestic structures (i.e. 'Irish houses'), even on high status or garrisoned sites, were relatively simple, earthen-walled, rectangular- and oval-shaped structures, that were perhaps built upon stone footings and covered by either hipped or round, thatched roofs furnished with either a central chimney or no chimney at all. The general absence of a tradition of the Irish building gabled stone houses, such as the example that formed the west wing of Blundell's House, during the late medieval period, combined with the failure of the 1601 description of the castle to mention such a building, suggests that the west wing is

[2] Although there are few extant historical references to Dundrum Castle that date from the fifteenth to the mid-sixteenth century, this is the period in which the castle, and its associated manor, can be confidently identified as being occupied by the Magennis family (see Paragraphs 2.5.5-2.5.9). The nature of the late medieval Gaelic occupation of Dundrum Castle is a subject of considerable interest. During this period the circular great tower of the inner ward apparently formed the principle residence of the Magennises. The upper floor of the tower contains several mural chambers whose roofs are formed either by corbelled or wicker-centred vaults. The use of wicker centring is widely considered to be a native Irish building technique of the late medieval period and where it is found there is normally a presumption that the vault is fifteenth century or later in date (McNeill 1997a, 150, 173). Although a small number of examples of the use of wicker centring, such as the vault over the first floor at Ballisnihiney, Co. Galway (McNeill 1997a, 149-152, fig.97) and the vaulted small room underneath the first-floor entrance at Castle Kirke, Co. Galway (McNeill 1997a, 161-163), have been identified which apparently predate the middle of the fourteenth century, no examples of the use of the technique dating to the period of the Anglo-Norman occupation of Dundrum Castle have been identified. Consequently, the use of the technique in the mural chambers of the great tower indicates that the building was substantially altered, and by extension occupied, during the later medieval period. The character of the mural chambers and variations in the support of the tower's first and second floors, prompted Waterman to speculate that the whole of the upper floor may have built during the late medieval period (Anon. 1966a, 209). However, the evidence for structural continuity between all of the floors, as represented by the building's stair and chimney flue, as well as the absence of a change in the tower's masonry, indicates, that the current form of the upper floor was the result of significant alterations carried out upon a pre-existing Anglo-Norman structure (McNeill 1997a, 53, 195-196). The normal, secular, high-status residence in eastern Ulster during the late medieval period was the towerhouse, and McNeill has suggested that the late medieval occupation of the great tower and the construction of the lower ward at Dundrum represent a departure from both the normal practices and ambitions of a Gaelic lord. Along with the later medieval phases at Roscommon Castle, Ballymote and Dunluce, McNeill has suggested that the later medieval episodes of castle building at Dundrum marked a significant shift in, at least, the symbolic aspects of Gaelic power in which a growing emphasis is placed upon the link between a lordship and a particular block of land (McNeill 1997a, 198; 1997b, 119). Analysis of the size of the internal floor space within the modified great tower at Dundrum Castle suggests that McNeill's argument is valid. The floor plan of the modified great tower had an estimated total area of 265 square metres, which is considerably larger than that of the local towerhouses of comparable date. For example the total area of the floor plan of Audley's Castle is 110 square metres, whilst even a large towerhous such as Kilclief Castle has a total floor plan of only 185 square metres (all estimates of floor plan are derived from the plans published in the Archaeological Survey of County Down cf. Anon. 1966a, figs.135, 143 and 153). Although it is possible that conversion of the pre-existing great tower at Dundrum was simply regarded as being a an easier and cheaper task than building a new towerhouse, the larger amount of internal space provided by the great tower, combined with its unusual circular form, suggests that it would have been perceived as being a structure that was more significant than a conventional towerhouse. Although the admittedly limited historical sources does not indicate that the Castlewellan branch of the Magennis family had any greater status than either the neighbouring branches of the family or other nearby Gaelic lordships, a comparative architectural analysis suggests that the family may have indeed harboured greater political ambitions.

later in date. Given the proposed fixed date around the 1630s for the subsequent construction of the east wing (see Paragraph 2.9.1), and the likelihood that the construction of the two wings were separate episodes (see Paragraphs 2.8.7-2.8.8), then the most likely historical context for the construction of the west wing is when Dundrum was owned by the Cromwells (i.e. between 1605 and *c.*1629 see Paragraphs 2.5.15 and 2.5.16). Presumably, at this time the great tower was not suitable for occupation, perhaps having been slighted in the Nine Years' War, although it may be that by the early seventeenth century, the aspiration to civilized living, albeit in a house apparently furnished with gun loops, was considered more important than considerations of defence cf. Jope 1960, 97. The relatively modest character of the building would be consistent with the financial difficulties experienced by both Edward Cromwell and his son Thomas Cromwell.

Later alterations to Blundell's House

2.9.6 A number of alterations to the fabric of the east wing indicate that the character of Blundell's House was modified after the east wing was built in the 1630s. These alterations included the blocking or narrowing of a number of basement and ground floor windows or openings (Paragraphs 2.8.10 and 2.8.11), as well as the reduction in size of the existing fireplace and the rough-insertion of a second fireplace at ground floor level (see Paragraph 2.8.10). It is possible that the two splayed gun loops in the east wall of the basement were also inserted during this episode of alteration to the east wing. It is probable, although not provable, that similar alterations to the fabric of the west wing, such as the blocking of doorways, the narrowing of the ground floor fireplace and the apparent insertion of gun loops, also date to this period. It could be argued that the alterations to the building's windows and openings was related to post-occupation robbing of dressed stonework from the building, however, it is not obvious why robbers would have taken the trouble to replace the removed stonework with even crudely-inserted rubble masonry, or why they would have simultaneously narrowed and blocked so many of the windows. It is more likely that the blocking and reduction in the width of the windows reflects an episode of increased concern about the building's defensive qualities, which presumably took place after a period when defence was perceived as being less of a concern. Although there is no evidence to prove whether or not these alterations were made at the same time, the narrowing and blocking of the windows would all have served to improve the defensibility of the building, whilst the crude addition of a new fireplace is also consistent with a change in the building's function. If the slighting of Blundell's House by Parliamentarian forces in the early 1650s and the subsequent abandonment of occupation of the building is accepted (see Paragraph 2.5.18), then these alterations must have taken place during the occupation of Dundrum by various garrisons during the war of the 1640s (see Paragraphs 2.5.17 and 2.5.18). The description of the castle in 1642 as containing no houses, but only cabins, to accommodate the garrison within the old walls (Hill 1869, 319-320; see Paragraph 2.5.17) suggests that at this period the curtain wall of the lower ward was still in a ruined condition and that, although defensible, Blundell's House was not necessarily considered part of the castle proper. If this was the case then it seems odd that it wasn't removed, for its position would have provided cover for any forces attacking the castle from the east.

2.10 Archiving

2.10.1 Copies of this report have been deposited with the Northern Ireland Environment Agency: Built Heritage. All site records and finds are temporarily archived with the School of Geography, Archaeology and Palaeoecology, Queen's University Belfast.

2.11 Credits and Acknowledgements

2.11.1 The excavations were directed by Philip Macdonald (Queen's University Belfast) with the assistance of Ruth Logue and Cormac McSparron (Queen's University Belfast). Logistical assistance during the course of the excavations was kindly

provided by Mark Davis and James McEvoy (both of the Northern Ireland Environment Agency: Built Heritage) and David McIlreavy (formerly of Queen's University Belfast), whilst valuable health and safety advice was supplied by Jon Avent (Mann Williams Consulting Civil and Structural Engineers). Charlotte Macdonald (Belvoir Park Primary School) generously assisted with the initial post-excavation processing. Preparation of this report has greatly benefited from the advice and assistance of Sarah Gormley, Tom McNeill, Cormac McSparron, Libby Mulqueeny, Ruairi O Baoill, Maura Pringle and Alastair Ruffell (all of Queen's University Belfast), Niamh MacNally (National Gallery of Ireland), Honora Faul (National Library of Ireland), Edward Besly (National Museum of Wales), Siobhan Stevenson (National Museums Northern Ireland), Stephen Russell JP (Historic Monuments Council) and Fionnuala Carson Williams, Tony Corey, Maybelline Gormley, Paul Logue, Liam McQuillian, John O'Keeffe, James Patience and Philip Smith (all of the Northern Ireland Environment Agency: Built Heritage). The illustrations were kindly prepared by Ruth Logue (Queen's University Belfast).

3 Account of the Excavations

3.1 Trench Locations

3.1.1 The locations and sizes of the three excavated trenches were based upon the original brief provided by John O'Keeffe (Northern Ireland Environment Agency: Built Heritage), which was modified slightly during a site meeting on the 2nd March 2009 between Philip Macdonald (Queen's University Belfast) and Maybelline Gormley, Paul Logue and Liam McQuillan (Northern Ireland Environment Agency: Built Heritage). The positions of the excavation trenches were chosen with a view to addressing the stated objectives of the excavation (see Section 2.2). Trench 1 was located external to the southern side of the east wing of Blundell's House, whilst Trenches 2 and 3 were located within the interior of the building's east wing (Figure 7). The specific research objectives the three trenches were intended to address are detailed below.

Trench 1 (length: 5.5 metres; width: 1.0 metre) was intended to investigate both the character of the foundations of Blundell's House and the nature of an apparently collapsed masonry located immediately to the south of the east wing.

Trench 2 (length: 2.0 metres; width: 2.0 metres) was primarily intended to uncover any surviving evidence of a supporting wall whose presence was suggested by the traces of an apparent barrel vault, relieving arch or stairwell preserved in the internal face of the northern wall of the east wing. By extending the trench up to the northern wall of the east wing it was intended to address the question of the building's foundations.

Trench 3 (length 2.0 metres; width: 1.0 metre) was excavated in ordered to investigate whether the relict base of the curtain wall of the lower ward survived running through the east wing.

3.2 Excavation Methodology

3.2.1 The excavation was essentially evaluative in character. Given the site's status as a scheduled monument in State Care, it was decided that any *in situ* masonry structures encountered during the course of the excavation would not be removed. It was not anticipated that the stratigraphic sequence at Blundell's House would be overly complex. Consequently, it was not considered appropriate to adopt the Single Context Planning method of site recording for the excavation. The small size of the trenches was, however, considered a potential methodological weakness. The problematic character of excavating small 'test' trenches, as opposed to relatively large 'open' areas, has long been recognised (Barker 1982, 44-67), and it is possible that subtle horizons and ephemeral structures within the archaeological stratigraphy of the east wing were not recognised during the course of excavation. The context record for the site was created using the standard context recording method (see Appendices 1 and 2). Individual features were planned (Scale 1:10) and photographed both prior to, and following, excavation. Where it was practically possible to do so, individual negative features were excavated by being half-sectioned and drawn (Scale 1:10) before the remainder of their fills were removed. Overall plans (Scale 1:20) of the trenches were prepared throughout the course of the excavation, and representative sections (Scale 1:10) of the completed trenches were also drawn. In addition to photography (see Appendix 3) and illustration (see Appendix 4), the principal site records consisted of context sheets augmented by a director's diary. Separate registers of small finds (Appendix 5) and samples (Appendix 9) were also be maintained. Particular attention was given to retrieving mortar and plaster samples during the course of the excavation so that these can be incorporated into any future programme of petrological analysis of mortar taken from the fabric of the ruin's standing remains. Members of the Northern Ireland Environment Agency: Built Heritage Inspectorate were kept informed of all significant developments during the course of the excavation. All excavation trenches were tied into the plan of the building and the Irish Ordnance Survey Grid using an EDM Total Station. Following the completion of recording, the trenches were manually backfilled.

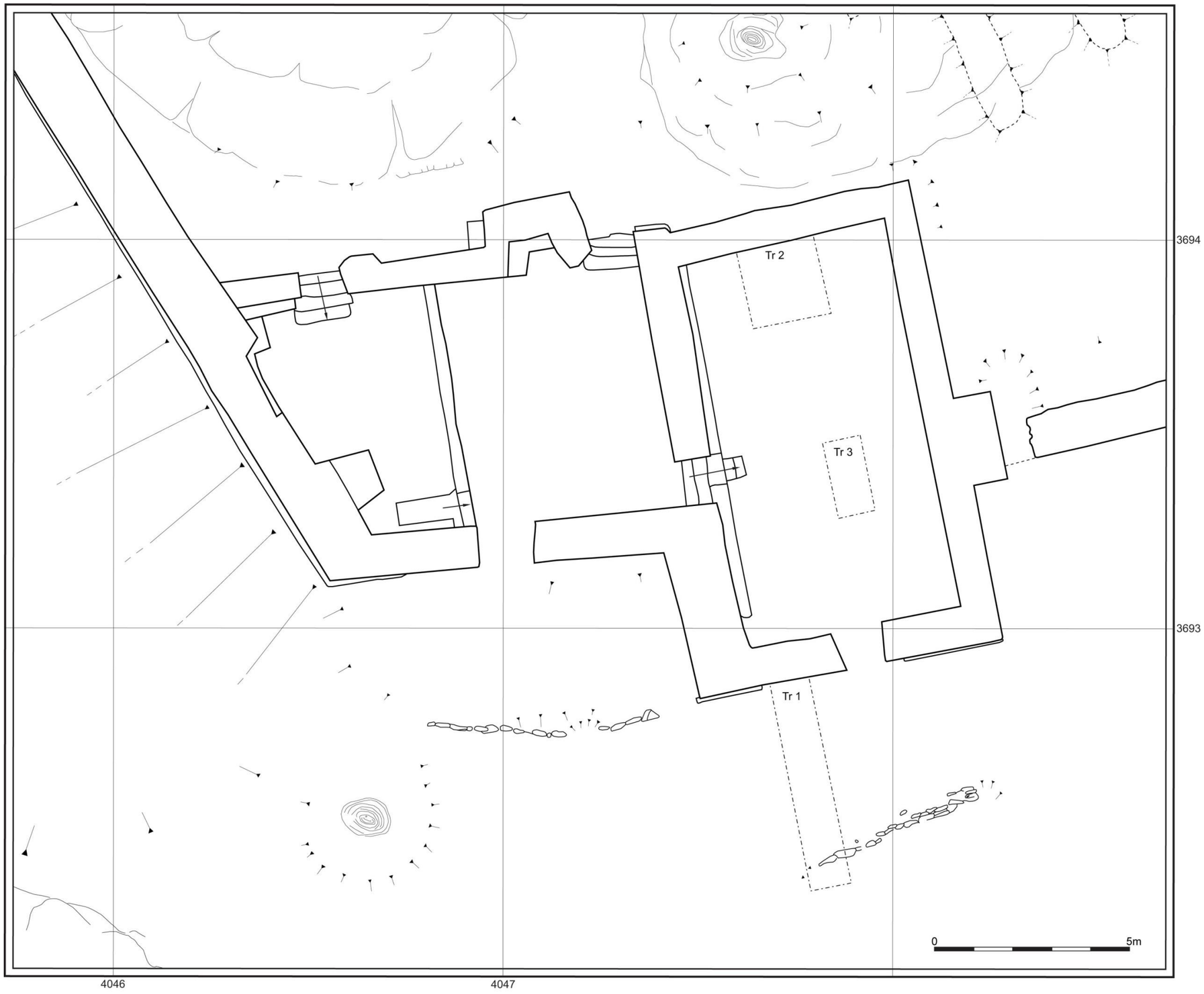

Figure 7: Plan of Blundell's House showing location of excavation trenches.

3.2.2 It is intended that the Harris Matrices for the site (see Appendix Two), as well as composite plates made up of successive photographs of all three trenches taken from an elevated position during the course of the excavation (Plates 11, 16 and 17), are referred to whilst reading the following account of the stratigraphic sequences of the excavation.

3.3 Trench 1

3.3.1 Trench 1 (width 1.0 metres) extended perpendicularly in a southerly direction for a distance of 5.5 metres from the external face of the east wing's southern wall (Context No.114). The northeastern corner of the trench was located 1.0 metre from the western edge of the doorway through the east wing's southern wall. The trench extended approximately 0.6 metres beyond the edge of the apparently collapsed masonry, which excavation subsequently demonstrated to be an *in situ* terrace revetment (Context No.112), located to the south of the east wing.

The topsoil and other superficial deposits

3.3.2 Following removal of the turf layer and humic, silty clay loam topsoil (Context No.101; maximum depth 0.16 metres), which extended throughout the length of the trench except where the *in situ* terrace revetment (Context No.112) protruded above the modern ground surface, two discrete areas of stone-rich humic soil (Context Nos.102 and 106) were uncovered. Although initially considered to be discrete contexts, excavation demonstrated that these deposits formed the base of the topsoil - their stone-rich character probably being a result of worm action or possibly a reflection of their close proximity to the underlying natural sterile subsoil (Context No.111) and the bedrock.

3.3.3 Stratigraphically underlying the topsoil (Context Nos. 101, 102 and 106), and located between the exposed part of the masonry revetment (Context No.112) and the southern wall of the east wing (Context No.114), was a thin deposit (maximum depth 0.10 metres) of small, angular- to subangular-shaped stones in a near sterile, loose, silty loam soil matrix (Context No.105). The deposit's stratigraphic position and the presence of fragments of glass and brick, as well as two stones with attached lime mortar (Small Find Nos.1018 and 1019), indicated that it was not a natural subsoil. Although the deposit's interpretation remains uncertain, it may have been a levelling deposit of relatively recent date. In the northeastern corner of Trench 1, this probable levelling deposit (Context No.105) overlay a localised layer of silty clay loam (Context No.122; maximum length (north-south) 0.3 metres; maximum width (east-west) 0.4 metres; maximum depth 0.1 metres) that butted up against the buried course of the southern wall of the east wing (Context No.114). The absence of any finds within this localised deposit made the elucidation of its date and origin uncertain, although it may have been associated with the backfilling of the bedrock-cut terrace (Context No.116) that the east wing of Blundell's House was built upon (see Paragraph 3.3.12).

3.3.4 Following the excavation of the topsoil and other superficial deposits described above (Paragraphs 3.3.2 to 3.3.3), the stratigraphic sequence within Trench 1 divided into two parts. In the southern half of the trench there was a series of dumped deposits (Context Nos.103 and 108) retained by a terrace revetment (Context No.112), and a second series of apparently contemporary dumped deposits (Context Nos.104, 107, 109 and 110) that were located below and to the south of the revetment (Context No.112). These dumped deposits, and the retaining revetment that separated them, formed parts of two adjacent terraces associated with a phase of landscaping that is dated to the last two to three decades of the eighteenth century. In the northern part of the trench immediately adjacent to the east wing there was a sequence of contexts (i.e. Context Nos.115, 121 and 116) associated with the construction of the east wing's southern wall (Context No.114), which is dated on architectural grounds to around the 1630s (see Paragraph 2.9.1). Separating these two sets of contexts was a relatively flat exposure of bedrock and a sterile subsoil made up of shattered bedrock (Context No.111), which extended between 0.65 and 2.95 metres from the northern end of Trench 1.

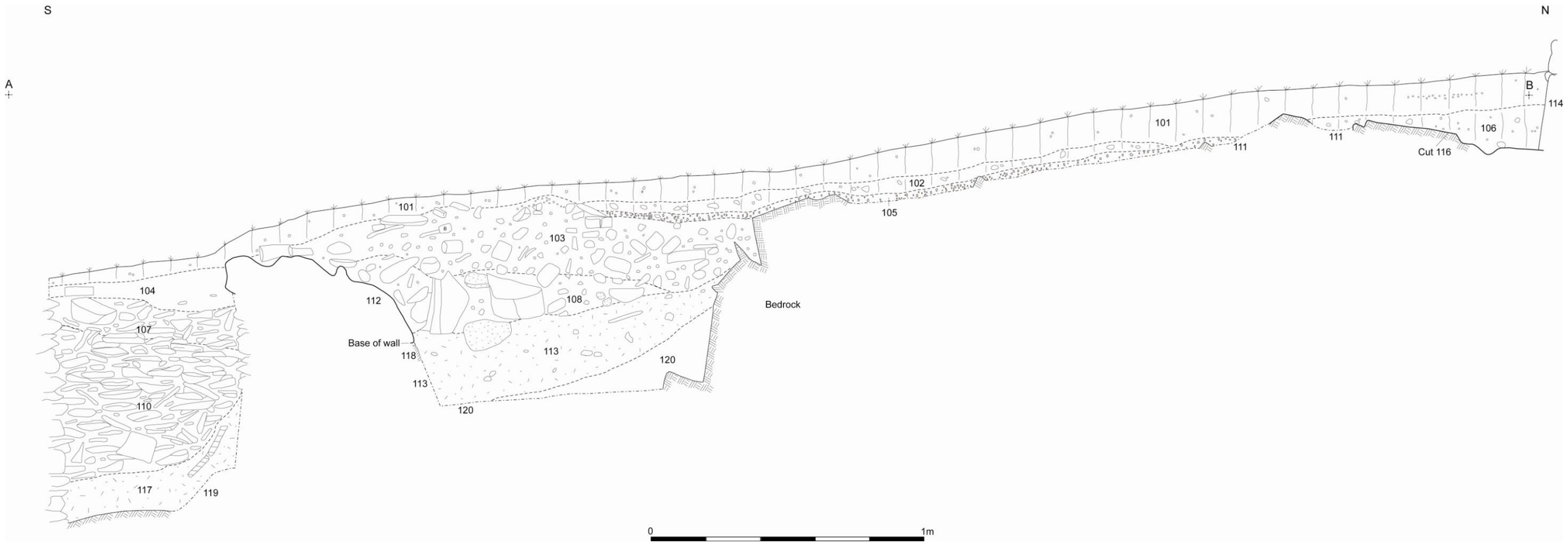

Figure 8: East-facing section of Trench 1.

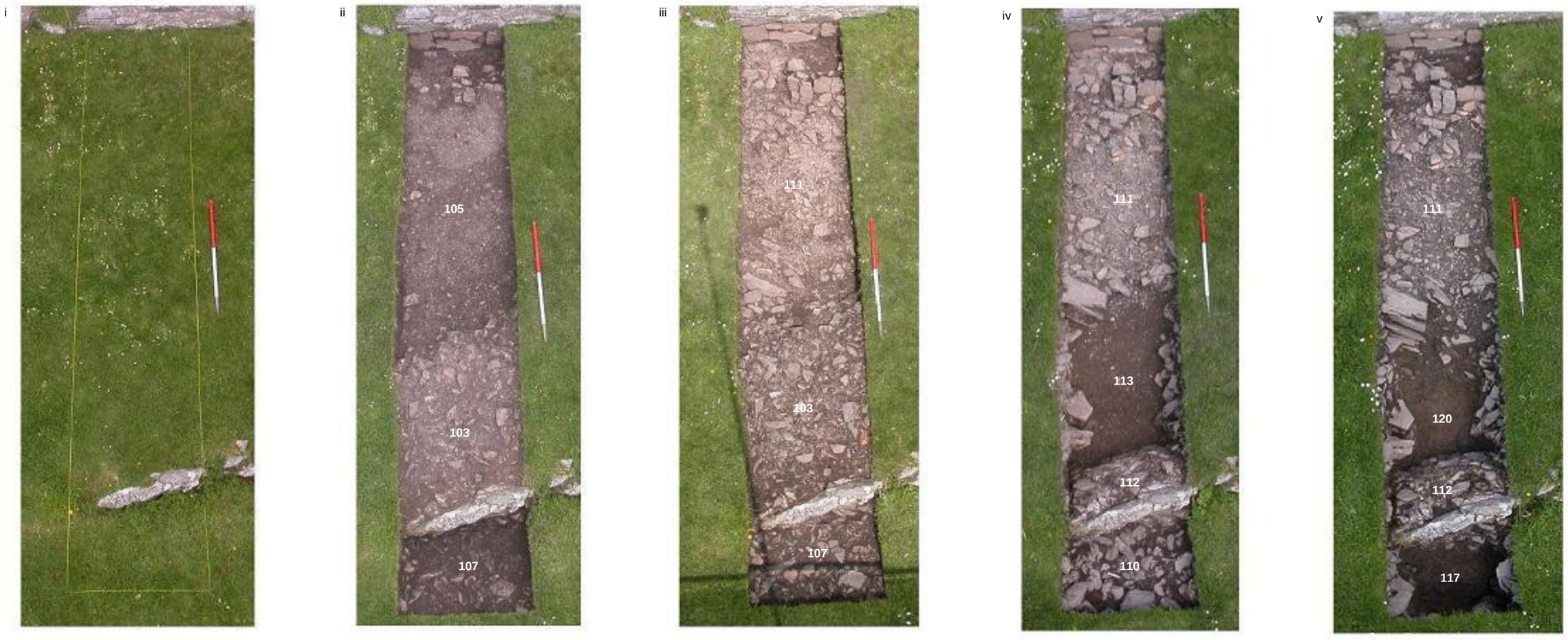

Plate 11: Successive photographs of Trench 1, looking north from an elevated position. From left to right: **i** - Trench 1 prior to excavation; **ii** - following excavation of superficial deposits of topsoil (101), stone-rich humic silty clay loam deposits (102 and 106) and redeposited layer of silty clay loam and clay (104), showing possible levelling deposit of small stones (105) and dumped deposit of stones in silty loam (107 and 103) and mortared stone revetment (112); **iii** - following excavation of the possible levelling deposit of small stones (105), showing dumped deposits of stones in silty loam (107 and 103), mortared stone revetment (112) and natural subsoil (111); **iv** - following excavation of dumped deposit of small stones in a silty loam matrix (109) and dumped deposit of stones with air voids (108), showing dumped deposit of stones with air voids (110), mortared stone revetment (112), mortar-rich, silty loam, buried soil horizon (113) and natural subsoil (111); and **v** – following excavation of dumped deposit of stones with air voids (110) and mortar-rich, silty loam, buried soil horizon(s) (113 and 117), showing natural subsoil (111, 119 and 120) and exposed bedrock. Scale 1.0 metre.

The upper terrace

3.3.5 The upper terrace was formed by two layers of dumped deposits (Context Nos.103 and 108) which butted up against, and were retained by, a masonry revetment (Context No.112) on their southern side. Excavation revealed that the northern extent of the dumped deposits was defined by a natural, near-vertical drop of around 0.6 metres in the surface of the bedrock. The uppermost of these deposits (Context No.103; maximum thickness 0.25 metres) was a dump of small- to medium-sized angular stones (maximum dimensions 0.30 metres) in a silty loam soil matrix. A small number of stones within the deposit had fragments of lime mortar adhering to them suggesting that they were derived from collapsed or demolished masonry. Small flecks of lime mortar and shell fragments were present throughout this deposit and it is likely that these represented material that had been eroded from the surface of building rubble within the deposit by rainwater percolating through the ground. Consequently, although the majority of stones within the deposit had no mortar adhering to them, a significant proportion of the stones may also have been the remains of masonry. Two roofing 'slates' (Small Find Nos.1020 and 1021) were also recovered from the dumped deposit (see Appendix 7). The underlying layer (Context No.108; maximum thickness 0.30 metres) consisted of a similar deposit of small- to medium-sized angular stones in a silty loam soil matrix, but also contained numerous voids between the stones. Three roofing 'slates' (Small Find Nos.1029-1030 and 1037) were recovered from this lower deposit. Other artefacts recovered from the two deposits included fragments of lime mortar, brick and pottery. The pot sherds included two examples of eighteenth-century blackware (Small Find Nos.1026-1027), and a large sherd of a probable lead-glazed earthenware dog bowl (Small Find No.1024) dated to the last two to three decades of the eighteenth century (see Appendix 8). The latter sherd (Small Find No.1024) provides important dating evidence as it is so large, and in such good condition, that it is unlikely to have been residually deposited. The presence of air voids within the lower deposit (Context No.108) and the presence of vertically-arranged stones within both layers (Context Nos.103 and 108) suggest that these were rapidly-deposited dumps. The silty loam soil matrix of the upper deposit (Context No.103), which represents the only difference between the two layers, is likely to have been washed down from the overlying topsoil (Context No.101). Consequently, both layers are interpreted as relating to a single episode of deposition. That both of these deposits contained a number of roofing 'slates' (Small Find Nos.1020-1021, 1029-30 and 1037), suggests that they were derived from the collapsed or dismantled roof of the adjacent east wing of Blundell's House. As previously noted, Mary Delany's illustration of Dundrum Castle provides a *terminus ante quem* of 1758 for the loss of the roof from Blundell's House (see Paragraph 2.6.1) suggesting that the 'slates' in the terrace deposits were probably left in a pile with other building rubble, either within the interior of the ruin or adjacent to it, for at least a couple of decades prior to being reused in this way. It is surprising that the 'slates' were not robbed for reuse elsewhere during this period, however, they may have been mixed up with general building debris making them not so attractive to robbers.

3.3.6 Prior to excavation, the masonry revetment (Context No.112) was assumed to be either the remains of a collapsed or demolished wall associated with an earlier phase of building on the site of the east wing of Blundell's House, or an exposure of natural bedrock that had been consolidated with lime mortar. Excavation demonstrated, however, that it was an *in situ* revetment and that its exposed surface was finished in a manner intended to resemble a natural outcrop of bedrock. The 'naturalistic' appearance of the revetment was further enhanced by building it at a slight angle, rather than parallel to, the southern wall of the east wing. Today, the revetment is visible on the surface for a distance of 5.0 metres (see Figure 7), although, it may originally have been slightly longer in length. It was constructed at an angle of 45° degrees to the horizontal upon a single foundation course of reused masonry rubble bonded with lime mortar (Context No.118). It stood to a height of 0.40 metres and was at least 0.25 metres thick. Once exposed the revetment's northern side was revealed to have been competently built with a neatly 'faced' appearance. The foundation course (Context No.118) included reused stone with lime mortar adhering to it and isolated lumps of mortar, which were both presumably derived from an episode of collapse or demolition of Blundell's House.

Plate 12: Mortared stone revetment (112), its underlying foundation deposit (118) and the underlying mortar-rich, silty loam, buried soil horizon (113), looking south. Scale 0.5 metres.

3.3.7 The dumped deposits (Context Nos.103 and 108) retained by the masonry revetment (Context No.112) extended the natural terrace formed by the relatively level expanse of bedrock immediately adjacent to the east wing's southern wall by an additional distance of 1.95 metres. This created a new terrace that extended outwards from the east wing for a total distance of between 4.90 and 5.05 metres. A comparable terrace revetment (length 6.1 metres), which extends approximately along the line of the southern wall of the east wing, also survives to the south of the west wing of Blundell's House (see Figure 7).

The lower terrace

3.3.8 Underlying the topsoil (Context No.101) in the southernmost 0.6 metres of Trench 1, which extended beyond the edge of the masonry revetment (Context No.112), was another sequence of dumped deposits (Context Nos.104, 107, 109 and 110). The uppermost of these deposits (Context No.104; maximum thickness 0.15 metres) was a mixed layer of humic, silty clay loam and clay. Its mixed character suggests that it was formed by the redeposition of soil taken from more than one source. Consequently, it is interpreted as having been a top dressing of soil for the lower terrace. Artefacts recovered from this layer included a slate pencil with an incomplete copper alloy terminal of probable eighteenth-century date (Small Find No.1014), as well as three fragments of ironwork (Small Find Nos.1015-1017). Underlying the mixed soil deposit (Context No.104) was a dumped deposit of medium-sized angular stones in a silty loam soil matrix that contained numerous flecks of lime mortar and fragments of shell (Context No.107; maximum thickness 0.17 metres). In addition to fragments of lime mortar, brick and several stones with lime mortar adhering to them, five roofing 'slates' (Small Find Nos.1031-1035; see Appendix 7) were also recovered from this deposit. Underlying this dumped deposit was a similar

layer consisting of small, angular stones in a silty loam soil matrix (Context No.109; maximum thickness 0.10 metres). This deposit (Context No.109), whose exposed extent was restricted to a small area in the southeastern corner of Trench 1, was only differentiated from the overlying layer (Context No.107) by the smaller size of its stone inclusions. Its removal fully exposed the surface of the lowest dumped deposit (Context No.110; maximum thickness 0.58 metres) of medium-sized angular stones with both silty loam and air voids between the stones. Twenty-three roofing 'slates' (Small Find Nos.1040-1056 and 1175-1180; see Appendix 7), brick, lime mortar and stones with mortar adhering were recovered from this lower deposit. The large number of voids between the stones in the lower deposit (Context No.110), and the occurrence of vertically-aligned stones in both of the main layers (Context Nos.107 and 110) indicates that the sequence of layers to the south of the revetment were rapidly-deposited dumps.

3.3.9 The close similarity of the sequence of the dumped deposits (Context Nos.107, 109 and 110) located below and to the south of the masonry revetment (Context No.112) (see Paragraph 3.3.8), with the dumped deposits (Context Nos.103 and 108) retained to the north of the masonry revetment (see Paragraph 3.3.5), suggest that they too represent dumped material used to create a terrace which extended beyond the southern edge of Trench 1. Today no physical expression of the revetment required to retain this lower terrace survives, probably as a result of the landscaping associated with creating the adjacent twentieth-century visitor car park. However, the 6.5 metres of ground between the masonry revetment and the car park's northern boundary wall is notably level suggesting the lower terrace may have originally been a substantial feature.

3.3.10 Stratigraphically, it was not possible to demonstrate a relationship between the dumped deposits associated with the lower terrace (Context Nos.107, 109 and 110) and the masonry revetment (Context No.112) as the dumped deposits were not fully excavated for fear of undermining the revetment. Consequently, it is uncertain whether the revetment was fully built prior to the deposition of the dumped deposits (Context Nos.107, 109 and 110), or the revetment and dumped deposits were built up alternately in incremental stages. Chronologically, this ambiguity is of little significance as both the revetment and the dumped deposits are demonstrably elements of the same episode of landscaping.

The pre-terrace deposits

3.3.11 Underlying the dumped deposits associated with the upper and lower terraces were two identical deposits of compacted, medium brown, silty loam (Context Nos.113 and 117 respectively). Excavation demonstrated that both of these deposits contained a large number of fragments of lime mortar, as well as several large stones with mortar adhering to every face, indicating that these buried soils contained rubble derived from the demolition, or collapse, of a walled structure. Other finds recovered from the buried soils included brick fragments, animal bone, slag and a well-preserved ferrous hearth-cake (Small Find No.1058). Although the need to preserve the masonry revetment (Context No.112) *in situ* meant that it was not possible to establish a stratigraphic relationship between these two deposits, they are almost certainly elements of a single soil horizon which pre-dated the construction of the terraces. Whether the demolition deposits contained within the buried soil related to the episode of collapse or demolition in which the east wing's roof was lost, or date to an earlier phase of activity at the site, is uncertain. The base of the revetment (Context No.112) and its underlying foundation course (Context No.118) must have been cut into the upper part of the buried soil (Context No.113), however, no foundation cut was recognised during the course of the excavation. This was, presumably, because the foundation was immediately backfilled with the soil displaced in cutting it in the first instance. The surface of the buried soil horizon sloped markedly downwards to the south. This slope presumably reflected the ground surface prior to the episode of landscaping associated with the construction of the terraces. Excavation demonstrated that the buried soil deposits directly overlay either bedrock or a natural, sterile, light greyish-brown sandy clay subsoil (Context Nos.119 and 120).

Features associated with the construction of the southern wall of the east wing

Plate 13: Northern part of Trench 1, following excavation of possible levelling deposit of small stones (105), showing localised deposit of silty clay loam (122) and mortar 'pad' (115) immediately adjacent to southern wall of the east wing of Blundell's House (114), looking north. Scale 0.5 metres.

3.3.12 At the northern end of Trench 1, the excavation of the localised layer of silty clay loam (Context No.122; see Paragraph 3.3.3) exposed an uneven surface in the bedrock (Context No.116) located immediately adjacent to the southern wall of the east wing (Context No.114). Although no tool marks were observed, the surface's proximity to the building, and the fact that it sloped towards the north against the prevailing direction of slope of the bedrock, suggested that it was artificial and represented the southern edge of a bedrock-cut terrace that the east wing of Blundell's House was built upon. The southern edge of this cut began 0.65 metres from the building's southern wall and had a maximum exposed depth of 0.11 metres. Of the east wing's southern wall, only a single course of masonry extended approximately 0.3 metres below the modern ground surface. This course of stone was built directly on to either the bedrock cut surface (Context No.116) or, where the surface of the bedrock was slightly deeper on the eastern side of the trench, upon a thin pad of lime mortar (Context No.115; maximum depth 0.03 metres) laid directly over a thin foundation course of otherwise unbonded stones (Context No.121; maximum depth also 0.03 metres). A number of the stones in this foundation course had relict traces of lime mortar adhering to them suggesting that they were derived from the collapsed or demolished remains of an earlier wall. It is possible that the localised deposit of silty clay loam (Context No.122) that filled the eastern part of the cut (Context No.116) was an original backfill, however, in the absence of any finds from the deposit this is impossible to verify. As the southern wall of the east wing is dated on architectural grounds to around the 1630s (see Paragraph 2.9.1), it is reasonable to assume that this date can be extended to the terrace cut through the bedrock (Context No.116) and the lime mortar pad (Context No.115) and associated foundation course (Context No.121). There is no evidence to suggest that the terrace may have been cut to accommodate an earlier structure constructed on the site of the east wing.

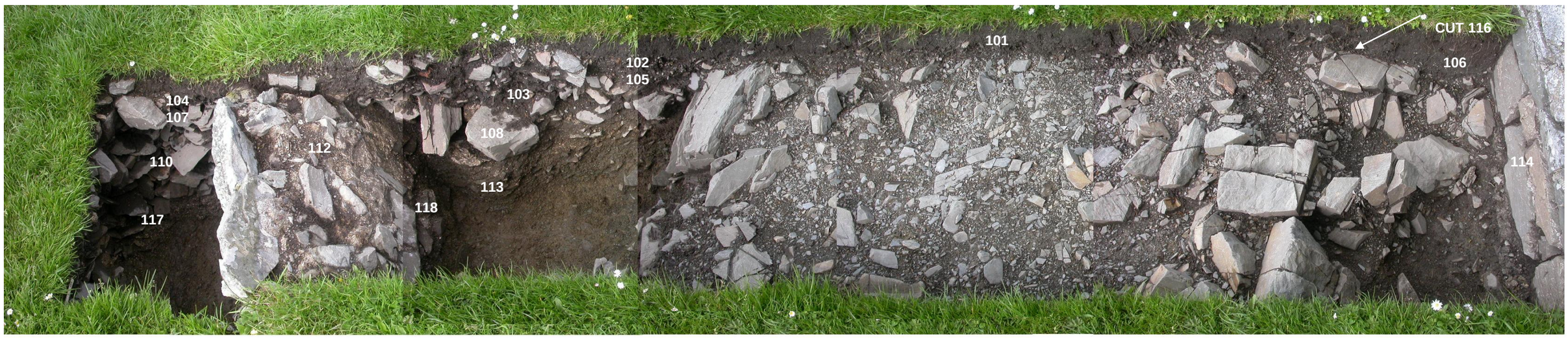

Plate 14: East-facing section of Trench 1 (photographic montage).

Plate 15: East-facing section of Trench 2 (photographic montage). Scale 1.0 metre.

3.4 Trench 2

3.4.1 Trench 2 (dimensions 2.0 x 2.0 metres) extended in a southerly direction from the internal face of the east wing's northern wall (Context No.209). The northeastern corner of the trench was located 1.89 metres from the internal northeastern corner of the east wing.

Twentieth-century deposits and features associated with making the site presentable to visitors

3.4.2 The present day surface of the interior of the east wing consists of a deposit of fine gravel within which a humic soil that supports a thin growth of weeds has begun to develop (Context No.201). Excavation demonstrated that the fine gravel had a near uniform thickness of between 0.02 and 0.03 metres and was deposited over a cap of hard, light greyish brown, redeposited clay (Context No.202; depth 0.02 to 0.03 metres), that in turn overlay a loose levelling deposit of small rounded stones in a medium brown silty clay soil matrix (Context No.203; depth 0.06 to 0.10 metres). This sequence of layers was presumably deposited in order to provide an even and attractive surface for visitors to the monument. The levelling deposit (Context No.203) was present throughout Trench 2, however, the overlying clay cap (Context No.202) did not extend into the northernmost 0.15 to 0.20 metre of the trench. The reason why the clay cap did not extend right up to the northern wall of the east wing was not obvious, although it is possible that originally it had and that root action associated with weeds, which preferentially grow against the wall of the building, had broken up and effectively dispersed the clay. It is uncertain whether the soil matrix within the underlying levelling deposit (Context No.203) had formed *in situ* or was an integral part of the layer when it was first deposited. Artefacts recovered from the fine gravel (Context No.201) were restricted to fragments of modern bottle glass and small fragments of lime mortar that were presumably derived from erosion of the walls of the east wing. Several large fragments of charcoal were also present within the gravel. These were presumably derived from the setting of fires within the ruin's interior – an activity presumably associated with the problem of underage drinking known to occur at the monument (Mark Davis pers.comm.) and which is archaeologically represented by the fragments of bottle glass. No finds were recovered from the redeposited-clay cap (Context No.202) and the single fragment of ferrous slag (Context No.1079) recovered from the levelling deposit was probably derived from the underlying mortar-rich clay loam (Context No.206).

3.4.3 Removal of the levelling deposit exposed, towards the middle of the southern edge of Trench 2, the northern end of a linear cut feature (Context No.205; exposed length (north-south) 0.22 metres, width 0.28 metres, depth 0.12 metres), which contained a ceramic drain-pipe (external diameter 101mm, internal diameter 78mm) that was aligned approximately north-south. This feature was backfilled with a greyish brown silty loam (Context No.204). The drain was also exposed 3.2 metres to the south in Trench 3 where it was excavated as Context No.304 (see Paragraph 3.5.3). Although the northern end of the drain-pipe had been partially closed off with a flat stone, presumably in order to prevent it from becoming clogged during the deposition of the overlying deposits (Context Nos.201, 202 and 203), a small amount of silt plugged the northern end of the drain-pipe. Apart from the clearance of this plug, the drain-pipe was left undisturbed by the excavation. The drain (Context No.205) was cut through the near horizontal surface (Context No.208) of the underlying deposit of mortar-rich clay loam (Context No.206). This horizontal surface (Context No.208) was located at a level equal to the base of the east wing's northern wall (Context No.209) and is interpreted as probably representing a deliberate levelling of the building's interior immediately prior to the laying of the drain and the creation of a new gravel surface to facilitate visitor access to the monument.

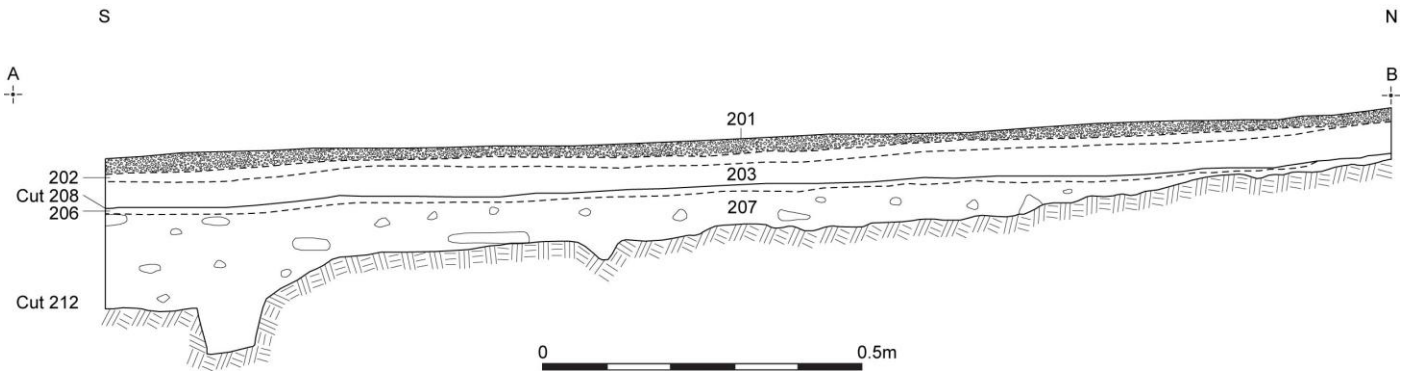

Figure 9: East-facing section of Trench 2.

Abandonment soil horizon and inferred discontinuity associated with the slighting of the east wing

3.4.4 The horizontal discontinuity (Context No.208) truncated a medium brown clay loam (Context No.206) which contained a large number of degraded lime mortar inclusions that gave the deposit a gritty texture. This deposit was thin (maximum depth 0.03 metres) and is interpreted as representing the trampled or disturbed surface of the underlying deposit of mixed clay loam (Context No.207), which contained significantly less inclusions of lime mortar. The mortar-rich trample (Context No.206) extended throughout most of Trench 2, however, in the area immediately adjacent to the east wing's northern wall it had been removed altogether by the overlying discontinuity (Context No.208), exposing both the underlying mixed clay loam (Context No.207) and the surface of the terrace cut into the bedrock (Context No.212). The inclusions of lime mortar within the upper part (Context No.206) of this soil horizon (Context Nos.206 and 207) probably relate to an episode of maintenance and re-pointing of the stonework of the east wing. The recovery of two scraps of tin foil (Small Find Nos.1080 and 1081) from the mortar-rich clay loam (Context No.206) suggest that this episode of maintenance, and by extension the overlying deposits associated with the creation of a gravel surface (see Paragraphs 3.4.2 to 3.4.3), probably date to the second half of the twentieth century. The presence of a soil horizon (Context No.309 and 313a) between the equivalent mortar-rich clay loam (Context No.308 and 310) and overlying discontinuity (Context No.312) in Trench 3 (see Paragraph 3.5.4) indicates that the episode of maintenance and re-pointing of the stonework and the subsequent laying of the drain (Context No.205) and creation of the gravel surface (Context No.201) were separated by a significant interval.

3.4.5 Underlying the mortar-rich trampled clay loam (Context No.206) was a mixed medium brown clay loam (Context No.207; maximum depth 0.08 metres) that extended throughout most of the trench, except for a strip approximately 0.1 metres wide immediately adjacent to the northern wall of the east wing where the surface of the bedrock-cut terrace the east wing was built upon began to rise. As well as including the occasional stone with lime mortar adhering to it, and fragments of brick and mortar indicative of collapsed masonry, this soil horizon also contained a large number of eighteenth-, nineteenth- and twentieth-century finds, including two fragments of worked animal bone (Small Find Nos.1102 and 1103), the bases of two shotgun cartridges (Small Find Nos.1100 and 1101), a very worn sixpence of Queen Victoria (old head issue 1893-1901) (Small Find No.1104; see Appendix 6), several pot sherds (Small Find Nos.1087, 1091-1093 and 1109-1113; see Appendix 8), two fragments of tin foil (Small Find Nos.1134 and 1135), a ceramic baking ball or bottle-stopper (Small Find No.1108), three clay pipe fragments (Small Find Nos.1095, 1096 and 1097), and a number of iron structural fittings (Small Find Nos.1116-1133 and 1136). The large number of finds within this soil suggests that it accumulated over a relatively long period of time and it is interpreted as representing the soil that formed within the interior of the east wing of Blundell's House after the roof either collapsed or was dismantled and the site had become a ruin. Interestingly, the finds within this deposit were concentrated at the northern end of the trench, possibly as a result of having been periodically swept up against the wall as part of a maintenance regime for the monument.

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Plate 16: Successive photographs of Trench 2, looking north from an elevated position. From left to right: **i** - Trench 2 prior to excavation; **ii** - following excavation of north-south aligned drain (204/205), showing horizontal discontinuity (208), north-south aligned drain cut (204), mortar-rich clay loam (206) and mixed clay loam (207); **iii** – following excavation of mortar-rich clay loam (206), showing mixed clay loam (207); and **iv** - following excavation of mixed clay loam (207), showing rock-cut terrace upon which the east wing of Blundell's House built (212). Scale 1.0 metre.

3.4.6 No evidence for deposits or features associated with either the dismantling or collapse of the roof, or the occupation of the east wing was recovered. Presumably, the basement of the east wing would have originally had either a beaten earth or flagged floor. As the surface of this floor would have been at a level higher than the horizontal discontinuity (Context No.208) associated with the levelling of the building's interior immediately prior to the deposition of the deposits associated with the modern gravel surface within the east wing (see Paragraph 3.4.3), it is not surprising that no evidence relating to this floor survived. If it had been a flagged floor then it was possibly lifted for reuse elsewhere, possibly at the same time the terraces to the south of the east wing were constructed (see Paragraphs 3.3.5 to 3.3.10), if it had been an earthen floor then it is likely to have been left *in situ*, deteriorated with exposure to the elements and formed the basis of the eighteenth- to twentieth-century soil horizon (Context No.207). These observations suggest that it is likely that the original floor was roughly at the same level as the present-day ground surface within the east wing.

Deposits and features associated with the construction of east wing

3.4.7 Removal of the mixed medium brown clay loam (Context No.207) exposed the weathered surface of the underlying bedrock (Context No.212). This surface was notably flat and uniform throughout the trench, except for its northern edge where it began to rise immediately adjacent to the northern wall (Context No.209) of the east wing. Although no tool marks were observed, the uniformity of the bedrock surface and the significant drop of 0.8 metres in level between the modern ground surface to the north of the east wing and the surface of the bedrock exposed in Trench 2 immediately adjacent to the north wall, indicates that the bedrock had been quarried to create a terrace upon which the east wing was built. Although flat, this surface was not horizontal - it sloped consistently to the south across the length of Trench 2 (from 53.05 to 52.94 metres OD) and presumably the whole length of the east wing.

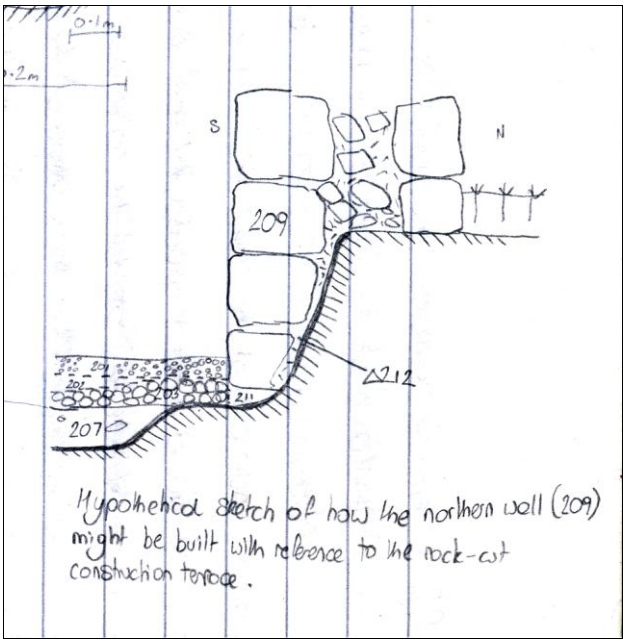

Figure 10: Sketch section representing how the northern wall of the east wing (209) was constructed with reference to the rock-cut terrace (212) (taken from the director's site notebook).

3.4.8 Excavation demonstrated that the base of the lowest course of the north wall (Context No.209) extended only 0.05 metres below the modern ground surface within the east wing. In the northwest corner of Trench 2 the northern wall was built directly on to the rising surface of the northern end of the bedrock-cut terrace (Context No.212), elsewhere a thin layer of medium brown clay loam (Context No.211; maximum depth 0.10 metres) was preserved immediately between the southern edge of the base of the wall and the surface of the bedrock. This deposit (Context No.211) contained a number

of fragments of lime-mortar and several small- to medium-sized angular stones. Although technically beyond the edge of excavation, the opportunity was taken to investigate part of this deposit (Context No.211). As it physically underlay the northern wall of the east wing (Context No.209) and its total excavation may have undermined the wall, it was decided, after consultation with the Northern Ireland Environment Agency: Built Heritage Inspectorate, to excavate only a small sample of the context. This partial excavation suggested that the deposit (Context No.211) did not extend right under the base of the wall, but that the central and northern parts of the wall (Context No.209) were built directly on to the rising surface of the bedrock-cut terrace (Context No.212) (see Figure 10 for a sketch interpretation of the arrangement). Finds recovered from the deposit (Context No.211) included several brick fragments (Context Nos.1137-1138 and 1140), a shard of glass (Small Find No.1139) and two fragments of tin foil (Small Find Nos.1168 and 1169). The deposit (Context No.211) is interpreted as probably representing a relict trace of the mixed clay loam (Context No.207) that had accumulated within a hollow underneath the wall (Context No.209) formed by the lifting of the original floor of the east wing (see Paragraph 3.4.6) and which was subsequently left undisturbed by the truncation (Context No.208) associated with the twentieth-century levelling of the building's interior (see Paragraph 3.4.3).

3.5 Trench 3

3.5.1 Trench 3 (dimensions 2.0 x 1.0 metres) was located within the centre of the interior of the east wing with its longitudinal axis aligned north-south. Excavation demonstrated that it had a similar stratigraphic sequence to that uncovered in Trench 2 (see Table One for inferred contextual concordances).

Context Descriptions	**Trench 2**	**Trench 3**
Fine gravel with humic soil	201	301
Clay capping deposit	202	302
Levelling deposit of small rounded stones	203	303
Fill of north-south aligned drain	204	305
Cut of north-south aligned drain	205	304
Horizontal discontinuity	208	312
Mortar-rich loam associated with twentieth-century maintenance and re-pointing	206	308, 310
Mixed clay loam which formed after the east wing had become a ruin	207	311, 316
Bedrock-cut terrace	212	317

Table One: Inferred contextual concordances between Trenches 2 and 3.

Twentieth-century deposits and features associated with making the site presentable to visitors

3.5.2 The superficial deposits within Trench 3 were near identical to those excavated in Trench 2. A deposit of fine gravel (Context No.301), within which a humic soil that supported the growth of grass and weeds had begun to develop, extended throughout most of the trench, although in places the underlying clay capping (Context 302) was exposed on the ground surface. The layer of fine gravel within Trench 3 was thinner than within Trench 2 (maximum depth 0.01 metres, as opposed to 0.02 to 0.03 metres), presumably because the position of the trench within the centre of the east wing coincided with a point of frequent egress that had resulted in a greater degree of erosion. Underlying the gravel (Context No.301) was a cap of hard, light greyish brown, redeposited clay mixed with sub-rounded to sub-angular gravel (Context No.302; maximum thickness 0.04 metres), which in turn overlay a levelling deposit made up of a sorted aggregate of small rounded to sub-rounded stones in a medium brown, silty clay loam soil matrix (Context No.303; maximum thickness 0.06 metres). No finds were recovered from any of these deposits, however, they can be dated, by both finds within underlying

deposits and with reference to the comparable deposits excavated in Trench 2 (see Paragraphs 3.4.2 to 3.4.4), to the second half of the twentieth century. They are interpreted as representing a successful attempt to provide an even and attractive surface for visitors to the monument.

3.5.3 Excavation of the levelling deposit exposed two linear features with relatively steep sides and flat bases (Context Nos.304 and 306), both of which contained conjoined ceramic drain-pipes. One of the negative features (Context No.304) was aligned north-south and was almost certainly a southern continuation of the drain exposed in Trench 2 (Context No.205; see Paragraph 3.4.3). It had been backfilled with a deposit of dark brown silty loam (Context No.305). This drain, which was exposed against the western edge of Trench 2, ran through the entire length of the trench and probably formed the principal drain laid within the interior of the east wing. If projected beyond the southern edge of excavation, its line passed through the centre of the entrance in the southern wall of the east wing. Assuming that the drain did extend through the entrance, as it would have needed to do in order to successfully drain the interior of the east wing, this would suggest that the threshold stones presently located in the entrance are either twentieth century in date, or were lifted and then re-laid during the twentieth century. The second linear feature (Context No.306) was aligned approximately eastnortheast-westsouthwest and ran from the eastern edge of excavation to butt against the north-south aligned drain (Context No.304). It too had been backfilled with a deposit of dark brown silty loam (Context No.307). The westernmost ceramic drain-pipe within the second drain (Context No.306) was aligned directly upon a join between the ceramic drain-pipes forming the main north-south drain suggesting that it formed a feeder drain. Both drains were laid with a slight fall that would have enabled them to drain to the south. With one exception, the individual lengths of ceramic drain-pipe were all of an identical type, which was evenly fired, circular in cross-section, embellished with twenty longitudinal ribs and had a length of 310mm, an external diameter of 101mm and an internal diameter of 78mm. This type of ceramic pipe was identical to that exposed within Trench 2 (see Paragraph 3.4.3). The one exception was a single example of a similar type of drain-pipe, which was used in the feeder drain (Context No.306), and which also had a circular cross-section and was embellished with twenty longitudinal ribs, but had slightly different dimensions (length 306mm, external diameter 104mm, internal diameter 76mm). Although no stratigraphic relationship could be established between either the linear cut features (Context Nos.304 and 306) or their respective fills (Context Nos.305 and 307), that the drain in the eastnortheast-westsouthwest-aligned feature (Context No.306) butted up against the north-south-aligned drain (Context No.304) indicates that the north-south drain was laid first. That both drains consisted of ceramic pipes of the same type suggests, however, that they were laid during the same episode of improvements at the site. As laid, the gaps between the ceramic pipes were minimal. Where lifted the pipes were silted up close to their ends, but were otherwise clear. Following the completion of the excavation of Trench 3, the choked ends of the ceramic drain-pipes were cleaned out and the drains were carefully re-laid prior to backfilling.

3.5.4 Both drains (Context Nos.304 and 306) were cut through a near-horizontal surface (Context No.312; equivalent to Context No.208) that represented a deliberate levelling of the east wing's interior, probably immediately prior to the laying of the drains and creation of the present-day gravel surface. This near-horizontal discontinuity (Context No.312) truncated a thin layer of dark brown silty loam (Context No.309 and 313a; maximum depth 0.01 metre) which was also bisected by the cut for the feeder drain (Context No.306) resulting in the creation of two separate straigraphic units (Context No.313a to the north of the drain and Context No.309 to the south of the drain). This deposit extended northwards a maximum distance of 1.25 metres from the southern edge of the trench before it was completely truncated by the episode of levelling (Context No.312). The deposit (Context No.309 and 313a), which had no equivalent in Trench 2, contained no finds and is interpreted as representing the truncated remains of a soil that has accumulated within the interior of the east wing after the twentieth-century episode of re-pointing of the stonework represented by the underlying mortar-rich deposit of silty clay loam (Context No.310 and 308; whose equivalent in Trench 2 was excavated as Context No.206).

Plate 17: Successive photographs of Trench 3, looking north from an elevated position. From left to right: i - following the excavation of aggregate levelling deposit (303), showing drains (304/305 and 306/307) cut into horizontal discontinuity (312) and silty loam deposits (313a and 309) and mortar-rich silty clay loam (310); **ii** - following excavation of drains (304 and 306) cut into horizontal discontinuity (312) and showing silty loam deposits (313a and 309), mortar-rich silty clay loam (310) and exposed in the base of the excavated drain (306) a medium brown clay loam (316); **iii** - following the excavation of medium brown clay loam (316), showing horizontal discontinuity associated with removal of the basement's floor (319) and the mortar-flecked silty loam (314); and **iv** - completion of excavation, showing the surface of the natural subsoil (318) and rock-cut terrace upon which the east wing of Blundell's House built (317). Scale 1.0 metres.

Plate 17 Successive photographs of Trench 3

3.5.5 The underlying deposit of mortar-rich silty clay loam was also bisected by the feeder drain (Context No.306) and formed two separate straigraphic units (Context No.310 to the north of the drain and Context No.308 to the south of the drain). This layer extended throughout most of Trench 3 and had a maximum thickness of 0.02 metres, although it was truncated by the episode of levelling (Context No.312) in the northeast corner of the trench. As with the equivalent deposit in Trench 2 (i.e. Context No.206), this deposit is interpreted as representing the disturbed and trampled surface of the underlying soil horizon (Context No.311 and 316) which was created during an episode of maintenance and re-pointing of the stonework within the east wing (see Paragraph 3.4.4). Consistent with the dating evidence recovered from Trench 2 was the inclusion of a fragment of tin foil (Small Find No.1147) within this trampled horizon that suggests the re-pointing is unlikely to significantly pre-date the middle of the twentieth century. The formation of a soil horizon (Context No.309 and 313a) between the mortar-rich silty clay loam (Context No.308 and 310) and the overlying near-horizontal discontinuity (Context No.312) indicates that the re-pointing of the stonework and the laying of the system of ceramic drain-pipes (Context Nos.304 and 306) and creation of the present day gravel surface (Context Nos.301, 302 and 303) were separated by at least a short interval of time.

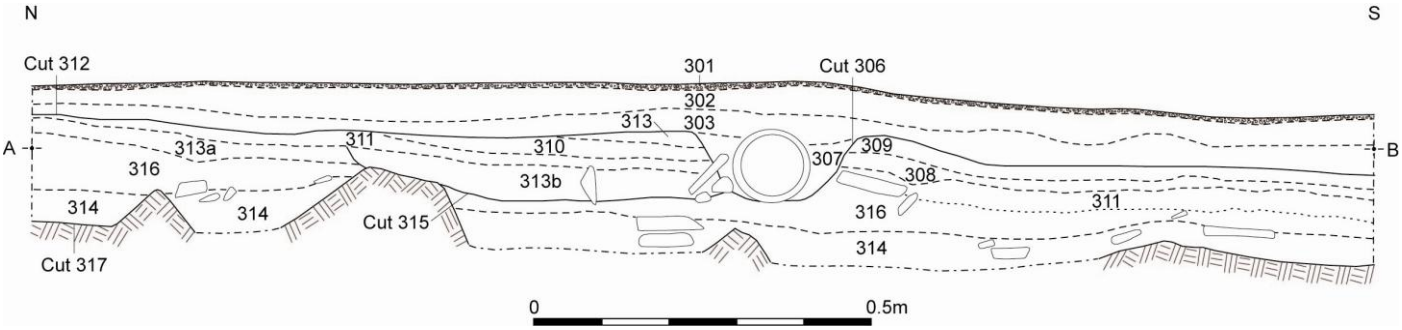

Figure 11: West-facing section of Trench 3.

Abandonment soil horizon and inferred discontinuity associated with the slighting of the east wing

3.5.6 Underlying the mortar-rich silty clay loam (Context No.308 and 310) was a mixed clay loam (Context No.311 and 316; maximum depth 0.10 metres) that extended throughout the trench. This deposit was analogous to the soil horizon within Trench 2 (i.e. Context No.207), which was interpreted as representing the soil that formed within the interior of the east wing of Blundell's House after the roof had collapsed or was dismantled and the site had become a ruin. Although it contained significantly less finds than its equivalent deposit in Trench 2, several pot sherds of eighteenth- to nineteenth-century date (Small Find Nos.1150-1152 and 1158-1159; see Appendix 8) and a circular-sectioned nail of probable twentieth-century date (Small Find No. 1149) were recovered. Within the northern part of the trench this deposit had been disturbed by the cutting of an irregular-shaped fire-pit (Context No.315) that was filled with a clay loam containing inclusions of redeposited, heat-modified clay and charcoal (Context No.313b; maximum depth 0.05 metres). Only a short section of the northern arc of the fire-pit survived intact, however, the feature was apparently over a metre in width. Recognition of the feature was complicated because by the small size of Trench 3. Its southern edge apparently coincided with the cut for the feeder drain (Context No.306) and the presence of the north-south-aligned drain (Context No.304) meant that it was not represented in the trench's east-facing section. As a consequence the feature (Context No.315), its fill (Context No.313b) and the soil horizon it was within (Context No.311 and 316) were, at least initially, imperfectly understood and excavated out of phase. This confusion was, perhaps, an inevitable consequence of the small size of Trench 3 (see Paragraph 3.2.1). The mixed clay loam underlying the fire-pit was excavated as Context No.316, elsewhere the abandonment soil horizon was excavated as Context No.311.

3.5.7 Underlying the mixed clay loam (Context No.311 and 316) was a deposit of greyish brown silty loam that included numerous flecks of degraded lime mortar (Context No.314; maximum depth 0.11 metres) and which extended throughout the trench. Finds recovered from this deposit consisted of several sherds of pottery (Small Find Nos.1160-1167), including examples of manganese mottled ware of early eighteenth century date (Small Find No.1162), tin-glazed earthenware of late seventeenth or early eighteenth century date (Small Find No.1163) and white stoneware of nineteenth-century date (Small Find Nos.1160-1161, 1165-1167) (N.Brannon pers.comm.; see Appendix 8). These sherds of pottery suggest that the deposit began to accumulate from approximately around the early eighteenth century. As the final phase of construction for the east wing is dated, on architectural grounds to around the 1630s (see Paragraph 2.9.1), this indicates that the greyish brown silty loam (Context No.314) post-dated the abandonment of the east wing of Blundell's House. Whether it represented the degraded remains of an earthen floor that was left *in situ* after the loss of the building's roof or a soil that accumulated after this episode of collapse or demolition is uncertain. The deposit had no direct equivalent in Trench 2.

3.5.8 Excavation demonstrated that the greyish brown silty loam that (Context No.314) directly overlay the truncated surface (Context No.317) of a natural, sterile, light grey clay, subsoil (Context No.318). This natural subsoil (Context No.318) did not extend throughout the trench, in places the frost-shattered surface of the bedrock had also been exposed and levelled by the act of truncation (Context No.317). With the exception of a few raised areas of bedrock, this surface was relatively uniform throughout the trench and although no tool marks were observed, it is interpreted as representing an artificial, rather than a natural, surface. It is uncertain, however, whether this episode of truncation represents the surface created by the lifting of the floor of the east wing during the slighting of the building, or the bedrock-cut terrace (equivalent to Context Nos.116 and 212) upon which the east wing was built. As with the bedrock-cut terrace in Trench 2 (Context No.212), the truncated surface was not horizontal - it sloped towards the south across the length of Trench 1 (from 52.76 to 52.72 metres OD). These heights were broadly consistent with the slope of the bedrock surface (Context No.212) recorded in Trench 2 (see Paragraph 3.4.7).

3.6 Summary

3.6.1 The principle finding of the limited excavations undertaken in 2009 was the recognition of a hitherto unrecognised and relatively late phase of activity at the site, which post-dated the abandonment of occupation and the loss of the building's roof. This late phase of activity consisted of the creation of terraces, designed to look like natural outcrops of bedrock, to the south of Blundell's House and is dated with reasonable confidence to the last two or three decades of the eighteenth century on the basis of a large sherd of a probable lead-glazed earthenware dog bowl (Small Find No.1024) whose condition indicates was not residually deposited (see Paragraph 3.3.5). This post-dates by at least a couple of decades the loss of the building's roof, which the earliest known representation of Blundell's House indicates occurred before 1758 (see Paragraph 2.6.1). The large number of near intact roofing 'slates' recovered from the dumped deposits associated with the construction of the late eighteenth-century terraces were almost certainly derived from the roof of the adjacent east wing of the building. Presumably they formed a convenient source of building material that had been left in a pile, along with other pieces of rubble, either within the interior of the ruin or immediately adjacent to it, following either the collapse or deliberate dismantling of the roof of Blundell's House (see Paragraph 3.3.5). It is surprising that the largely intact 'slates' in this assemblage had not been taken for reuse elsewhere prior to their eventual incorporation into the terrace deposits. The presence of a significant quantity of roofing 'slates' and other building rubble within the terrace deposits suggests that the construction of the terraces may have coincided with an attempt to clear the site of debris derived from earlier episodes of collapse or demolition. Precise dating of the collapse or deliberate dismantling of the roof of Blundell's House is not possible, however, this event presumably occurred between the traditional historical date for the slighting of Dundrum Castle by Cromwellian forces in the mid seventeenth century and the 1758 *terminus ante quem* provided by Mary Delaney's sketch. The small assemblage of pottery (Small Find Nos.1160-1167) recovered from a soil

(Context No.314) that apparently accumulated after the loss of the roof (see Paragraph 3.5.7) does not enable this long date range to be refined. The significance of the later eighteenth-century phase of alterations to the landscape immediately surrounding Blundell's House is further considered within its historical context in the report's concluding remarks (see Section 5.2).

4 Discussion of Roofing Material

4.1 Introductory Comments

4.1.1 One of the three principal objectives of the excavations was to recover evidence of the materials which had been used to roof Blundell's House (see Section 2.2). A total of 34 roofing 'slates' were recovered from stratified contexts during the course of the excavations, 33 from dumped deposits used to create the terraces associated with landscaping of the area immediately to the south of the east wing (Small Find Nos. 1020-21, 1029-35, 1037, 1040-56 and 1175-80), and one that had apparently been residually deposited within a mixed soil horizon in the interior of the east wing that also contained artefacts of eighteenth- to twentieth-century date (Small Find No. 1094) (Table Two). The roof 'slates' were manufactured from local shale, presumably quarried from the rock-cut ditch on the northern and western sides of the Anglo-Norman castle's upper ward. Given that the 'slates' were manufactured from local stone, their recognition during the course of the excavation was based upon the presence of either a perforation or adhering beds of lime mortar. The large number of unstratified 'slates' from Trench 1 (Small Find Nos. 1060-78 and 1170-74; see Table Two) were only recognised several days after they had been placed upon the spoil heap and preferential drying of the soil adhering to them had revealed the presence of fixing holes. It is reasonable to assume that they were also derived from the dumped deposits associated with the landscaping of the area south of the building's east wing (i.e. Context Nos.103, 107-8 and 110).

Context No.	No. of 'slates'	Context Description
103	2	Dumped deposit associated with eighteenth-century landscaping
107	5	Dumped deposit associated with eighteenth-century landscaping
108	3	Dumped deposit associated with eighteenth-century landscaping
110	23	Dumped deposit associated with eighteenth-century landscaping
Unstratified Trench 1	24	N/A
207	1	Mixed eighteenth- to twentieth-century soil horizon

Table Two: Contextual distribution of recovered roof 'slates'.

4.1.2 Given the sheer quantity of roofing 'slates' recovered from the landscaping deposits, as well as their association with other elements of building rubble, it is reasonable to suggest that they derive from the roof of Blundell's House. The excavation demonstrated that the 'slates' were incorporated into a series of dumped deposits that post-dated the loss of the building's roof (see Paragraph 3.3.5). Consequently, the roof that the 'slates' were laid on to would have been that of the final phase of occupation of Blundell's House and it should be noted that the following analysis relates only to the roof of this final structural phase of the building. The close proximity of the 'slates'' context of deposition to the building's east wing prompts the assumption that they had been laid on the roof of the east wing, rather than on another part of Blundell's House. This assumption remains unproven, despite the possibility suggested by study of the eighteenth-century images of the site that the east wing may have remained inhabited after the rest of the building had become a roofless ruin (see Paragraph 2.6.4). It is also possible, even if the 'slates' were all derived from the east wing's roof, that some had been reused from either an adjacent part of Blundell's House or an earlier structure that occupied the site of the east wing.

4.2 Plan of the roof of the final structural phase of Blundell's House

4.2.1 In addition, to examination of the 'slates' themselves, analysis of the roof of the final structural phase of Blundell's House is aided by a study of the building's surviving fabric. The gabled southern and northern walls of the east wing indicate that it was surmounted by a gabled roof that was aligned north-south. A line of roofing 'slates' is preserved in the east wing's

southern gable providing valuable information about the arrangement of individual 'slates' upon the roof (Plates 7 and 21). The outline of a small, dormer-like, gable is preserved in the harling of the inner face of the chimney projection on the east wing's eastern wall (see Paragraph 2.8.1). This dormer-like feature would have projected perpendicularly from the main, north-south aligned, part of the east wing's roof at a height approximately 1.5 metres below the crest of the main roof. The joining of the small, dormer-like feature with the main part of the roof would have created two distinct valleys on the roof's eastern side.

4.2.2 It is uncertain how the western side of the east wing's roof was connected to the remainder of Blundell's House. The westernmost wall of Blundell's House consists of the curtain wall of the Anglo-Norman Castle's lower ward which has had a later gable built upon it. Although at present this wall superficially has the appearance of having been a double gable, this is a result of the way in which it has either collapsed or been dismantled towards a point of weakness created by the presence of a gun loop. This gable would have formed the western end of an east-west aligned gabled roof of similar height to the east wing's roof. The western gable would have been set at an angle to, rather than perpendicular to, the alignment of the west wing's roof, because the western and southern walls of the west wing were built upon the line of the pre-existing curtain wall which do not meet at a right angle. That the western wing of Blundell's House was built prior to the east wing, and that it was once a free-standing structure, has long been recognised (Archaeological Survey of County Down 1966a, 211; see Paragraph 2.8.7). Although Waterman considered this structural sequence to potentially reflect little more than an alteration in the building's plan during the course of its construction (Anon. 1966a, 211), it seems unlikely that such a considerable way through completing the building that a decision would be suddenly taken to nearly double the size of its floor plan (and by extension cost) by adding an additional wing. It is more likely that the east wing represents a separate, later stage in the complex structural sequence of Blundell's House, and that it was essentially an extension built on to the eastern side of a pre-existing building which now forms the western wing of Blundell's House (see Paragraph 2.8.7).

4.2.3 In terms of the arrangement of the roof of the final phase of construction at Blundell's House, the above conjectures and observations are consistent with three possibilities (Figure 12). Firstly, the 'west wing' could have been partly demolished either prior to, or during, the construction of the east wing. As noted above (see Paragraph 2.6.4), study of one late eighteenth-century image of the site indicates that the fabric of the west wing was in a considerably poorer state of repair than that of the east wing, suggesting that the west wing may have been slighted or fallen into ruin either prior to the construction of the east wing, or whilst the east wing was still occupied (Figure 12.A). Given the architectural pretension exhibited by the triangular pediments which probably contained armorials and relief sculptures in the east wing's southern wall, it seems unlikely that its builders would have left an adjoining ruin standing next to the newly built east wing. Consequently, this first possibility is unlikely to be correct. The second possibility is that the west wing was still inhabited when the east wing was built, but that the roof of the west wing was not extended so as to be physically joined with that of the east wing (Figure 12.B). Such an arrangement would enable the west wing to be abandoned and become a ruin without compromising the structural integrity of the east wing. Thirdly, the west wing was still inhabited when the east wing was built and the west wing's roof was extended to join the roof of the east wing at a right-angle creating two valleys on the western side of the east wing's gabled roof (Figure 12.C). This third possibility would have required some modification of the western side of the east wing's roof if the building's west wing was allowed to become a ruin prior to the desertion of the east wing.

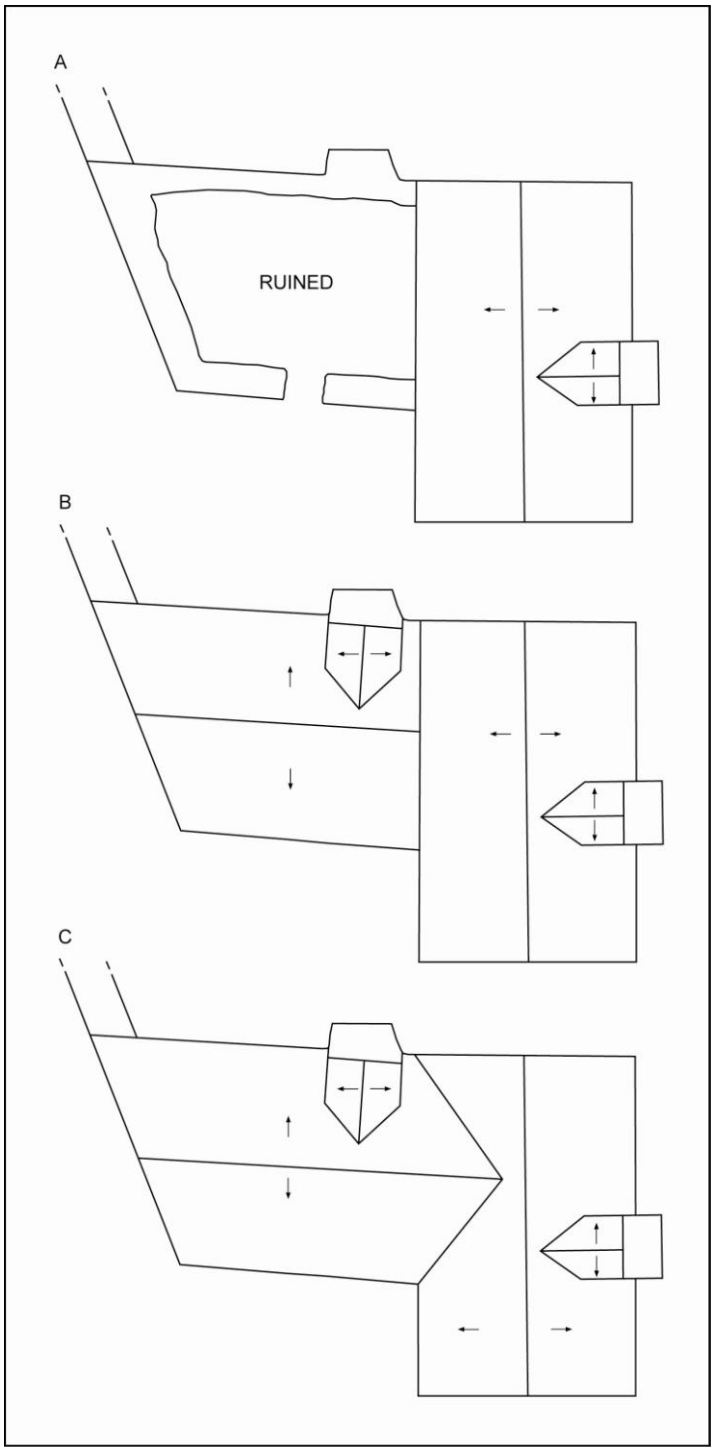

Figure 12: Three conjectural plans of the roofing arrangements for the final phase of Blundell's House.

4.3 The assemblage of roof 'slates'

4.3.1 The 59 roofing 'slates' recovered during the excavations were all manufactured from the local red shale of the Hawick Group (see Section 2.3). This stone a fine-grained sedimentary rock formed from deposits of silt and clay, varying in dark to light brownish grey in colour. Shale has a laminated structure making it relatively easy to split along bedding planes. This makes it suitable, if not ideal, for use as a roofing material. In comparison, slate, which is metamorphosed shale, is a harder stone that is both more resistant to weathering and, as a result of metamorphism, is capable of being split along close-spaced planes independent of its bedding. This means that it is easier to consistently split slate, rather than shale,

into thin and relatively flat sheets that can be easily stacked making it a superior stone for the purposes of roofing (Curran *et al.* 2010, 101). As a result of its superior properties and widespread use, the term 'slate' has come to be popularly used for all stone roofing shingles. Consequently, although technically not a slate, following Carroll and Quinn (2003, 312), the terms 'slate' and 'slates' are used throughout this report to describe the shale roofing shingles recovered during the course of the excavations; whilst the specialist terminology employed in the report is derived from Holden 1989 (for a representational summary of some of these traditional trade terms see Figure 21). The upper surface of a roofing slate, that which is exposed to the elements, is known as the 'back', whilst the underside of the slate is known as the 'bed'; the different surfaces of a slate can be identified from the surviving traces of lime mortar used to bond the bed of one slate to the back of slate underneath (Holden 1989, 80). Despite there being an exploitable source of slate located only 35 kilometres to the north of Dundrum at Rosemount, Co. Down (Curran *et al.* 2010, 101), the use of local shale, rather than imported slates, would have greatly reduced the costs of roofing Blundell's House. The practice of using locally-available shale, rather than importing slate for manufacturing roofing shingles, is apparently not uncommon in Ireland, having also been noted in medieval and post-medieval horizons in Cork City (Carroll and Quinn 2003, 312-315) and Parkes Castle, Co. Leitrim (S.Gormley pers.comm.). Unfortunately, the qualities of the local shale, and damage which has occurred during both the dismantling of the roof and the 'slates' deposition in the terrace levelling deposits, make it difficult to quantify the assemblage for the purposes of comparative analysis. Many of the 'slates' are damaged and it is difficult to assess whether their roughly-shaped edges are original or the result of secondary damage. This often makes assessment of their original alignment, dimensions and shape problematic; shoulders and trimmed corner edges are particularly difficult to identify with confidence. Furthermore, the stone's tendency to laminate following exposure to the elements means it is not possible to ascertain whether the thickness of any given 'slate' represents its original thickness unless intact lime mortar beds are present on both the bed and back surfaces of the 'slate'. Unfortunately, with the exception of the material from Cork City (Carroll and Quinn 2003, 312-315; but see Paragraph 4.3.5 for problems with the consistency of the cataloguing of the Cork City 'slates'), there is a lack of large, published assemblages of roofing 'slates' from Ireland, which makes comparative analysis difficult. Locally, a substantial number of triangular, single-holed, shale 'slates' were recovered from medieval contexts during excavations at Cathedral Hill, Downpatrick, Co. Down (N.Brannon pers.comm.), however, these remain unstudied. The archaeological analysis of roofing 'slates' is a much neglected study in the British Isles, although a number of southern English assemblages have been published (i.e. West *et al.* 1975, 311-314, nos.2243-2251, fig.271; Allan 1984, 300-302, fig.168.34-44, fig.170). Of these studies the most useful for comparative purposes is Holden's consideration of the slates of medieval Sussex (1989).

4.3.2 Despite their frequently incomplete and damaged character, the 'slates' form a demonstrably heterogeneous group in terms of both their shape and size. For the examples that are more-or-less intact, their original shapes can be identified, with varying degrees of confidence, as ranging from rectangular (Small Find Nos. 1020-21, 1032, 1035, 1044, 1050, 1057, 1062, 1064, 1066, 1076 and 1172-73), through slightly tapered (Small Find Nos. 1042, 1046-47, 1051, 1065, 1075 and 1178), to being markedly tapered towards their heads (Small Find Nos. 1041, 1048-49, 1053-56, 1063, 1065, 1070, 1077-78 and 1174-76). Many, but not all, of the 'slates' were 'shouldered' by having their upper corners removed. These 'shoulders' vary considerably in size, and in a couple of cases begin nearly halfway down the length of the 'slate' lending these rectangular-shaped 'slates' a superficially tapered appearance (Small Find Nos. 1050 and 1062). Some of the 'slates' have shoulders that are so pronounced that they meet at a point giving their heads a triangular shape (i.e. Small Find Nos. 1069, 1077, 1170 and 1174). A couple of the 'slates' are furnished with only a single shoulder which gives them an asymmetrical form (i.e. Small Find Nos. 1020 and 1065). A few of the 'slates' are well enough preserved to demonstrate that the corners of their tails were neatly trimmed in order to give them a rounded appearance (i.e. Small Find Nos. 1021, 1174, 1176 and 1178), whilst in one case the whole of the tail has a rounded, rather than straight, edge (i.e. Small Find No. 1020). The tails of three 'slates' (Small Find Nos. 1077, 1176 and 1178) appear to have been crudely chamfered, presumably to aid the run off of rain water. It is also possible that a number of the 'slates' within the assemblage (i.e. Small Find Nos. 1040, 1046, 1049, 1054, 1056, 1062 and 1170) had been deliberately battered, that is

thinned towards the head on their bed face in order to make them overlap more closely (cf. Holden 1989, 79), however, in no case was it possible to be certain that this battered appearance was not the result of secondary damage rather than design.

Plate 18: The backs of two near complete roofing 'slates' that taper towards their heads (left: Small Find No.1077; right: Small Find No.1070). One of the 'slates' (Small Find No.1077) has pronounced shoulders that form a point giving its head a triangular shape and a crudely-chamfered tail. Scale 10 centimetres.

4.3.3 Various histograms showing the dimensions of the 'slates' have been produced (Figures 13-20). As noted above, few of the 'slates' were complete. Consequently, it was not possible to record all of the measured dimensions for every 'slate' in the assemblage. Three measurements of length were recorded: overall length (Figure 13), effective length (Figure 14) and exposed length or margin (Figure 20). The overall length is the distance between the head and the tail of the 'slate'. Although the total number of complete 'slates' for which this measurement could be recorded was small, the overall length of the complete 'slates' varied between 109mm (Small Find No. 1021) and 279mm (Small Find No. 1077) reflecting the diversity of 'slate' lengths within the assemblage. The majority of the complete 'slates' (70%) ranged between 161mm and 200mm in overall length. Although the Blundell's House sample is not large enough to be considered statistically reliable, the range of overall lengths is slightly longer than those recorded on the 'slates' recovered from thirteenth and fourteenth century date in Cork City (Carroll and Quinn 2003, 313-315), but compares closely with the 'slates' from seventeenth- and eighteenth-century contexts from Cork City (Carroll and Quinn 2003, 313-315), sixteenth to seventeenth-century contexts in Exeter (Allan 1984, 301, fig.170) and the medieval slates of Sussex recorded by Holden (1989, 79, fig.4).

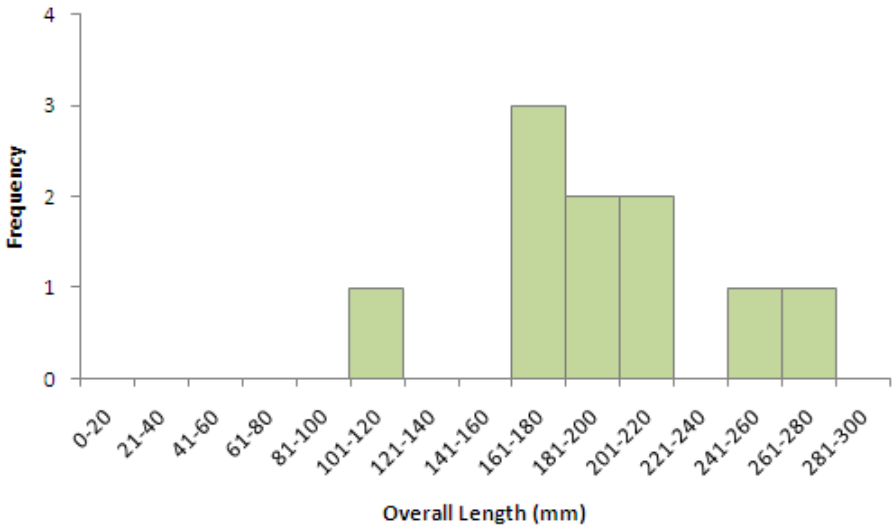

Figure 13: Histogram of the overall length of the 'slates' (sample size 10).

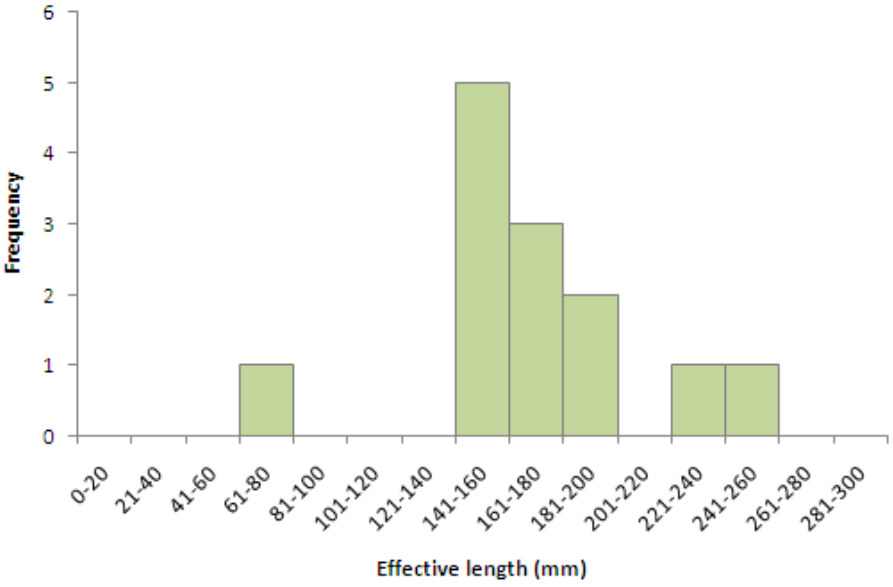

Figure 14: Histogram of the effective length of the 'slates' (sample size 13).

4.3.4 A more functionally-meaningful measurement of length is the distance between a 'slate's' fixing hole and its tail, which represents the distance that each 'slate' effectively covers on the roof. The effective lengths of the 'slates' in the assemblage are represented below (Figure 14) and show a comparable, albeit slightly shorter, range of lengths to those recorded for overall length (Figure 13). The range of effective lengths varies between 79mm (Small Find No. 1021) and 257mm (Small Find No. 1077), again reflecting the lack of uniformity within the assemblage, although it is possible that the exceptionally short 'slate' (Small Find No. 1021) may have been from the top course at the ridge or some other form of abutment which required the use of a shorter 'slate' than normal cf. Holden 1989, 83.

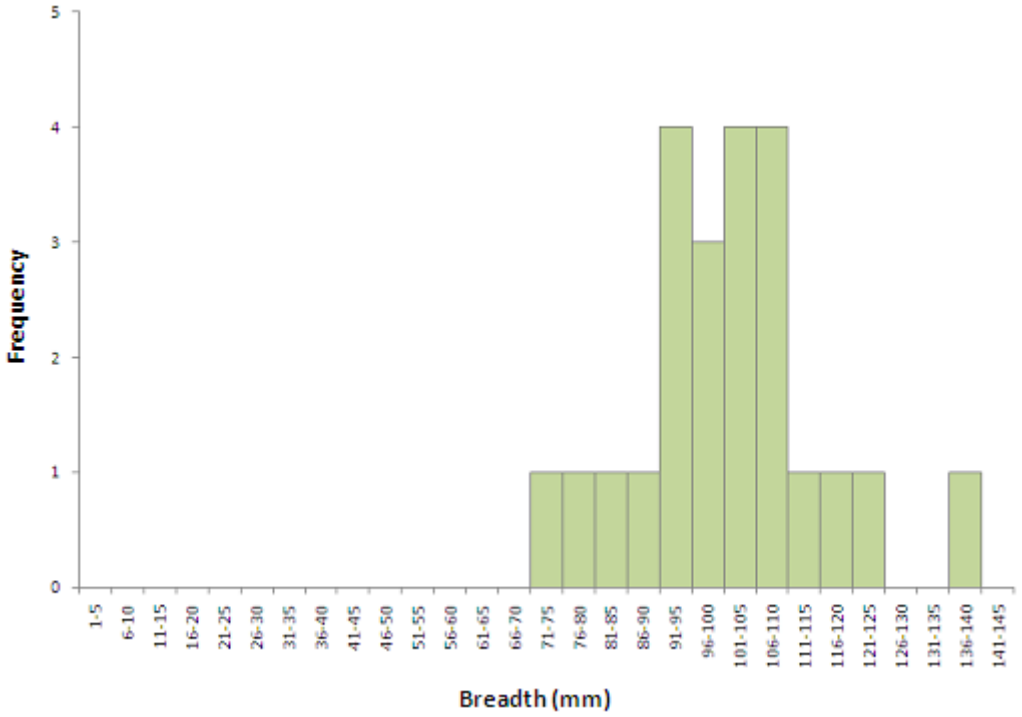

Figure 15: Histogram of the original maximum breadth of the 'slates' (sample size 23).

4.3.5 The number of 'slates' for which it was possible to measure the original maximum breadth was greater than the number of measurements it was possible to make for length. The maximum breadths of the 'slates' varied between 71mm (Small Find No. 1174) and 137mm (Small Find No. 1035), a range which again emphasises the heterogeneity of the assemblage. The majority of the 'slates' (65%) ranged between 91mm and 110mm in maximum breadth. The range of overall breadths of the Blundell's House sample was comparable, albeit slightly smaller, than the range of breadths measured by Holden in his study of the medieval slates of Sussex (1989, 79, fig.4) and by Allan for slates from Exeter (1984, 301, fig.170). The recorded overall breadths of both the thirteenth- to fourteenth-century and the seventeenth- to eighteenth-century 'slate' assemblages from Cork City had significantly wider ranges (46mm to 171mm, and 22mm to 158mm respectively cf. Carroll and Quinn 2003, 313-315), however, the narrow dimensions of some of the Cork City 'slates' suggests that several incomplete examples have probably been recorded as complete casting doubt on their reliability for comparative purposes. A scattergram representing the dimensions of the twelve 'slates' from Blundell's House for which it was possible to measure both effective length and original maximum breadth (Figure 17) indicates the diversity in the shape of the 'slates' within the assemblage. Although there is some correlation between these two dimensions, it is notable that the widest 'slate' is also one with a relatively short effective length (Small Find No. 1035; effective length 160mm, original maximum breadth 137mm). The maximum thicknesses of the 'slates' varied between 6mm (Small Find Nos. 1061, 1171 and1173) and 29mm (Small Find No. 1054), although of the 55 'slates' that were measured, only three had a maximum thickness in excess of 17mm (Figure 16). The range of thicknesses was comparable to those recorded for both the 'slates' recovered from thirteenth- and fourteenth-century contexts in Cork City (Carroll and Quinn 2003, 313-325), sixteenth- to seventeenth-century contexts in Exeter (Allan 1984, fig.170) and by Holden in his study of the medieval

slates in Sussex (1989, fig.4), however, the 'slates' from seventeenth- and eighteenth-century contexts in Cork City included a significant number of thinner examples (Carroll and Quinn 2003, 315).

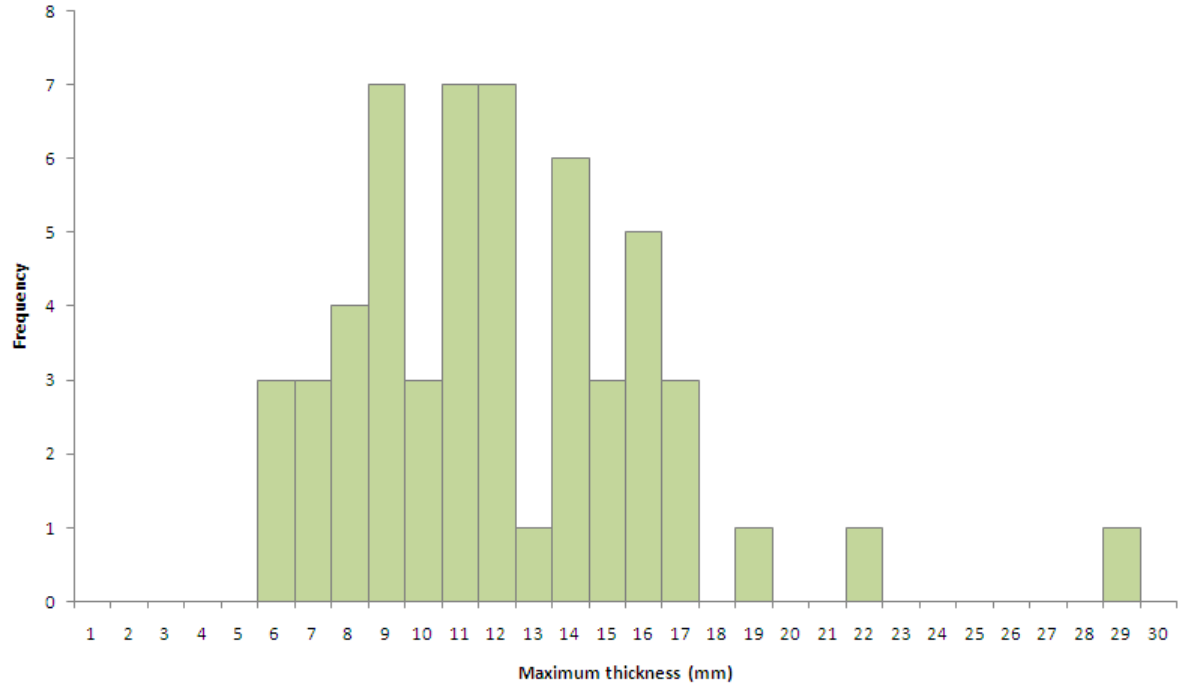

Figure 16: Histogram of the maximum thickness of the 'slates' (sample size 55).

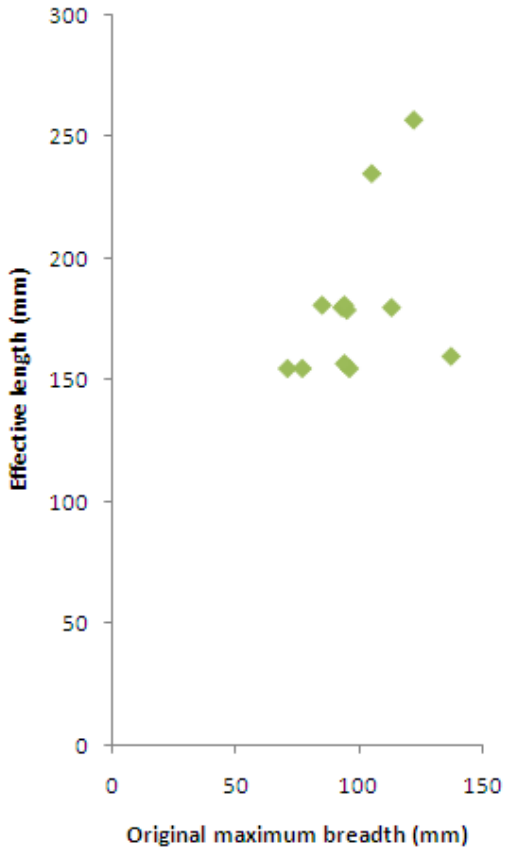

Figure 17: Scattergram comparing effective length against original maximum breadth (sample size 12).

4.3.6 The fixing holes on the 'slates' from the assemblage varied from circular to rectangular in shape. The diameters of the circular fixing holes ranged from 4mm (Small Find No. 1172) to 8mm (Small Find Nos. 1030, 1042, 1052, 1054 and 1094), whilst the maximum dimensions of the rectangular and sub-rectangular fixing holes varied from 2mm (Small Find No. 1072) to 7mm (Small Find Nos. 1033, 1053, 1067, 1071 and 1173) (Figure 18). The size of the fixing holes in the Blundell's House assemblage are notably smaller than those recorded by Holden in the medieval slates from Sussex (1989, 79, fig.4). The dimensions of only two of the perforations present in the Cork City 'slate' assemblages are recorded (10mm and 13.4mm cf. Carroll and Quinn 2003, 313, 315). It is notable that both of these fixing holes are larger than those recorded in the Blundell's House assemblage. The significance of this variation in fixing hole size between the Blundell's House 'slates' and the comparative assemblages is not immediately obvious. Examination of the fixing holes on the 'slates' from Blundell's House suggests that they were not drilled, but punched, presumably using a slater's iron pick. This action caused spalls to fall from the surface of the 'slate' which had not been directly struck leaving an irregular-shaped countersunk depression. Twenty-four of the 'slates' (i.e. Small Find Nos. 1035, 1040, 1042, 1044-45, 1050-52, 1054-56, 1061-63, 1065, 1068-70, 1072, 1094, 1170, 1172, 1174 and 1178) also show evidence of careful secondary working around the fixing hole on the surface of the 'slate' that was originally struck. Presumably this task, which was probably also performed using a slater's iron pick, was undertaken in order to widen the fixing hole so as to accommodate a nail or peg. Of the 24 'slates' upon which the secondary working of the fixing hole was recognised, ten also contain sufficient traces of lime mortar bedding to enable their back and bed surfaces to be identified (i.e. Small Find Nos. 1035, 1040, 1050-52, 1055, 1065, 1070, 1072 and 1178). On every example of these ten 'slates' it is the bed surface of the surface of the 'slate' which has been originally struck and then subjected to secondary working to create the fixing hole. The irregular-shaped countersunk depression formed by the spalling created by the initial striking with the slater's iron pick would have accommodated the head of any nail or peg used to secure the 'slate'. Given that irregular cleft laths (battens), rather than neatly sawn laths, were probably used on the roof, then it is likely that the fixing holes of the slates were made by the roofer whilst he was bedding the slates so as to enable the tails in any given course to form a reasonably straight line (but see Paragraph 4.3.11 for evidence that this was not always achieved).

4.3.7 The normal practice for fixing slates would have been to use wooden pegs to hang them over the laths (battens), whilst possibly using iron nails to fix those slates whose fixing holes coincided with rafters (Holden 1989, 80). Historically, the finger and toe bones of sheep as well as the drumsticks of chickens have also been used to fix slates in the north of England (Dobson 1960, 16-18). The perforation through one of the 'slates' (Small Find No. 1042) with the largest size of circular fixing hole (diameter 8mm) contained a small fragment of iron, which was presumably the remains of a nail. Presumably, this 'slate' was positioned over a rafter and the roofer was obliged, or took the opportunity, to fix it with a nail. No evidence for the use of nails is observable on the other 'slates' in the assemblage. Although a number of hand-made, iron nails, with rectangular-sectioned stems, were found during the course of the excavations (i.e. Small Find Nos. 1003, 1007-1009, 1016-1017, 1119, 1129 and 1153), none were recovered from the dumped deposits (Context Nos.103, 107, 108 and 110) that contained the bulk of the assemblage. Consequently, there is no *a priori* reason to assume that these nails were used to fix the 'slates' to the roof. No wooden fixing pegs, or small bones that could have been utilised as fixing pegs, were recovered during the excavations. Holden has speculated that the modern practice of using a nail to fix slates into place where they form the final course adjacent to a ridge or dormer, as well as where they abut a verge, hip or valley, may be a traditional practice that extended back to the medieval period (1989, 80). Although no evidence for these practices was observed in the Blundell's House assemblage of 'slates', it is not unreasonable to assume that the slaters who laid the roof probably followed them.

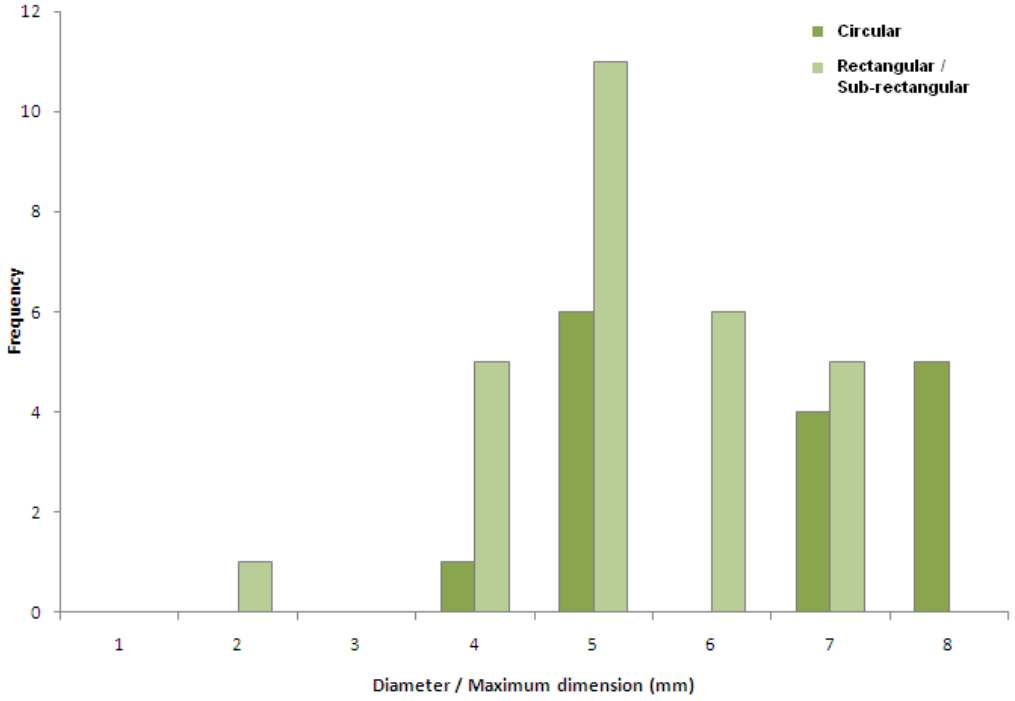

Figure 18: Histogram of the diameter / maximum dimension of the circular (sample size 16) and rectangular / sub-rectangular (sample size 28) fixing holes.

4.3.8 Traces of lime mortar are present on 32 of the 'slates' indicating that the 'slates' on the east wing's roof were bedded – a process in which mortar is used to bond the bed of one slate to the back of the underlying slate. This practice reduces 'lift' of the 'slates' in high winds and also prevents rainwater creeping sideways between adjacent 'slates' as a result of capillary attraction cf. Holden 1989, 80, however, it has the disadvantage of reducing the elasticity of the tiling (Bennett and Pinion 1948, 223). In the majority of cases only a thin trace of mortar survives, presumably as a result of either the mortar bed being broken away when the roof was dismantled, or leaching out by ground water following deposition. However, in a significant number of cases the mortar beds survive largely intact (Small Find Nos. 1040, 1047-1048, 1050, 1053, 1055, 1060, 1065, 1076, 1078 and 1175-1180). Interestingly, the mortar beds that remain intact are predominantly located upon the back of the 'slates' - a bias in survival which suggests that the 'slates' were removed from the roof in a consistent manner. This suggests that rather than having simply collapsed as a result of neglect, the roof was probably systematically dismantled – an observation consistent with the high number of intact 'slates' within the excavated assemblage (see Paragraph 3.3.5). The thickness of the intact mortar beds varies between 6mm (Small Find No. 1050) and 16mm (Small Find No. 1175) (Figure 19). In contrast, the mortar beds on the medieval slates from Sussex varied only between 8mm and 10mm in thickness (Holden 1989, 80). It is probable that the marked variation in, and greater maximum values of, the thicknesses of the mortar beds which survive in the Blundell's House assemblage are a result of the use of shale to create the 'slates'. As noted above (see Paragraph 4.3.1), the use of shale, as opposed to slate, inevitably results in shingles which not only tend to be thicker, but also have less uniform thicknesses. Study of the impressions left by overlying 'slates' within the preserved mortar beds of one 'slate' (Small Find No. 1175) indicate that 'slates' of varying thickness were used adjacent to each other (see Paragraph 4.3.11). Consequently, in order to keep the exposed surfaces of a course of 'slates' of varying thickness even, it would be necessary to use relatively thick beds of mortar where the overlying 'slates' were thin. Concomitantly, the use of a thick bed of mortar would also necessitate setting the overlying 'slate' at a relatively shallow angle of effective pitch (see Paragraph 4.4.2).

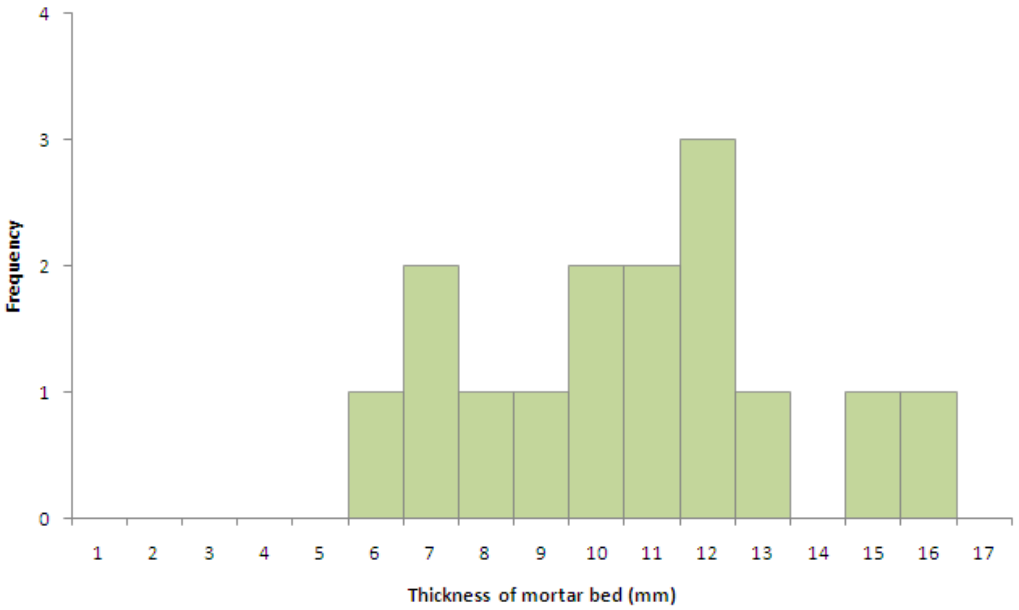

Figure 19: Histogram of the thickness of the mortar beds (sample size 15).

4.3.9 The mortar beds used to bond one 'slate' to the back of the underlying 'slates' vary in length between 37mm (Small Find No. 1047) and 74mm (Small Find No. 1040). This is a relatively short distance in comparison to the overlap between the adjacent courses of 'slates'. Holden has suggested that as lime mortar is porous it is desirable to leave a void between the upper parts of the various layers of 'slates' in order to avoid capillarity (1989, 80), however, the reason for this practice may be an economically-driven imperative to reduce the amount of lime mortar employed in laying the roof.

4.3.10 Where both the mortar bed on the back surface of a 'slate' and the 'slate's' tail edge survive intact, it is possible to measure the exposed length, or margin, of the 'slate' (Figure 20). The exposed length is the distance between the lower edge of the mortar bed on the 'slate's' back and the tail edge of the 'slate'; it is quite literally the length of the 'slate' that was exposed to the elements. The exposed lengths of the eleven 'slates' within the assemblage which it is possible to ascertain vary between 35mm (Small Find No. 1176) and 70mm (Small Find No.1048).

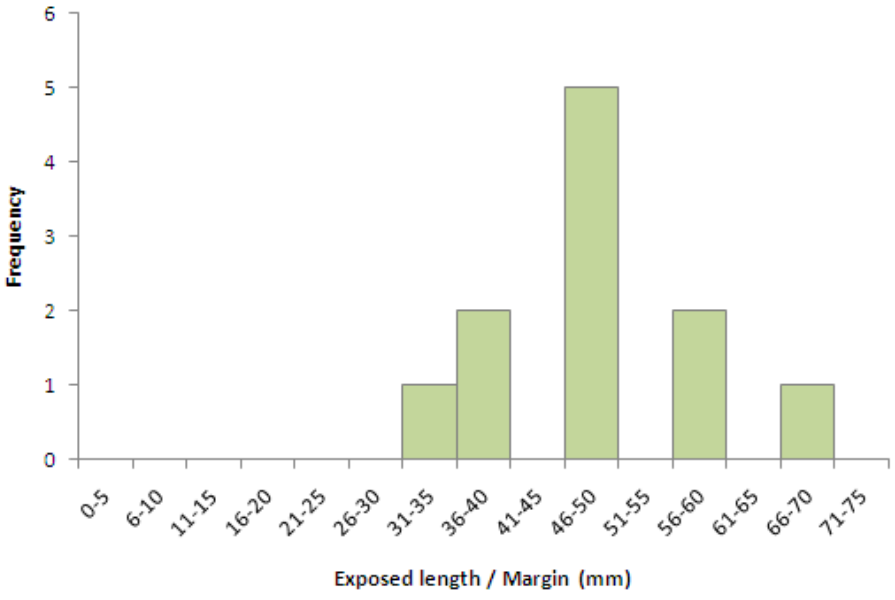

Figure 20: Histogram of the exposed length (margin) of the 'slates' (sample size 11).

4.3.11 Longitudinal seams of lime mortar are present on the surface of the mortar beds on the back surfaces of four of the 'slates' within the assemblage (Small Find Nos.1040, 1175, 1179 and 1180). These seams would have been formed by the mortar squeezing up between the adjoining edges of two 'slates' of the next course that were laid directly upon the mortar bed. On one of these 'slates' (Small Find No.1040; see Plate 19) the fixing hole also survives and it is observable that the longitudinal seam is approximately aligned with the centrally-placed fixing hole. This indicates that, for this one 'slate' at least, the overlying 'slates' of the adjacent course formed a near perfect 50% overlap. The reliance that can be placed upon generalisations derived from this single observation is, however, questionable. Given the marked variations in the measured breadths of 'slates' within the assemblage (see Figure 15) it cannot be reliably concluded that the entire roof was neatly laid out in this manner. Studies of both the slate roofs of medieval Sussex and the traditional Cornish Scantle method of laying slates suggest that adjacent courses of slates usually consisted of slates of random widths (Holden 1989, 80) and, whilst efforts would have been made to prevent the edges of overlapping slates from coinciding, this is likely to have been the case at Blundell's House too. On another of the 'slates' upon which a longitudinal seam of mortar is preserved, impressions also survive within the mortar bed of the perpendicular seams created by the tails of the overlying 'slates' (Small Find No. 1175; Plate 20). There is a difference of 15mm between the longitudinal position of these perpendicular seams indicating that the courses of the 'slate' roof would not have had a neat or even appearance. There is also a height difference of 3mm between the flat facets (created by the bed surfaces of the overlying 'slates') either side of the longitudinal seam of this 'slate' (Small Find No. 1175), indicating that 'slates' of varying thickness were, at least on one occasion, used next to each other in the roof. Of the other 'slates' with longitudinal seams the difference in height between the flat facets either side of the seam is either minimal (1mm, Small Find No.1179) or non-existent (Small Find Nos. 1040 and 1180). Presumably pushing different sized slates to varying degrees into the underlying mortar beds enabled the exposed surfaces of the slates to be kept tolerably even.

4.3.12 The 'slate' which contains the height difference between the facets preserved in its mortar bed (Small Find No. 1175) also, uniquely, appears to have been treated prior to being laid on the roof. The back surface of the 'slate' has been incised or scored with fine lines which run perpendicular to the length of the 'slate' (Plates 20 and 21). These appear to be keying for a dark grey substance, which forms a thin layer that has apparently been applied to the back of the 'slate'. These lines, and the surviving traces of the applied layer, are present beneath the area that was covered by part of the mortar bed that has become detached, indicating that they were applied prior to the 'slate' being laid onto the roof. Although the incised lines and dark grey substance may be geological in origin, they appear artificial. In order to elucidate the nature and purpose of this applied layer, analytical investigation is recommended (see Paragraph 6.3.1).

4.3.13 No evidence was recovered to suggest that the 'slates' had been 'torched'. Torching is a method of pointing, usually with lime mortar mixed with animal hair, applied from the underside of the roof to the upper edges of each slate after the laying of the roof has been completed with a view to reducing the penetration of wind and reducing the rattling of the slates (Bennett and Pinion 1948, 68-69; Holden 1989, 81). It was common English medieval practice to point or render with mortar the undersides of at least the lowest courses of slates, if not the entire roof, once it had been built (Salzman 1952, 233), however, the technique does not appear to have been applied to the roof the east wing. No clay ridge tiles were recovered during the course of the excavation; these may have been retained for reuse elsewhere if the roof of the east wing was dismantled. No evidence that the 'slates' themselves had been reused, such as the occasional presence of two fixing holes, was observed. Nor had any of the 'slates' been cut at an angle to meet the valley intersection between the main roof and the small, dormer-like gable roof projecting from the main roof whose presence is suggested by the profile preserved in outline in the harling of the inner face of the chimney projection on the east wing's eastern wall (see Paragraph 2.8.1).

Plate 19: The back of a roofing 'slate' upon which a longitudinal seam is preserved on the surface of the mortar bed (Small Find No.1040). This seam was formed by the mortar squeezing up between the adjoining edges of the two 'slates' laid on to the mortar bed. That it approximately lines up with the centrally-placed fixing hole indicates that the overlying 'slates' formed a near 50% overlap. Scale 10 centimetres.

Plate 20: The back of a roofing 'slate' upon which the longitudinal seam is preserved on the surface of the mortar bed (Small Find No.1175). Note that impressions also survive within the mortar bed of the perpendicular seams created by the tails of the overlying 'slates'. That there is a difference of 15mm between the longitudinal position of these perpendicular seams indicates that the courses of the 'slate' roof would not have had a neat or even appearance. A further point of interest are the scored lines which run perpendicular to the length of the 'slate' and appear to be keying for a dark grey substance. Scale 10 centimetres.

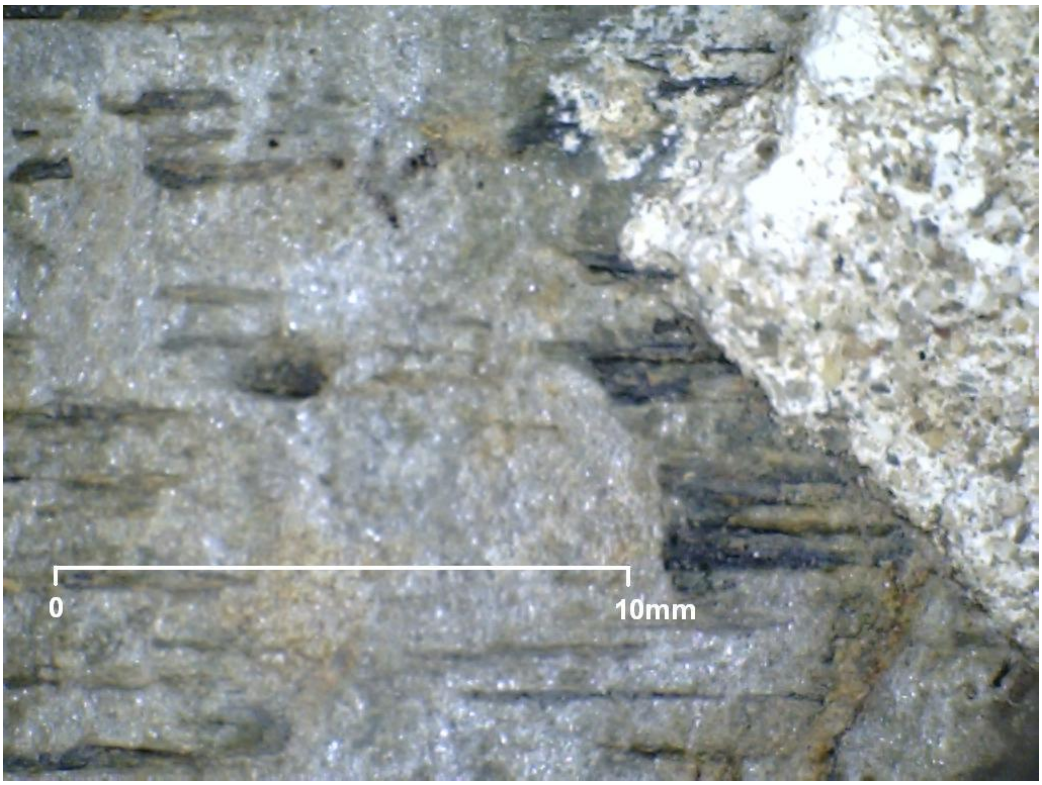

Plate 21: Microscopic image of incised lines filled with dark grey substance on 'slate' (Small Find No. 1175). Note the image shows lines beneath part of the 'slate' that was formerly covered by part of the mortar bed.

4.4 Discussion

4.4.1 Study of the assemblage indicates that the 'slates' used to roof the east wing of Blundell's House formed a heterogeneous group (see Section 4.3). This observation is not surprising, John Stow's *Survey of London* (1598) records that most of the slating done in London in the late sixteenth century was undertaken with slates of irregular size and shape (cf. Dobson 1960, 16), whilst the use of shale rather than slate to manufacture the 'slates' for Blundell's House would have made the production of uniform shingles difficult. The recognition that the assemblage consists of 'slates' of differing lengths suggests the use of diminishing courses in roofing the east wing of Blundell's House. Whilst being a conventional late medieval building method, slating in diminishing courses was a highly-skilled, specialist craft (Holden 1989, 85). The method is practical because it keeps the long and heavier slates close to the eaves, whilst also producing aesthetically-pleasing results (Bennett and Pinion 1848, 10). By facilitating the use of different lengths of slates, the technique also minimises waste (Holden 1989, 81).

4.4.2 As previously noted, a line of roofing 'slates' comparable with those recovered during the course of the excavation is preserved in the southern gable of the east wing (see Paragraph 2.8.11 and Plate 7). Photographic analysis of the eastern half of the east wing's southern wall enables a number of properties of the roof to be estimated (Plate 22; although a detailed survey of the building's southern wall will be necessary in order to produce accurate figures for all of the quoted measurements, the existing survey of the wall undertaken by staff of the Northern Ireland Environment Agency confirms that the gabled facade runs at an angle of 45° from the horizontal (see Figure 6) and suggests that the other measurements derived from the photographic analysis are also reliable). The eastern half of the gable runs at an angle of 44° from the horizontal which was presumably equivalent to the roof's rafter pitch (see Plate 22.A), whilst the slightly steeper, gabled facade runs at an estimated angle of 45° from the horizontal (see Plate 22.B). The effective pitch of the individual slates varies markedly, but has a maximum estimated value of 26° to the horizontal (see Plate 22.C; the

variation in the effective pitch of the 'slates' which have been preserved *in situ* is probably a result of the variability in their form). The estimated minimum difference of 18° between the east wing's rafter pitch and effective pitch is relatively high in comparison to the figures cited for the use of both cambered plain tiles (8° - 9°) and the traditional mortar-bedded slating technique of Scantle (12.5°) (Holden 1989, 83). The high figure at Blundell's House is probably a reflection of both the employment of thick layers of mortar to bed the slates (itself probably a necessity given the uneven surfaces of 'slates' manufactured from shale cf. Paragraph 4.3.8) and possibly the use of a substantial tilting fillet.

Plate 22: Photographic analysis of the eastern half of the east wing's southern wall. A = 44° angle of the gable to the horizontal (equivalent to the roof's rafter pitch); B = 45° angle of the gabled facade to the horizontal; C = 26° maximum estimated angle of effective pitch of *in situ* 'slates'.

4.4.3 The number of layers of 'slates' present at any one point in the roof can be reconstructed by comparing the exposed length (margin) of a slate with its effective length (that is the distance between the fixing hole and the tail) expressed as a percentage ratio (i.e. (exposed length ÷ effective length) x 100). Modern slate roofs have a minimum of two and a maximum of three layers of slates (a percentage over 31%), whilst roofs laid using the traditional Cornish Scantle method of graduated, diminishing courses have a minimum of three and a maximum of four layers of slates (usually a percentage between 28% or less and 31% cf. Holden 1989, 82-83). Holden has suggested that the additional number of layers used in the Scantle method is a response to the severe weather conditions suffered in Cornwall (1989, 82). Only three 'slates' survive within the Blundell's House assemblage with margins accompanied by fixing holes (Small Find Nos. 1040, 1051 and 1055; Table Three). The percentage ratio for one of these 'slates' (Small Find No. 1040) is consistent with it having been used on part of the roof which had almost exactly three layers of 'slate' at any given point, whilst the percentage ratios of the other two 'slates' (Small Find Nos. 1051 and 1055) indicate that they were used on part of the roof which had

a minimum of three and a maximum of four layers of 'slates'. Holden's analysis of the medieval slates from Sussex demonstrated that they had an average percentage ratio of 40.4% (1989, 83) consistent with their being used on roofs with a minimum of two and a maximum of three layers of slate. Given its exposed location, the decision to use a greater number of layers of 'slates' in the roof of Blundell's House than was the norm in medieval Sussex is perhaps not surprising.

Small Find No.	Exposed length	Effective length	Percentage Ratio
1040	57mm	180mm	31.7%
1051	49mm	181mm	27.1%
1055	48mm	181mm	26.5%

Table Three: Details of 'slates' with margins accompanied by fixing holes.

4.4.4 The dimensions of the three 'slates' (Small Find Nos. 1040, 1051 and 1055) are notably uniform in comparison to the rest of the assemblage (for example, compare the second column of Table Three with Figure 20, and the third column of Table Three with Figure 14). This suggests that all three 'slates' may have come from adjoining parts of the roof. Given that the range of effective lengths of the assemblage ranged from 79mm (Small Find No. 1021) and 257mm (Small Find No. 1077) (see Paragraph 4.3.4; and Figure 14) it is reasonable to conclude that these slates were located neither at the foot or the top of the roof. Although not a statistically representative sample, it is possible to use these figures, along with those observed during the study of both the 'slate' assemblage (Section 4.3) and the surviving line of roofing 'slates' in the southern gable (Paragraph 4.4.2), to provisionally reconstruct part of the profile of the east wing's roof, showing it made up of 'slates' fixed at their heads in diminishing courses with their tails bedded in mortar (Figure 21).

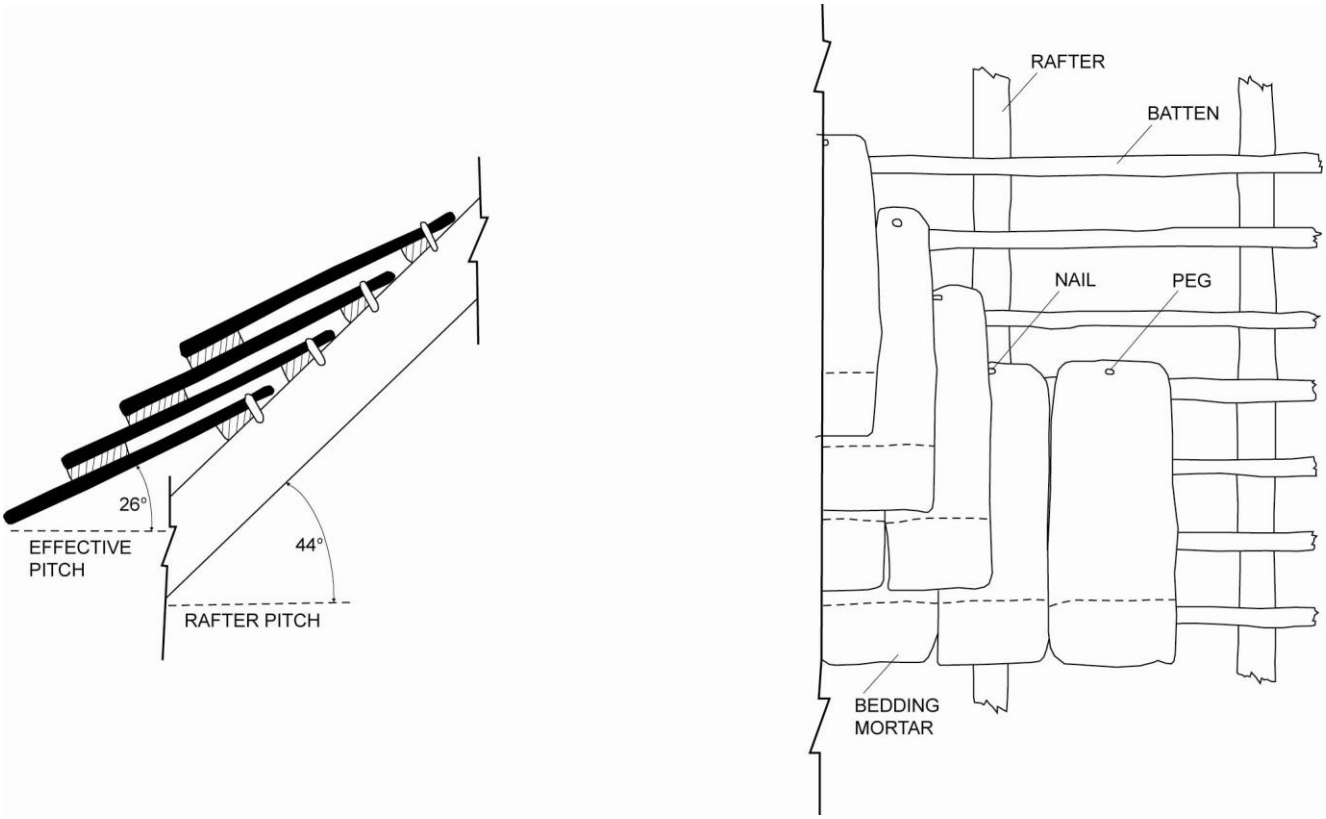

Figure 21: Reconstructed profile and plan of the east wing's roof.

5 Concluding Remarks

5.1 Fulfilling the Aim and Objectives of the Excavation

5.1.1 The excavation and associated investigation of the east wing of Blundell's House has been largely successful in addressing the three principal objectives of the project (see Paragraph 2.3.1). In terms of the first objective, the results of the 2009 excavation suggested that no archaeological layers contemporary with the construction or occupation of Blundell's House survive either within the interior of the east wing, or immediately to the south of the east wing. It should be noted, however, that the small size of all three excavation trenches means that the excavation results may not necessarily be representative of the overall levels of preservation within the building and its immediate environs. Although it is reasonable to assume that the past episodes of truncation of the ground surface within the east wing, which were identified during the course of the excavation, would have removed all occupation levels within the interior of the east wing, it is possible that bedrock-cut features contemporary with the construction of either the east wing of Blundell's House, or any earlier structure that stood on its site, could remain preserved beyond the limits of the 2009 trenches. Although it is a reasonable supposition that a similarly poor level of preservation occurs in the west wing of the building, this too would need to be confirmed by excavation.

5.1.2 The 2009 excavations did demonstrate the preservation of at least two artificial terraces and a buried soil horizon in the area between the northern boundary of the visitor car park and the east wing of Blundell's House. These terraces are interpreted as dating to the last two or three decades of the eighteenth century and apparently represent an episode of deliberate modification to the grounds around the already ruined house, possibly in order to make them conform to contemporary 'picturesque' and 'naturalistic' ideals of landscape design. The recovery of a large assemblage of roofing 'slates' and building rubble from the dumped material used to build these terraces suggests that they were derived from the roof and fabric of Blundell's House - and probably from the adjacent east wing of the building. Presumably this material formed a convenient source of hard core that had been left in a pile either within the interior of the ruin or immediately adjacent to it, following either the collapse or deliberate dismantling of the roof and internal structure of Blundell's House.

5.1.3 The second defined objective of the excavation, to establish what materials were used to roof the building, was also successfully fulfilled. The preservation of a large number of roofing 'slates' of local shale within the dumped deposits associated with the artificial terraces, combined with an examination of the surviving fabric of the building, has enabled a detailed reconstruction of the roof of the final structural phase of Blundell's House (see Chapter 4).

5.1.4 The third stated objective was the recovery of architectural or ornamental stonework; artefactual evidence; the return wall of the possible barrel vault or stairwell in the northern part of the east wing as suggested by the apparent traces of a relieving arch within the fabric of the east wing's northern wall; and evidence of the possible, stepped structure, external to the southern side of the east wing of Blundell's House. No architectural or ornamental stonework was recovered during the course of the excavation suggesting that any dressed stone that had been used in the building was systematically robbed, perhaps as early as the 1640s when a number of the windows in the building were apparently deliberately narrowed by the crude insertion of blocks of rubble masonry. Although it is possible that some dressed stone may have been incorporated into the unexcavated parts of the dumped deposits associated with the construction of the terraces in the late eighteenth century, the failure to recover any dressed stone from these contexts suggests that if any architectural or ornamental stonework was removed from the building at this date, then it was retained for use elsewhere by the agents of the Blundell or Hill families.

5.1.5 Despite Trench 2 being intentionally positioned in order to address the issue, no evidence was recovered for a return wall of the possible barrel vault or stairwell in the northern part of the east wing which was suggested by the apparent traces of a relieving arch within the fabric of the east wing's northern wall. This does not prove that a return wall did not originally exist. In both Trenches 2 and 3 the level of truncation associated with the lifting of the original floor of the east wing apparently coincided with the surface of the bedrock-cut terrace upon which the east wing was built. Alternatively, the removal of the internal features and deposits within the east wing may have coincided with the construction of the terraces to the south of the building. The presence of a significant quantity of roofing 'slates' and other building rubble within the terrace deposits suggests that the construction of the terraces may have coincided with an episode of clearing the site of debris from previous episodes of collapse or demolition. This possible episode of clearance may also have involved the removal of any internal features within the building and been undertaken with the intention of creating an accessible, 'picturesque' ruin out of the remains of the house that complimented the appearance of the 'naturalistic' terraces. Alternatively, the internal features of the building may have been removed or collapsed when the roof was lost at some point before 1758. If the building was deliberately slighted in the middle of the seventeenth century by Parliamentarian forces then such a thorough act of demolition would possibly have removed any evidence relating to internal walls and features.

5.1.6 No artefactual evidence coincident with the historically- and architecturally-attested period of the east wing's occupation was recovered during the course of the excavation. The earliest artefactual evidence recovered was an abraded sherd of either Staffordshire or Bristol feathered trailed slipware (Small Find No.1001) which was recovered from the topsoil in Trench 1 (i.e. Context No.101). This residually-deposited sherd is of a type dated from the late seventeenth to early eighteenth century (N.Brannon pers.comm.; see Appendix 8). This floruit coincides with the period associated with the abandonment of occupation and demolition or collapse of the building. Finally, as noted above (Paragraph 5.1.2), the excavation of Trench 1 demonstrated that the stepped structure to the south of the east wing was part of an artificial terrace which probably dated to the later decades of the eighteenth century.

5.2 Transforming the Ruins

5.2.1 Where the excavations were most successful was in identifying a hitherto unrecognised phase in the cultural, if not architectural, sequence of Blundell's House. Historical and architectural analysis of the site (see Sections 2.5 and 2.8 respectively) resulted in the identification of two principle phase of construction and a subsequent phase of alteration of the building. These phases have been identified, with varying degrees of certainty, with the possession of the property by both the Cromwell (construction of the west wing) and Blundell (construction of the east wing) families during the early seventeenth century and 1630s respectively, and the garrisoning of the building during the 1640s and the opening years of the 1650s (modification of both wings, apparently for the purposes of defence). Although no direct evidence was found to date the abandonment of the building - an event traditionally associated with the slighting Dundrum Castle by Parliamentarian forces *c.*1652 - the excavations did identify an episode of deliberate modification of the landscape immediately surrounding the building during the later part of the eighteenth century. It is considered likely that this episode of landscaping coincided with the clearance of rubble and other debris within or around the ruined house, and it is possible that other alterations to the building, such as the removal of any surviving floors or internal structural timbers, also occurred at this time. This probable episode of clearance may have been intended to create an accessible 'picturesque' ruin out of the standing remains of Blundell's House.

5.2.2 In terms of the history of garden and landscape design in Ireland, the eighteenth century can be divided into two phases: an earlier formal period that was superseded by the period of the natural landscape park during the middle decades of the century (McErlean 2007, 276). The transition from the earlier formal period in garden design was a gradual process which extended throughout much of the first half of the eighteenth century. During this period of transition the rigid formality and

overtly artificial style of gardens of the seventeenth and early eighteenth century was rejected, resulting in formal garden designs becoming simpler and incorporating increasingly more 'natural' elements. Inspiration for garden and landscape design became increasingly drawn from the place itself by exaggerating the natural form of the landscape and adding variety to its shape and features. The transition was completed, in both England and Ireland, by the 1760s with the widespread adoption of the naturalistic landscape approach amongst local gentry, as well as the creation of massive landscape parks that were intended to emulate the natural landscape by the wealthiest landowners (Williamson 1998, 249). Towards the end of the eighteenth century the smoother and softer lines of the earlier, Classically-inspired landscape gardeners gave way to the use of wilder shapes and forms by what became known as the Picturesque School led by figures such as Richard Payne Knight and Uvedale Price. By imitating the 'fiercer' and more 'savage' aspects of nature, such as crags and cliffs, the Picturesque style resulted in the increased use of more irregular, striking and forceful lines in planting and design (Banks 1991, 82-85; Buchan 2006, 148). In recent years it has been argued that the transition in England from formal to naturalistic landscape design was a politicised process that had its origins in the 'Glorious Revolution' (Richardson 2007). In Ireland the process was probably no less politicised, perhaps reflecting both the pride of the landowning classes in the improvements to the agricultural landscape which they were responsible for, as well as their reaction to the concomitant superimposition of a rectilinear geometry upon the landscape that was perceived as being at odds with the natural beauty of an open, unenclosed countryside (Lamb and Bowe 1995, 30-31).

5.2.3 The elements of the designed landscape identified outside Blundell's House during the 2009 excavations are both chronologically and formally consistent with the late trend in landscape gardening towards an emphasis on the 'picturesque'. Ultimately, however, the results of the excavations in 2009 prompt a series of interpretive questions, which on the basis of our current level of evidence cannot be answered. The dating evidence is not precise enough to establish whether the alterations were carried out when the property was owned by the three daughters of Montague, the First Viscount Blundell or after it had started to pass into the hands of the Hill family (see Paragraph 2.5.19), however, it seems reasonable to assume that it is more likely to have been undertaken by Arthur Hill, the Second Marquess of Downshire (1753-1801) as a new landowner keen to express his prosperity and economically, as well as aesthetically, 'improve' his new Dundrum Estates. Certainly, the acquisition of 2000 acres of adjacent land at Ballykinlar in 1793 (see Paragraph 2.5.19) reflects the Second Marquess's willingness to invest in the Dundrum Estates and landscaping was often intended to be perceived as a bold statement of not only the present prosperity of a landowner, but also their future intentions cf. Buchan 2006, 128. The scale of the landscaping is impossible to assess. The results of the 2009 excavations indicate that the area immediately to the south of Blundell's House was modified, but evidence for any greater alteration of the landscape is difficult to identify – perhaps because of the absence of an occupied mansion which would have formed the focus for the development of a landscape park. Consequently, there is no reason why any of the typical defining features and characteristics of the natural landscape should be represented at Dundrum – if only because the estate, valuable as it was, did not form a principle residence for either the Blundell or Hill family. It may be that the landscaping at Dundrum was, at least in terms of scale, a relatively modest exercise. In addition to the well known, enormous landscape parks that extended over a thousand acres, there are numerous examples in Britain and Ireland of naturalistic landscaping over much smaller areas only one or two acres in size (Banks 1991, 82). The creation of the terraces, as well as mimicking and the stark boldness of both the natural outcrops on the hill and the rock-cut ditch of the inner ward of Dundrum Castle, would have provided improved views of Dundrum Bay. Serpentine lakes formed an important aspect of landscape park design and it may have been considered that the serpentine form of the inner bay of Dundrum Bay provided a striking and pleasing view from the site of Blundell's House.

5.2.4 Another significant set of questions concerns whether the clearance of building debris from within or around Blundell's House was intended to compliment the landscaping of the grounds immediately surrounding the ruin. It may be that any piles of roof 'slates' and rubble derived from earlier episodes of collapse or demolition were perceived simply as a convenient quarry for material from which to create the terraces. That said, a date in the late eighteenth century would be

historically consistent with a deliberate act intended to create a picturesque ruin consistent with late eighteenth- and early nineteenth-century ideas of Romanticism. The vogue for ivy-clad ruins and dramatic rock forms within landscape design began in the 1790s with the influential publications of Richard Payne Knight's *'Landscape: a Didactic Poem'* and Uvedale Price's *'An Essay on the Picturesque'* (Williamson 1998, 194). As the eighteenth century progressed there was a move away from the Classical towards the Gothic in the style of landscape gardening in which ruins, such as Blundell's House, increasingly became focal points within gardens.

5.2.5 A final, unresolved question is: why did the daughters of the First Viscount Blundell, or more likely Arthur Hill, the Second Marquess of Downshire, invest time and effort in modifying a landscape which did not form their principal Irish residence. The answer to this question presumably lies in the complex changing patterns of social relations and power in Irish society during the eighteenth century, and may be regarded as an expression of the growing wealth of major landowners, such as the Hill family, in Ireland. In order to meaningfully address these historical questions, and successfully interpret this archaeologically-identified phase of landscape design in social terms, study of that part of the Downshire Papers relating to both the Blundell family and Arthur Hill, the Second Marquess of Downshire (Public Record Office of Northern Ireland Nos. D607 and D671) should be considered a priority.

6 Recommendations for Further Work

6.1 Introduction

6.1.1 In addition to informing the future management strategy for the care and maintenance of Blundell's House, the fieldwork and associated research detailed in this report has also clarified our appreciation of the date and historical significance of the monument. Consequently, despite their limited scale, the excavations carried out in 2009 justify publication. It is recommended that a comprehensive report on the excavations is prepared for publication in an academic journal, whilst a detailed summary of the research, suitable for an interested and informed local audience, is submitted to a local journal, such as the *Lecale Review*. Three sets of recommendations for the additional work necessary to complete the proposed publications are made. Firstly, it is suggested that a concerted effort is made to locate, and then assess the potential of, the archive for Waterman's unpublished 1960 excavations in the lower ward of Dundrum Castle (Section 6.2). Secondly, it is recommended that a limited programme of specialist research on the artefacts recovered during the 2009 excavations is undertaken (Section 6.3). Finally, it is proposed that a limited programme of additional historic and pictorial research is undertaken (Section 6.4).

6.2 Assessment of the potential of the 1960 excavation archive

6.2.1 Apart from being briefly noted in the *Archaeological Survey of County Down* (Anon. 1966a, 210), Waterman's 1960 excavations in the lower ward are unpublished. As well as being an archaeologically-important investigation into a scheduled monument in State Care, the results of Waterman's 1960 excavations have potentially significant implications for appreciating the character of later medieval occupation of Dundrum Castle, as well as refining the interpretation of Blundell's House (see Paragraph 2.7.6). Consequently, it is recommended that a concerted effort is made to locate the archive and then assess its potential for meaningful publication. As part of this assessment it is also suggested that the opportunity is taken to establish whether any other unpublished excavations were conducted at Dundrum by Waterman (see Paragraph 2.7.6). If the assessment of Waterman's archive indicates that the excavations in the lower ward justify dissemination, then it is suggested that they are published jointly with the 2009 excavations of Blundell's House.

6.3 Specialist artefact research

6.3.1 A detailed report on the 'slates' recovered during the course of the excavations has already been prepared for publication (see Chapter 4 and Appendix 7), however, it is recommended that analytical work is conducted upon one of the 'slates' that appears to have been treated prior to being laid on the roof (Small Find No.1175) in order to assess the nature and significance of the dark grey substance applied to the back of the 'slate' (see Paragraph 4.3.12).

6.3.2 In addition to nine fragments of modern white metal (tin?) foil, the assemblage of metalwork includes 43 artefacts, that is 37 pieces of ironwork, five copper alloy objects and a single composite artefact. It is recommended that a formal catalogue and report on the metalwork should be prepared for publication by Philip Macdonald, Centre for Archaeological Fieldwork, Queen's University of Belfast. It will be necessary to undertake X-radiography of the metalwork assemblage prior to preparing a formal catalogue and report on the metalwork. It is recommended that this work is undertaken by Philip Parkes, Cardiff Conservation Services, Cardiff University. It is recommended that an initial set of digital images are prepared for appraisal. Following evaluation a small number of detailed conventional X-ray plates will probably be required

6.3.3 It is recommended that an evaluative report on the potential for analytical study of the hearthcake (Small Find No.1058) and other metalworking residue recovered during the course of the excavations is prepared by Tim Young, Geoarch

Consultancy. The evaluative report will form a publishable document in its own right. Tim Young has experience of preparing reports on slag from a large number of sites, including several Irish medieval and post-medieval sites.

6.3.4 A small number of other artefacts of interest, such as a slate pencil of probable eighteenth-century date (Small Find No.1014), were recovered during the course of the excavations. It is recommended that a formal catalogue and report on these artefacts should be prepared for publication by Philip Macdonald, Centre for Archaeological Fieldwork, Queen's University of Belfast.

6.4 Limited programme of additional historic and pictorial research

6.4.1 The review of the historical evidence relating to Blundell's House presented in this report (Section 2.5) should be considered provisional. Unfortunately, due to the temporary closure of the Public Record Office of Northern Ireland to facilitate its move to new premises, it was not possible to complete the analysis of the available historical sources in the detail required for a meaningful study of Blundell's House. Consequently, it is recommended that a limited programme of focussed, additional research should be undertaken after the Public Record Office of Northern Ireland reopens in May 2011. To realise the full potential of the available historical sources for casting further light upon the history of Dundrum Castle and Blundell's House, it is necessary in some cases to go beyond the published calendars used to compile the report's historical narrative (Section 2.5) and interrogate the original documents. For example, the entry in the published calendar relating to Payne's account of the events at Dundrum Castle during the 1641 rebellion is particularly brief (see Paragraph 2.5.17). Further study of the original document, a copy of which is held on microfilm by the Public Record Office of Northern Ireland (PRONI Ref. No.MIC223/113), should provide significant details of the layout of the castle and the state of Blundell's House at this date.

6.4.2 A second source of historical evidence whose potential has not been fully realised during the compilation of this report are the Downshire Papers, which are also held in the Public Record Office of Northern Ireland (Ref Nos. D607 and D671). This large collection of documents relating to the management of the Downshire Estates has the potential to cast light upon alterations to Blundell's House during the period of ownership of the Dundrum Estate by both the Blundell and Hill families. In addition, as demonstrated by the use of nineteenth-century estate maps to reconstruct the extent of the late medieval manorial estate (see Paragraphs 2.5.8 and 2.5.22), study of the Downshire Papers will enable aspects of the medieval history of Dundrum Castle and Blundell's House to be reconstructed. Consequently, it is recommended that, following the reopening of the Public Record Office of Northern Ireland, the Downshire Papers are also consulted.

6.4.3 In addition to the recommended additional historical research, it is proposed that an attempt is made to identify and study the original image, or images, upon which both W.Thomas's 1791 engraving (Figure 3) and Fleming's undated sketch (Figure 4) were based (see Paragraphs 2.6.2 to 2.6.11). Study of these 'lost' original illustrations is key to assessing the veracity of the known early images of Blundell's House and in particular the problematic evidence for a northern courtyard or extension to the building (see Paragraph 2.6.11). Consequently, it is recommended that a search through the collections of the Royal Irish Academy, the acknowledged source for many of Fleming's copies, is undertaken.

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Appendix 1: Context List

Trench 1

Context No.	***Description***
101	Turf layer and humic, silty clay loam topsoil
102	Stone-rich, humic, silty clay loam
103	Dumped deposit of medium-sized stones in silty loam soil matrix
104	Mixed deposit of humic, silty clay loam and clay (redposited backfill?)
105	Dark greyish brown deposit of small stones in a near sterile silty loam soil matrix
106	Stone-rich, humic silty clay loam
107	Dumped deposit of medium-sized stones in silty loam soil matrix
108	Dumped deposit of medium-sized stones in silty loam soil matrix with air voids
109	Dumped deposit of small-sized stones in silty loam soil matrix
110	Dumped deposit of medium-sized stones in silty loam soil matrix with air voids
111	Natural sterile subsoil (light grey clay and shattered bedrock)
112	Mortared stone revetment (intended to look like a natural outcrop)
113	Mortar-rich, medium brown silty loam - buried soil horizon (probably same as 117)
114	South wall of the east wing of Blundell's House
115	Mortar 'pad' below lowest course of the south wall of the east wing of Blundell's House (114)
116	Cut feature: rock-cut terrace upon which the east wing of Blundell's House built
117	Mortar-rich, medium brown silty loam - buried soil horizon (probably same as 113)
118	Bonded foundation course of reused masonry for mortared stone revetment (112)
119	Natural sterile subsoil (light grey brown sandy clay) (probably same as 120)
120	Natural sterile subsoil (light grey brown sandy clay) (probably same as 119)
121	Unbonded foundation deposit of reused masonry beneath mortar 'pad' (115)
122	Localised deposit of silty clay loam

Trench 2

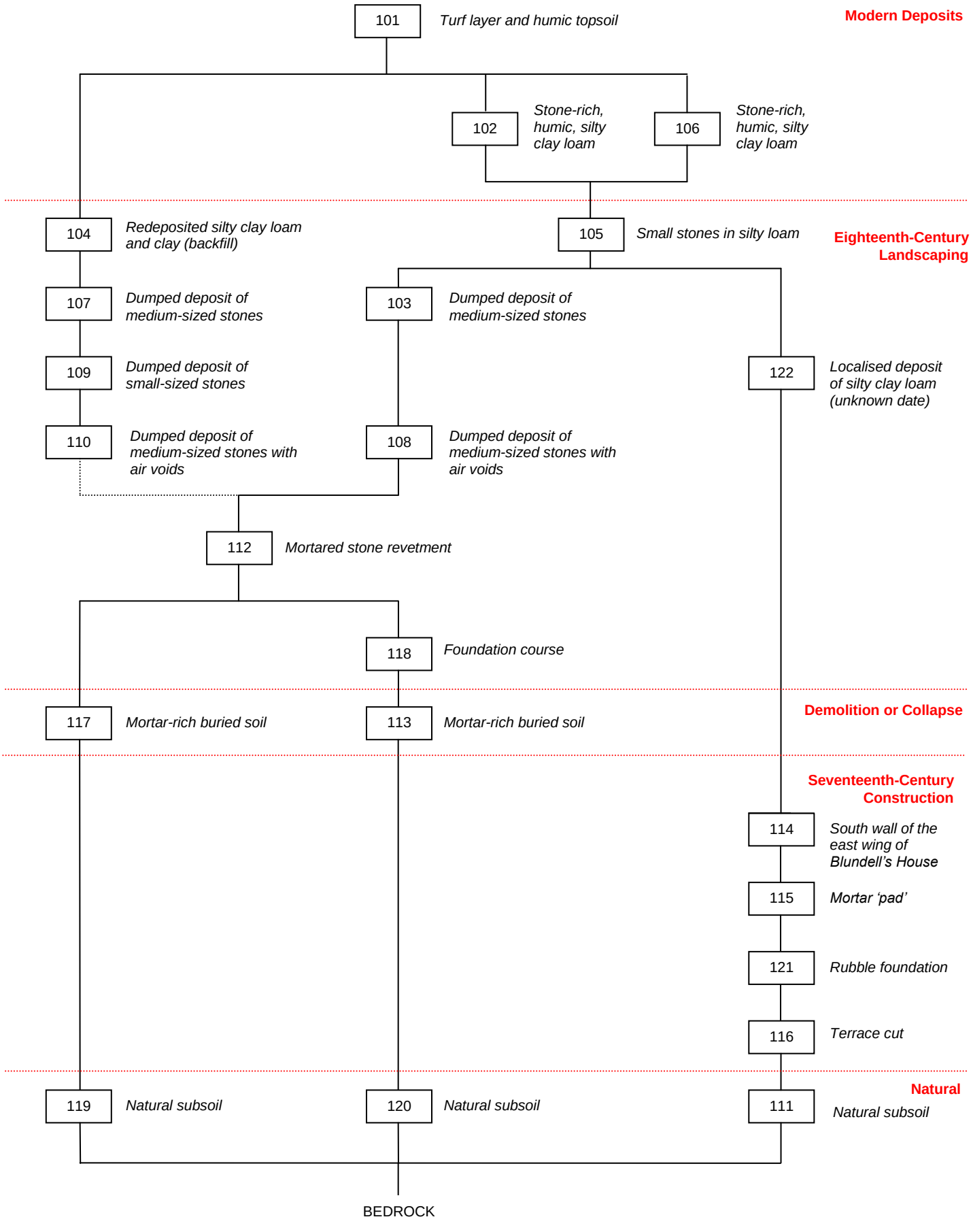
Context No.	***Description***
201	Fine gravel within humic soil
202	Light greyish brown clay capping deposit
203	Aggregate levelling deposit of small rounded stones
204	Greyish brown silty loam (fill of 205)
205	Cut feature: north - south aligned drain
206	Mortar-rich clay loam
207	Mixed, medium brown clay loam (probably same as 211)
208	Horizontal discontinuity (levelling of surface)
209	North wall of the east wing of Blundell's House
210	N/A
211	Mixed, medium brown clay loam (probably same as 207)
212	Cut feature: rock-cut terrace upon which the east wing of Blundell's House built

Trench 3

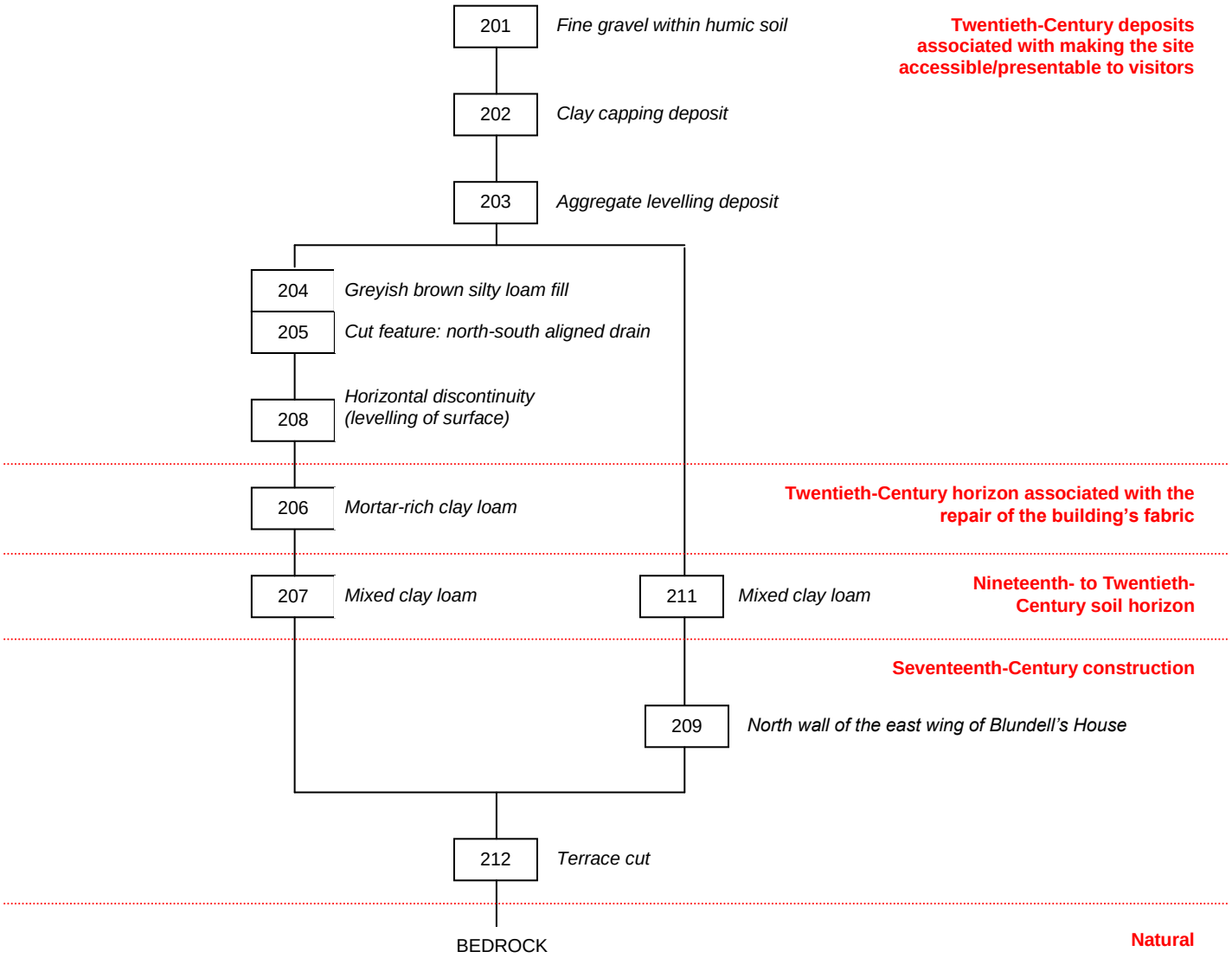
Context No.	***Description***
301	Fine gravel with humic soil
302	Light greyish brown clay mixed with aggregate of small rounded stones
303	Aggregate levelling deposit of small rounded stones
304	Cut feature: north - south aligned drain
305	Dark brown silty loam (fill of 304)
306	Cut feature: eastnortheast - westsouthwest aligned drain
307	Dark brown silty loam (fill of 306)
308	Mortar-rich silty clay loam (interpreted as the same as 310)
309	Dark brown silty loam (interpreted as the same as 313a)
310	Mortar-rich silty clay loam (interpreted as the same as 308)
311	Mixed, medium brown clay loam
312	Horizontal discontinuity (levelling of surface)
313a	Dark brown silty loam (interpreted as the same as 309)
313b	Medium brown clay loam with heat-modified clay and charcoal inclusions (layer and fill of 315)
314	Mortar-flecked, medium greyish brown silty loam
315	Cut feature: fire pit
316	Mixed, medium brown clay loam (partially excavated as 311)
317	Horizontal discontinuity: either removal of basement floor or construction terrace
318	Natural sterile subsoil (light grey clay)

Appendix 2: Harris Matrices

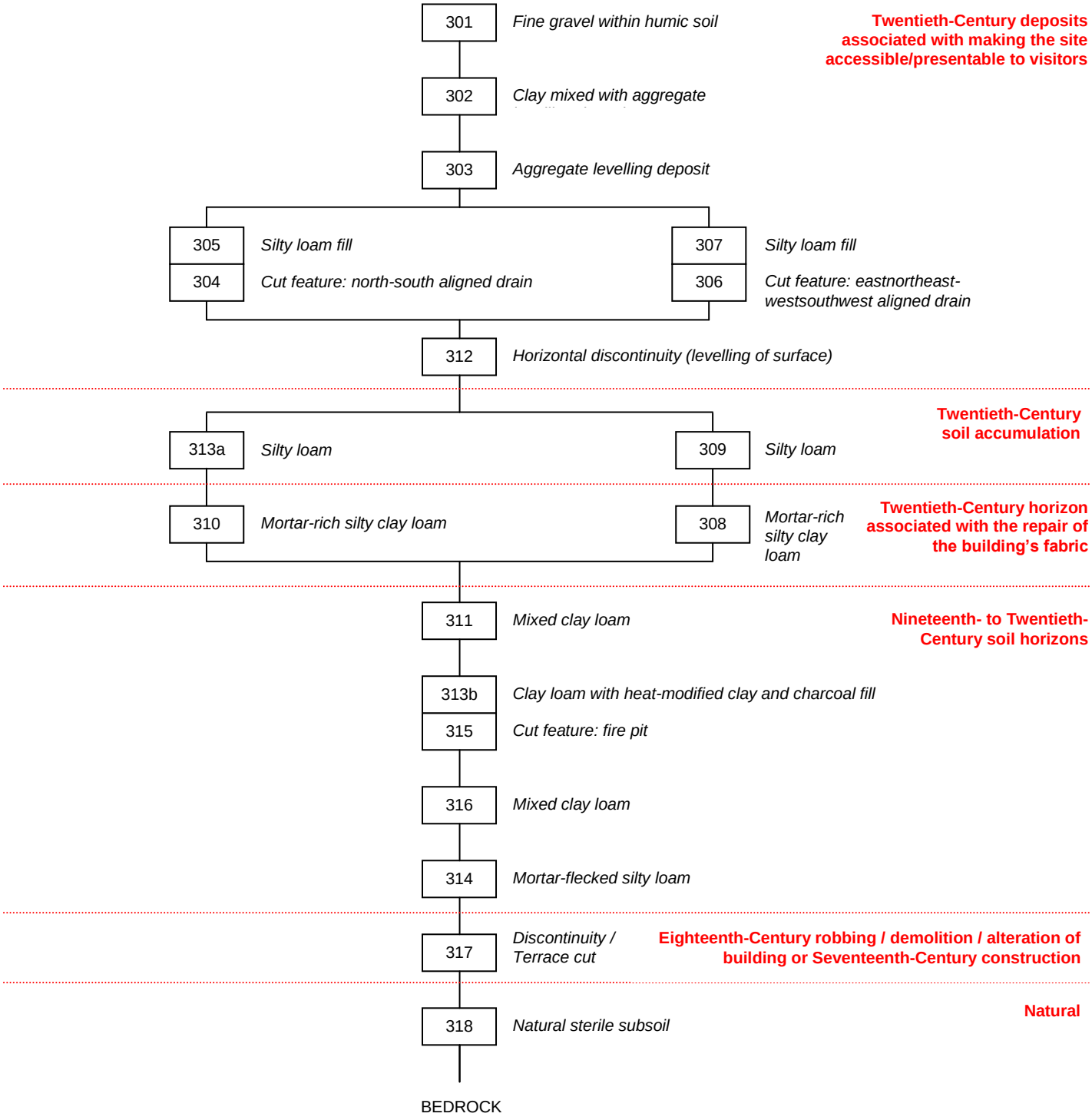
Trench 1



Trench 2


201
Fine gravel within humic soil
Twentieth-Century deposits associated with making the site accessible/presentable to visitors
202
Clay capping deposit
203
Aggregate levelling deposit
204
Greyish brown silty loam fill
205
Cut feature: north-south aligned drain
208
Horizontal discontinuity (levelling of surface)
206
Mortar-rich clay loam
Twentieth-Century horizon associated with the repair of the building's fabric
207
Mixed clay loam
211
Mixed clay loam
Nineteenth- to Twentieth-Century soil horizon
Seventeenth-Century construction
209
North wall of the east wing of Blundell's House
212
Terrace cut
BEDROCK
Natural

Trench 3


301
Fine gravel within humic soil
Twentieth-Century deposits associated with making the site accessible/presentable to visitors
302
Clay mixed with aggregate
303
Aggregate levelling deposit
305
Silty loam fill
304
Cut feature: north-south aligned drain
307
Silty loam fill
306
Cut feature: eastnortheast-westsouthwest aligned drain
312
Horizontal discontinuity (levelling of surface)
Twentieth-Century soil accumulation
313a
Silty loam
309
Silty loam
310
Mortar-rich silty clay loam
308
Mortar-rich silty clay loam
Twentieth-Century horizon associated with the repair of the building's fabric
311
Mixed clay loam
Nineteenth- to Twentieth-Century soil horizons
313b
Clay loam with heat-modified clay and charcoal fill
315
Cut feature: fire pit
316
Mixed clay loam
314
Mortar-flecked silty loam
317
Discontinuity / Terrace cut
Eighteenth-Century robbing / demolition / alteration of building or Seventeenth-Century construction
Natural
318
Natural sterile subsoil
BEDROCK

Appendix 3: Photographic Record

[All images taken with a Nikon Coolpix 4500 digital camera]

Trench 1

21st April 2009

1-2	Trench 1, prior to excavation, looking north *[DSCN5575-5576]*
3	Trench 1, prior to excavation, looking west (northern part of trench) *[DSCN5577]*
4	Trench 1, prior to excavation, looking west (middle part of trench) *[DSCN5578]*
5	Trench 1, prior to excavation, looking west (southern part of trench) *[DSCN5579]*
6	Trench 1, prior to excavation, looking west (southern part of trench) *[DSCN5580]*
7	Trench 1, prior to excavation, looking west (middle part of trench) *[DSCN5581]*
8	Trench 1, prior to excavation, looking west (northern part of trench) *[DSCN5582]*
9-10	Trench 1, prior to excavation, looking south *[DSCN5583-5584]*
11-15	Trench 1, prior to excavation, looking north from an elevated position *[DSCN5585-5589]*
16-18	Trench 1, prior to excavation, looking west from an elevated position *[DSCN5590-5592]*
19-22	Trench 1, prior to excavation, looking east from an elevated position *[DSCN5593-5597]*
23-24	Trench 1, following excavation of topsoil (101), exposing stone-rich humic silty clay loam deposits (102 and 106), redeposited layer of silty clay loam and clay (104), possible levelling deposit of small stones (105) and dumped deposit of stones in silty loam (103), looking north *[DSCN5598-5599]*
25-27	Trench 1, following excavation of topsoil (101), exposing stone-rich humic silty clay loam deposits (102 and 106), redeposited layer of silty clay loam and clay (104), possible levelling deposit of small stones (105) and dumped deposit of stones in silty loam (103), looking west *[DSCN5600-5602]*
28-29	Trench 1, exposed dumped deposit of stones in silty loam (103) following excavation of topsoil (101), looking west *[DSCN5603-5604]*
30-31	Trench 1, exposed dumped deposit of stones in silty loam (103) following excavation of topsoil (101), looking north *[DSCN5605-5606]*

5606]

23rd April 2009

32-40	Trench 1, following excavation of topsoil (101), exposing stone-rich humic silty clay loam deposits (102 and 106), redeposited layer of silty clay loam and clay (104), possible levelling deposit of small stones (105) and dumped deposit of stones in silty loam (103), looking north from an elevated position *[DSCN5607-5615]*
41-42	Trench 1, following excavation of topsoil (101), exposing stone-rich humic silty clay loam deposits (102 and 106), redeposited layer of silty clay loam and clay (104), possible levelling deposit of small stones (105) and dumped deposit of stones in silty loam (103), looking west from an elevated position *[DSCN5616-5617]*
43-46	Trench 1, following excavation of topsoil (101), exposing stone-rich humic silty clay loam deposits (102 and 106), redeposited layer of silty clay loam and clay (104), possible levelling deposit of small stones (105) and dumped deposit of stones in silty loam (103), looking east from an elevated position *[DSCN5618-5621]*
47-48	Northern end of Trench 1, following excavation of stone-rich humic silty clay loam deposit (106), exposing buried masonry course of southern wall of the east wing (114), possible levelling deposit of small stones (105), mortar 'pad' (115) and outcrops of bedrock, looking north *[DSCN5622-5623]*
49-50	Northern end of Trench 1, following excavation of stone-rich humic silty clay loam deposit (106), exposing buried masonry course of southern wall of the east wing (114), possible levelling deposit of small stones (105), mortar

'pad' (115) and outcrops of bedrock, with stone-rich humic silty clay loam (102) in foreground, looking north *[DSCN5624-5625]*

51-52 Northern end of Trench 1, following excavation of stone-rich humic silty clay loam deposit (106), exposing buried masonry course of southern wall of the east wing (114), possible levelling deposit of small stones (105), mortar 'pad' (115) and outcrops of bedrock, looking north *[DSCN5626-5627]*

24th April 2009

53-54 Southern end of Trench 1, showing partially-excavated redeposited layer of silty clay loam and clay (104) overlying dumped deposit of stones in silty loam (107), with mortared stone revetment (112) in background, looking north *[DSCN5628-5629]*

55-56 Southern end of Trench 1, showing partially-excavated redeposited layer of silty clay loam and clay (104) overlying dumped deposit of stones in silty loam (107), with mortared stone revetment (112) and dumped deposit of stones in silty loam (103) in background, looking north *[DSCN5630-5631]*

57-58 Southern end of Trench 1, showing partially-excavated redeposited layer of silty clay loam and clay (104) overlying dumped deposit of stones in silty loam (107), with mortared stone revetment (112) in background, looking west *[DSCN5632-5633]*

59-60 Southern end of Trench 1, showing partially-excavated redeposited layer of silty clay loam and clay (104) overlying dumped deposit of stones in silty loam (107), with mortared stone revetment (112) in background, looking east *[DSCN5634-5635]*

61-64 Trench 1, following excavation of superficial deposits of topsoil (101), stone-rich humic silty clay loam deposits (102 and 106) and redeposited layer of silty clay loam and clay (104), showing possible levelling deposit of small stones (105) and dumped deposit of stones in silty loam (107 and 103) and mortared stone revetment (112), looking north *[DSCN5636-5639]*

65-70 Trench 1, following excavation of superficial deposits of topsoil (101), stone-rich humic silty clay loam deposits (102 and 106) and redeposited layer of silty clay loam and clay (104), showing possible levelling deposit of small stones (105) and dumped deposit of stones in silty loam (107 and 103) and mortared stone revetment (112), looking west *[DSCN5640-5645]*

71-74 Trench 1, following excavation of superficial deposits of topsoil (101), stone-rich humic silty clay loam deposits (102 and 106) and redeposited layer of silty clay loam and clay (104), showing possible levelling deposit of small stones (105) and dumped deposit of stones in silty loam (107 and 103) and mortared stone revetment (112), looking east *[DSCN5646-5649]*

75-78 Trench 1, following excavation of superficial deposits of topsoil (101), stone-rich humic silty clay loam deposits (102 and 106) and redeposited layer of silty clay loam and clay (104), showing possible levelling deposit of small stones (105) and dumped deposit of stones in silty loam (107 and 103) and mortared stone revetment (112), looking north from an elevated position *[DSCN5651-5654]*

79-82 Trench 1, following excavation of superficial deposits of topsoil (101), stone-rich humic silty clay loam deposits (102 and 106) and redeposited layer of silty clay loam and clay (104), showing possible levelling deposit of small stones (105) and dumped deposit of stones in silty loam (107 and 103) and mortared stone revetment (112), looking east from an elevated position *[DSCN5655-5658]*

83-91 Trench 1, following excavation of superficial deposits of topsoil (101), stone-rich humic silty clay loam deposits (102 and 106) and redeposited layer of silty clay loam and clay (104), showing possible levelling deposit of small stones (105) and dumped deposit of stones in silty loam (107 and 103) and mortared stone revetment (112), looking west from an elevated position *[DSCN5659-5668]*

27th April 2009

92-94 Trench 1, excavation in progress (Ruth Logue), looking northeast *[DSCN5675-5677]*

95 Trench 1, excavation in progress (Philip Macdonald), looking west *[DSCN5678]*

96-97 Trench 1, excavation in progress (Philip Macdonald), looking northwest *[DSCN5679-5680]*

98-100 Trench 1, following excavation of possible levelling deposit of small stones (105), showing dumped deposits of stones in silty loam (107 and 103) and mortared stone revetment (112), looking north *[DSCN5681-5683]*

101-108 Trench 1, following excavation of possible levelling deposit of small stones (105), showing dumped deposits of stones in silty loam (107 and 103) and mortared stone revetment (112), looking west *[DSCN5684-5691]*

109-110 Northern part of Trench 1, following excavation of possible levelling deposit of small stones (105), showing dumped deposit of stones in silty loam (103) and mortar 'pad' (115) immediately adjacent to southern wall of the east wing of Blundell's House. Mortared stones (Small Find Nos.1018 and 1019) within dumped deposit of stones in silty loam (103) are visible, looking east *[DSCN5692-5693]*

111-112 Northern part of Trench 1, following excavation of possible levelling deposit of small stones (105), showing dumped deposit of stones in silty loam (103) and mortar 'pad' (115) immediately adjacent to southern wall of the east wing of Blundell's House. Mortared stones (Small Find Nos.1018 and 1019) within dumped deposit of stones in silty loam (103) are visible, looking north *[DSCN5694-5695]*

113-114 Northern part of Trench 1, following excavation of possible levelling deposit of small stones (105), showing dumped deposit of stones in silty loam (103) and mortar 'pad' (115) immediately adjacent to southern wall of the east wing of Blundell's House. Mortared stones (Small Find Nos.1018 and 1019) within dumped deposit of stones in silty loam (103) are visible, looking west *[DSCN5696-5697]*

115-116 Trench 1, following excavation of the possible levelling deposit of small stones (105), showing dumped deposits of stones in silty loam (107 and 103) and mortared stone revetment (112), looking east from an elevated position *[DSCN5698-5699]*

117-119 Trench 1, following excavation of the possible levelling deposit of small stones (105), showing dumped deposits of stones in silty loam (107 and 103) and mortared stone revetment (112), looking west from an elevated position *[DSCN5700-5702]*

120-126 Trench 1, following excavation of the possible levelling deposit of small stones (105), showing dumped deposits of stones in silty loam (107 and 103) and mortared stone revetment (112), looking north from an elevated position *[DSCN5704-5710]*

127-128 Record shot of middle part of Trench 1, following excavation of dumped deposit of stones in silty loam (103), showing air voids within dumped deposit of stones (108), looking northeast *[DSCN5726-5727]*

129-131 Northern part of Trench 1, following excavation of possible levelling deposit of small stones (105), showing dumped deposit of stones in silty loam (103) immediately adjacent to the southern wall of the east wing of Blundell's House. Mortared stones (Small Find Nos.1018 and 1019) within dumped deposit of stones in silty loam (103) are labelled, looking west *[DSCN5728-5730]*

30th April 2009

132-133 Trench 1, following excavation of dumped deposit of stones in silty loam (103), showing dumped deposit of stones in silty loam (107), mortared stone revetment (112), dumped deposit of stones with air voids (108), natural subsoil (111) and exposures of bedrock, looking north *[DSCN5731-5732]*

134-137 Trench 1, following excavation of dumped deposit of stones in silty loam (103), showing dumped deposit of stones in silty loam (107), mortared stone revetment (112), dumped deposit of stones with air voids (108), natural subsoil (111) and exposures of bedrock, looking east *[DSCN5733-5736]*

138-141 Trench 1, following excavation of dumped deposit of stones in silty loam (103), showing dumped deposit of stones in silty loam (107), mortared stone revetment (112), dumped deposit of stones with air voids (108), natural subsoil (111) and exposures of bedrock, looking west *[DSCN5737-5740]*

142-143 Southern end of Trench 1, following excavation of dumped deposit of stones in silty loam (107), showing dumped deposit of small stones in a silty loam matrix (109), dumped deposit of stones with air voids (110) and mortared stone revetment (112), looking north *[DSCN5741-5742]*

144-145 Southern end of Trench 1, following excavation of dumped deposit of stones in silty loam (107), showing dumped deposit of small stones in a silty loam matrix (109), dumped deposit of stones with air voids (110) and mortared stone revetment (112), looking west *[DSCN5743-5744]*

146-147 Southern end of Trench 1, following excavation of dumped deposit of stones in silty loam (107), showing dumped deposit of small stones in a silty loam matrix (109), dumped deposit of stones with air voids (110) and mortared stone revetment (112), looking east *[DSCN5745-5746]*

148-149 Southern end of Trench 1, following excavation of dumped deposit of stones in silty loam (107), showing part of the dumped deposit of stones with air voids (110) underlying the mortared stone revetment (112), looking north *[DSCN5747-5748]*

150 Southern end of Trench 1, following excavation of dumped deposit of stones in silty loam (107), showing the voids within part of the dumped deposit of stones with air voids (110), looking north *[DSCN5749]*

151-156 Trench 1, following excavation of dumped deposit of stones in silty loam (103) and dumped deposit of stones in silty loam (107), showing dumped deposit of small stones in a silty loam matrix (109), dumped deposit of stones with air voids (110), mortared stone revetment (112), dumped deposit of stones with air voids (108), natural subsoil (111) and exposures of bedrock, looking north from an elevated position *[DSCN5750-5755]*

157 Trench 1, following excavation of dumped deposit of stones in silty loam (103) and dumped deposit of stones in silty loam (107), showing dumped deposit of small stones in a silty loam matrix (109), dumped deposit of stones with air voids (110), mortared stone revetment (112), dumped deposit of stones with air voids (108), natural subsoil (111) and exposures of bedrock, looking east from an elevated position *[DSCN5756]*

158-166 Trench 1, following excavation of dumped deposit of stones in silty loam (103) and dumped deposit of stones in silty loam (107), showing dumped deposit of small stones in a silty loam matrix (109), dumped deposit of stones with air voids (110), mortared stone revetment (112), dumped deposit of stones with air voids (108), natural subsoil (111) and exposures of bedrock, looking west from an elevated position *[DSCN5757-5765]*

7th May 2009

167-172 Trench 1, following excavation of dumped deposit of small stones in a silty loam matrix (109) and dumped deposit of stones with air voids (108), showing dumped deposit of stones with air voids (110), mortared stone revetment (112), mortar-rich, silty loam, buried soil horizon (113) and natural subsoil (111), looking west *[DSCN5768-5773]*

173-174 Trench 1, following excavation of dumped deposit of small stones in a silty loam matrix (109) and dumped deposit of stones with air voids (108), showing dumped deposit of stones with air voids (110), mortared stone revetment (112), mortar-rich, silty loam, buried soil horizon (113) and natural subsoil (111), looking north *[DSCN5774-5775]*

175-180 Trench 1, following excavation of dumped deposit of small stones in a silty loam matrix (109) and dumped deposit of stones with air voids (108), showing dumped deposit of stones with air voids (110), mortared stone revetment (112), mortar-rich, silty loam, buried soil horizon (113) and natural subsoil (111), looking east *[DSCN5776-5781]*

181-184 Trench 1, following excavation of dumped deposit of small stones in a silty loam matrix (109) and dumped deposit of stones with air voids (108), showing dumped deposit of stones with air voids (110), mortared stone

revetment (112), mortar-rich, silty loam, buried soil horizon (113) and natural subsoil (111), looking north from an elevated position *[DSCN5782-5785]*

185-187 Trench 1, following excavation of dumped deposit of small stones in a silty loam matrix (109) and dumped deposit of stones with air voids (108), showing dumped deposit of stones with air voids (110), mortared stone revetment (112), mortar-rich, silty loam, buried soil horizon (113) and natural subsoil (111), looking east from an elevated position *[DSCN5786-5788]*

188-194 Trench 1, following excavation of dumped deposit of small stones in a silty loam matrix (109) and dumped deposit of stones with air voids (108), showing dumped deposit of stones with air voids (110), mortared stone revetment (112), mortar-rich, silty loam, buried soil horizon (113) and natural subsoil (111), looking west from an elevated position *[DSCN5789-5795]*

195-196 Trench 1, following excavation of dumped deposit of stones with air voids (108), showing northern face of mortared stone revetment (112) with mortar-rich, silty loam, buried soil horizon (113) in foreground, looking south *[DSCN5796-5797]*

197 Trench 1, following excavation of dumped deposit of stones with air voids (108), showing northern face of mortared stone revetment (112) with mortar-rich, silty loam, buried soil horizon (113) in foreground and dumped deposit of stones with air voids (110) in background, looking south *[DSCN5798]*

198-199 Part of west-facing section of Trench 1, following excavation of dumped deposit of stones with air voids (108), showing (in section) dumped deposits of stones in silty soil matrix (103) and with air voids (108) butting up against northern face of mortared stone revetment (112), looking west *[DSCN5799-5800]*

200-201 Part of Trench 1 showing mortared stone revetment (112) extending beyond eastern edge of excavation, looking east *[DSCN5801-5802]*

11th May 2009

202-204 Trench 1, north-facing side of mortared stone revetment (112), showing foundation course (118) and mortar-rich, silty loam, buried soil horizon (113) in north-facing arbitrary edge of excavation, following partial excavation of the buried soil horizon (113), looking south *[DSCN5813-5815]*

205-206 Part of east-facing section of Trench 1, following partial excavation of mortar-rich, silty loam, buried soil horizon (113), showing mortared stone revetment (112) and humic topsoil (101), stone-rich humic silty clay loam (102), dumped deposits of stones in silty soil matrix (103) and with air voids (108), and mortar-rich, silty loam, buried soil horizon (113), looking west *[DSCN5816 - DSCN5817]*

207-208 Part of east-facing section of Trench 1, following partial excavation of mortar-rich, silty loam, buried soil horizon (113), showing mortared stone revetment (112) and humic topsoil (101), stone-rich humic silty clay loam (102), dumped deposits of stones in silty soil matrix (103) and with air voids (108), and the mortar-rich, silty loam, buried soil horizon (113), looking east *[DSCN5818 - DSCN5819]*

209-211 Southern end of Trench 1, following partial excavation of dumped deposit of stones with air voids (110), showing the dumped deposit of stones with air voids (110) butting up against the mortared stone revetment (112) and the mortar-rich, silty loam, buried soil horizon (117) exposed in the base of the trench, looking north *[DSCN5820 - DSCN5822]*

212-213 Southern end of Trench 1, following partial excavation of dumped deposit of stones with air voids (110), showing the dumped deposit of stones with air voids (110) butting up against the mortared stone revetment (112) and the mortar-rich, silty loam, buried soil horizon (117) exposed in the base of the trench, looking west *[DSCN5823 - DSCN5824]*

214-215 Southern end of Trench 1, following partial excavation of dumped deposit of stones with air voids (110), showing the dumped deposit of stones with air voids (110) butting up against the mortared stone revetment (112) and the

mortar-rich, silty loam, buried soil horizon (117) exposed in the base of the trench, looking east *[DSCN5825 - DSCN5826]*

13th May 2009

216-219 East-facing section of southern end of Trench 1, following excavation of dumped deposit of stones with air voids (110) and mortar-rich, silty loam, buried soil horizon (117), showing in section topsoil (101), redeposited layer of silty clay loam and clay (104), dumped deposits of stones in a silty soil matrix (107) and with air voids (110) and mortar-rich, silty loam, buried soil horizon (117) with mortared stone revetment (112), exposed bedrock and sterile subsoil (119) in foreground, looking west *[DSCN5827 – DSCN5830]*

220-222 West-facing section of southern end of Trench 1, following excavation of dumped deposit of stones with air voids (110) and mortar-rich, silty loam, buried soil horizon (117), showing in section topsoil (101), redeposited layer of silty clay loam and clay (104), dumped deposits of stones in a silty soil matrix (107) and with air voids (110), dumped deposit of small stones in a silty loam matrix (109) and mortar-rich, silty loam, buried soil horizon (117) with mortared stone revetment (112), exposed bedrock and sterile subsoil (119) in foreground, looking east *[DSCN5831 – DSCN5833]*

223-234 Southern end of Trench 1, following excavation of dumped deposit of stones with air voids (110) and mortar-rich, silty loam, buried soil horizon (117), showing south-facing side of the mortared stone revetment (112) with exposed bedrock and sterile subsoil (119) in foreground, looking north *[DSCN5834 – DSCN5845]*

235 East-facing section of southern end of Trench 1, following excavation of dumped deposit of stones with air voids (110) and mortar-rich, silty loam, buried soil horizon (117), showing in section topsoil (101), redeposited layer of silty clay loam and clay (104), dumped deposits of stones in a silty soil matrix (107) and with air voids (110) and mortar-rich, silty loam, buried soil horizon (117) with mortared stone revetment (112), exposed bedrock and sterile subsoil (119) in foreground, looking west *[DSCN5846]*

236 West-facing section of southern end of Trench 1, following excavation of dumped deposit of stones with air voids (110) and mortar-rich, silty loam, buried soil horizon (117), showing in section topsoil (101), redeposited layer of silty clay loam and clay (104), dumped deposits of stones in a silty soil matrix (107) and with air voids (110), dumped deposit of small stones in a silty loam matrix (109) and mortar-rich, silty loam, buried soil horizon (117) with mortared stone revetment (112), exposed bedrock and sterile subsoil (119) in foreground, looking east *[DSCN5847]*

20th May 2009

237-238 Trench 1, following completion of excavation, looking north *[DSCN5848-5849]*

239-244 West-facing section of Trench 1, following completion of excavation, looking east *[DSCN5850-5855]*

245-250 East-facing section of Trench 1, following completion of excavation, looking west *[DSCN5856-5861]*

251-252 Trench 1, following completion of excavation, looking south *[DSCN5862-5863]*

253-260 Trench 1, following completion of excavation, looking west from an elevated position *[DSCN5864-5871]*

253-254 Trench 1, following completion of excavation, looking east from an elevated position *[DSCN5872-5873]*

255-271 Trench 1, following completion of excavation, looking north from an elevated position *[DSCN5874-5890]*

272-274 Trench 1, following completion of excavation, showing mortared stone revetment (112), its underlying foundation deposit (118) and the underlying mortar-rich, silty loam, buried soil horizon (113), looking south *[DSCN5891-5893]*

275 Trench 1, following completion of excavation, showing mortared stone revetment (112), its underlying foundation deposit (118) and the underlying mortar-rich, silty loam, buried soil horizon (113), looking southeast *[DSCN5894]*

276-277 Trench 1, following completion of excavation, showing mortared stone revetment (112), its underlying foundation deposit (118) and the underlying mortar-rich, silty loam, buried soil horizon (113), looking south *[DSCN5895-5896]*

Trench 2

26th May 2009

278-279 North wall of the east wing of Blundell's House prior to laying out of Trench 2 *[DSCN5897-5898]*
280 Trench 2, prior to excavation, looking north *[DSCN5899]*
281 Trench 2, prior to excavation, looking east *[DCSN5900]*
282-284 Trench 2, prior to excavation, looking west *[DSCN5901-5903]*
285 Trench 2, prior to excavation, showing looking north wall of the east wing of Blundell's House *[DSCN5904]*
286-287 Trench 2, prior to excavation, looking east *[DCSN5905-5906]*
288-294 Trench 2, prior to excavation, looking north from an elevated position *[DSCN5907-5912, DSCN5914]*
295-296 Trench 2, following excavation of fine gravel with humic soil (201), showing clay capping (202) and aggregate levelling deposit (203), looking north *[DSCN5915-5916]*
297 Trench 2, following excavation of fine gravel with humic soil (201), showing clay capping (202) and aggregate levelling deposit (203), looking east *[DSCN5917]*
298-299 Trench 2, following excavation of fine gravel with humic soil (201), showing clay capping (202) and aggregate levelling deposit (203), looking west *[DSCN5918-5919]*
300-301 Trench 2, following excavation of clay capping (202), showing aggregate levelling deposit (203), looking north *[DSCN5921-5922]*
302 Trench 2, following excavation of clay capping (202), showing aggregate levelling deposit (203), looking east *[DSCN5923]*
303 Trench 2, following excavation of clay capping (202), showing aggregate levelling deposit (203), looking west *[DSCN5924]*
304-305 Trench 2, following excavation of aggregate levelling deposit (203), showing horizontal discontinuity (208), north-south aligned drain (204/205), mortar-rich clay loam (206) and mixed clay loam (207), looking north *[DSCN5926-5927]*
306 Trench 2, following excavation of aggregate levelling deposit (203), showing horizontal discontinuity (208), north-south aligned drain (204/205), mortar-rich clay loam (206) and mixed clay loam (207), looking east *[DSCN5928]*
307-308 Trench 2, following excavation of aggregate levelling deposit (203), showing horizontal discontinuity (208), north-south aligned drain (204/205), mortar-rich clay loam (206) and mixed clay loam (207), looking west *[DSCN5929-5930]*
309-310 Trench 2, north-south aligned drain (204/205) prior to excavation, revealed by removal of aggregate levelling deposit (203), viewed vertically (with north to top of frame) *[DSCN5931-5932]*

27th May 2009

311-312 Trench 2, north-south aligned drain (204/205) following excavation, viewed vertically (with north to top of frame) *[DSCN5952-5953]*
313-315 Trench 2, north-south aligned drain (204/205) following excavation, looking south *[DSCN5954-5956]*
316-325 Trench 2, following excavation of north-south aligned drain (204/205), showing horizontal discontinuity (208), north-south aligned drain cut (204), mortar-rich clay loam (206) and mixed clay loam (207), looking north from an elevated position *[DSCN5957-5966]*

326-327 Trench 2, following excavation of north-south aligned drain (204/205), showing horizontal discontinuity (208), north-south aligned drain cut (204), mortar-rich clay loam (206) and mixed clay loam (207), looking east *[DSCN5967-5968]*

328 Trench 2, following excavation of north-south aligned drain (204/205), showing horizontal discontinuity (208), north-south aligned drain cut (204), mortar-rich clay loam (206) and mixed clay loam (207), looking north *[DSCN5969]*

329-330 Trench 2, following excavation of north-south aligned drain (204/205), showing horizontal discontinuity (208), north-south aligned drain cut (204), mortar-rich clay loam (206) and mixed clay loam (207), looking west *[DSCN5971-5972]*

29th May 2009

331-332 Trench 2, following excavation of mortar-rich clay loam (206), showing mixed clay loam (207), looking north *[DSCN5984-5985]*

331 Trench 2, following excavation of mortar-rich clay loam (206), showing mixed clay loam (207), looking east *[DSCN5986]*

332-335 Trench 2, following excavation of mortar-rich clay loam (206), showing mixed clay loam (207), looking west *[DSCN5987-5990]*

336-342 Trench 2, following excavation of mortar-rich clay loam (206), showing mixed clay loam (207), looking north from an elevated position *[DSCN5991-5997]*

3rd June 2009

343-344 Trench 2, following completion of excavation, showing the surface of the rock-cut terrace (212), looking north *[DSCN6027-6028]*

345-346 Trench 2, following completion of excavation, showing the surface of the rock-cut terrace (212),looking east *[DSCN6029-6030]*

347-349 Trench 2, following completion of excavation, showing the surface of the rock-cut terrace (212),looking north from an elevated position *[DSCN6031-6033]*

350-355 South-facing edge of Trench 2, following completion of excavation, showing the base of the north wall of the east wing of Blundell's House (209) and disturbed clay loam (211) and part of the rock-cut terrace (212), looking north *[DSCN6034-6039]*

356-359 East-facing section of Trench 2 following completion of excavation showing fine gravel with humic soil (201), clay capping (202), aggregate levelling deposit (203), mortar-rich clay loam (206), mixed clay loam (207) part of the rock-cut terrace (212), looking west *[DSCN6040-6043]*

360-363 West-facing section of Trench 2 following completion of excavation showing fine gravel with humic soil (201), clay capping (202), aggregate levelling deposit (203), mortar-rich clay loam (206), mixed clay loam (207) part of the rock-cut terrace (212), looking east *[DSCN6044-6047]*

Trench 3

3rd June 2009

364 Trench 3, prior to excavation, looking north *[DSCN5998]*

365 Trench 3, prior to excavation, looking east *[DSCN5999]*

366 Trench 3, prior to excavation, looking west *[DSCN6000]*

367 Trench 3, prior to excavation, looking north with the previously excavated Trench 2 in the background *[DSCN6001]*

368 Trench 3, prior to excavation, looking north *[DSCN6004]*

369 Trench 3, prior to excavation, looking east *[DSCN6005]*

370 Trench 3, prior to excavation, looking west *[DSCN6006]*

371-373 Trench 3, prior to excavation, looking north from an elevated position *[DSCN6007-6009]*

374 Trench 3, following the excavation of fine gravel with humic soil (301), showing light greyish brown clay mixed with aggregate of small stones, looking north *[DSCN6010]*

375 Trench 3, following the excavation of fine gravel with humic soil (301), showing light greyish brown clay mixed with aggregate of small stones, looking east *[DSCN6011]*

376 Trench 3, following the excavation of fine gravel with humic soil (301), showing light greyish brown clay mixed with aggregate of small stones, looking west *[DSCN6012]*

377 Trench 3, following the excavation of fine gravel with humic soil (301), showing light greyish brown clay mixed with aggregate of small stones, looking east *[DSCN6013]*

378-379 Trench 3, following the excavation of fine gravel with humic soil (301), showing light greyish brown clay mixed with aggregate of small stones, looking north from an elevated position *[DSCN6014-6015]*

380-381 Trench 3, following the excavation of aggregate levelling deposit (303), showing drains (304/305 and 306/307) cut into horizontal discontinuity (312) and silty loam deposits (313a and 309), looking north *[DSCN6016-6017]*

382 Trench 3, following the excavation of aggregate levelling deposit (303), showing drains (304/305 and 306/307) cut into horizontal discontinuity (312) and silty loam deposits (313a and 309), looking east *[DSCN6018]*

383 Trench 3, following the excavation of aggregate levelling deposit (303), showing drains (304/305 and 306/307) cut into horizontal discontinuity (312) and silty loam deposits (313a and 309), looking west *[DSCN6019]*

384-385 Trench 3, following the excavation of aggregate levelling deposit (303), showing drains (304/305 and 306/307) cut into horizontal discontinuity (312) and silty loam deposits (313a and 309), looking north from an elevated position *[DSCN6020-6021]*

386-390 Trench 3, following the excavation of aggregate levelling deposit (303), showing drains (304/305 and 306/307) cut into horizontal discontinuity (312) and silty loam deposits (313a and 309), looking east from an elevated position *[DSCN6022-6026]*

4th June 2009

391 Trench 3, following excavation of drains (304/305 and 306/307) cut into horizontal discontinuity (312) and showing silty loam deposits (313a and 309), looking north *[DSCN6048]*

392-394 Trench 3, following excavation of drains (304/305 and 306/307) cut into horizontal discontinuity (312) and showing silty loam deposits (313a and 309), looking west *[DSCN6049-6051]*

395-398 Trench 3, following excavation of drains (304/305 and 306/307) cut into horizontal discontinuity (312) and showing silty loam deposits (313a and 309), looking north from an elevated position *[DSCN6052-6055]*

399-403 Trench 3, following excavation of drains (304/305 and 306/307) cut into horizontal discontinuity (312) and showing silty loam deposits (313a and 309), looking west from an elevated position *[DSCN6056-6060]*

404 Trench 3, following excavation of drains (304/305 and 306/307) cut into horizontal discontinuity (312) and showing silty loam deposits (313a and 309), looking north *[DSCN6061]*

405 Trench 3, following excavation of drains (304/305 and 306/307) cut into horizontal discontinuity (312) and showing silty loam deposits (313a and 309), looking east *[DSCN6062]*

406 Trench 3, following excavation of drains (304/305 and 306/307) cut into horizontal discontinuity (312) and showing silty loam deposits (313a and 309), looking west *[DSCN6063]*

407-409 Trench 3, following excavation of drains (304/305 and 306/307) cut into horizontal discontinuity (312) and showing silty loam deposits (313a and 309), looking west from an elevated position *[DSCN6064-6066]*

5th June 2009

410-411 Trench 3, following the excavation of mixed clay loam (311), showing surface of clay loam with heat-modified clay and charcoal inclusions (313b) and in the southern part of the trench the surface (319) of the mortar-flecked silty loam (314) [out of phase], looking north *[DSCN6067-6068]*

412 Trench 3, following the excavation of mixed clay loam (311), showing surface of clay loam with heat-modified clay and charcoal inclusions (313b) and in the southern part of the trench the surface (319) of the mortar-flecked silty loam (314) [out of phase], looking east *[DSCN6069]*

413 Trench 3, following the excavation of mixed clay loam (311), showing surface of clay loam with heat-modified clay and charcoal inclusions (313b) and in the southern part of the trench the surface (319) of the mortar-flecked silty loam (314) [out of phase], looking west *[DSCN6070]*

414-419 Trench 3, following the excavation of mixed clay loam (311), showing surface of clay loam with heat-modified clay and charcoal inclusions (313b) and in the southern part of the trench the surface (319) of the mortar-flecked silty loam (314) [out of phase], looking north from an elevated position *[DSCN6071-6076]*

420-421 Trench 3, following the excavation of clay loam with heat-modified clay and charcoal inclusions (313b), showing cut edge of fire pit (315), medium brown clay loam (316) and in the southern part of the trench the surface (319) of the mortar-flecked silty loam (314) [out of phase], looking north *[DSCN6077-6078]*

422 Trench 3, following the excavation of clay loam with heat-modified clay and charcoal inclusions (313b), showing cut edge of fire pit (315), medium brown clay loam (316) and in the southern part of the trench the surface (319) of the mortar-flecked silty loam (314) [out of phase], looking east *[DSCN6079]*

423 Trench 3, following the excavation of clay loam with heat-modified clay and charcoal inclusions (313b), showing cut edge of fire pit (315), medium brown clay loam (316) and in the southern part of the trench the surface (319) of the mortar-flecked silty loam (314) [out of phase], looking west *[DSCN6080]*

424-426 Trench 3, following the excavation of clay loam with heat-modified clay and charcoal inclusions (313b), showing cut edge of fire pit (315), medium brown clay loam (316) and in the southern part of the trench the surface (319) of the mortar-flecked silty loam (314) [out of phase], looking north from an elevated position *[DSCN6081-6083]*

427-428 Trench 3, following the excavation of medium brown clay loam (316), showing horizontal discontinuity associated with removal of the basement's floor (319) and the mortar-flecked silty loam (314), looking north *[DSCN6084-6085]*

429-430 Trench 3, following the excavation of medium brown clay loam (316), showing horizontal discontinuity associated with removal of the basement's floor (319) and the mortar-flecked silty loam (314), looking east *[DSCN6086-6087]*

431-430 Trench 3, following the excavation of medium brown clay loam (316), showing horizontal discontinuity associated with removal of the basement's floor (319) and the mortar-flecked silty loam (314), looking west *[DSCN6088-6089]*

431-432 Trench 3, following the excavation of medium brown clay loam (316), showing horizontal discontinuity associated with removal of the basement's floor (319) and the mortar-flecked silty loam (314), looking north from an elevated position *[DSCN6090-6091]*

433-432 Trench 3, following the excavation of medium brown clay loam (316), showing horizontal discontinuity associated with removal of the basement's floor (319) and the mortar-flecked silty loam (314), looking west from an elevated position *[DSCN6092-6097]*

9th June 2009

433-434	Trench 3, following completion of excavation, showing the surface of the natural subsoil and rock-cut terrace (317), looking north *[DSCN6098-6099]*
435	Trench 3, following completion of excavation, showing the surface of the natural subsoil and rock-cut terrace (317), looking east *[DSCN6100]*
436	Trench 3, following completion of excavation, showing the surface of the natural subsoil and rock-cut terrace (317), looking west *[DSCN6100]*
437-439	Trench 3, following completion of excavation, showing the surface of the natural subsoil and rock-cut terrace (317), looking north from an elevated position *[DSCN6101-6103]*

Appendix 4: Field Drawing Register

Drawing No.	*Scale*	*Type*	*Description*
1	1:20	Plan	Plan of Trench 1 following excavation of humic topsoil (101), showing stone-rich, humic silty clay loams (102 and 106), redeposited layer of silty clay loam and clay (104), dumped deposits of medium-sized stones in silty loam (103 and 105) and mortared stone revetment (112).
2	1:100	Plan	Plan of Blundell's House and its immediate environs showing the position of Trenches 1, 2 and 3.
3	1:20	Plan	Plan of Trench 1 following excavation of stone-rich, humic silty clay loams (102 and 106) and redeposited layer of silty clay loam and clay (104), showing dumped deposits of medium-sized stones in silty loam (103 and 105) and mortared stone revetment (112).
4	1:20	Plan	Plan of Trench 1 following excavation of dumped deposit of small-sized stones in silty loam soil matrix (109) and dumped deposit of medium-sized stones with air voids (108), showing dumped deposit of medium-sized stones with air voids (110), mortared stone revetment (112), mortar-rich buried soil horizon (113) and natural subsoil (111).
5	1:20	Plan	Plan of southern end of Trench 1, following partial excavation of dumped deposit of medium-sized stones with air voids (110) and the mortar-rich buried soil horizon (113), showing mortar-rich buried soil horizon (117) and natural subsoil (111) [overlay of Drawing No.4].
6	1:10	Elevation	Elevation of that part of the southern wall of the east wing of Blundell's House as exposed in the south-facing section of Trench 1.
7	1:20	Plan	Final plan of Trench 1 following excavation of dumped deposit of medium-sized stones with air voids (110), mortar-rich buried soil horizon (117) and partial excavation of the natural subsoil (120).
8	1:10	Section	East-facing section of Trench 1.
9	1:20	Plan	Plan of Trench 2 following the excavation of the levelling deposit of aggregate (203) showing modern drain (205) cut into truncated surface (208) of mortar-rich clay loam (206) and mixed clay loam (207).
10	1:20	Plan	Plan of Trench 2 following the excavation of the modern drain (205) cut into truncated surface (208) of mortar-rich clay loam (206) and mixed clay loam (207).
11	1:20	Plan	Plan of Trench 2 showing surface of rock-cut terrace (212).
12	1:10	Elevation	Elevation of part of the north wall of the east wing of Blundell's House (incorporating the south-facing section of Trench 2).

13	1:10	Section	East-facing section of Trench 2.
14	1:20	Plan	Plan of Trench 3 following excavation of aggregate levelling deposit (303) showing modern drains (304 and 306) and mortar-rich silty loam (308) and dark brown silty loam (309).
15	1:20	Plan	Plan of Trench 3 following excavation of modern drains (304 and 306), showing surface of horizontal discontinuity (312) and mortar-rich silty loam (308 and 310), dark brown silty loam (309 and 313a) and clay loam (311).
16	1:20	Plan	Plan of Trench 3 following the excavation of clay loam with heat-modified clay and charcoal inclusions (313b) showing the fire pit (315) cut into layer of clay loam (316) and [out of phase] mortar-flecked silty loam (314).
17	1:10	Section	West-facing section of Trench 3.
18	1:20	Plan	Plan of Trench 3 showing surface of rock-cut terrace upon which the east wing of Blundell's House was built (317), the truncated natural subsoil (318) and exposed bedrock.

Appendix 5: Small Finds Register

Small Find No.	*Description*	*Context No.*
1001	Pottery sherd	101
1002	Copper alloy cartridge case	101
1003	Iron nail (rectangular-sectioned)	101
1004	Iron nail (circular-sectioned)	101
1005	Clay pipe stem (fragment)	101
1006	Possible fragment of 'slate' (roofing material?) (not retained)	106
1007	Iron nail (rectangular-sectioned)	106
1008	Iron tapering bar fragment (rectangular-sectioned) (nail shank?)	106
1009	Iron nail (rectangular-sectioned)	102
1010	Copper alloy cartridge case	102
1011	Bone/horn/wood/acrylic four-holed button	102
1012	Possible fragment of 'slate' (roofing material?) (not retained)	102
1013	Possible fragment of 'slate' (roofing material?) (not retained)	102
1014	Slate pencil / graphite rod ? (with incomplete copper alloy terminal)	104
1015	Iron rod fragment (circular-sectioned)	104
1016	Iron bar fragment (rectangular-sectioned) (nail shank?)	104
1017	Iron bar fragment (rectangular-sectioned)	104
1018	Mortared stone	105
1019	Mortared stone	105
1020	Perforated stone (roofing material?)	103
1021	Perforated stone (roofing material?)	103
1022	Pottery sherd	103
1023	Fragment of frosted glass	107
1024	Pottery sherd	108
1025	Large brick fragment (diagnostic)	108
1026	Pottery sherd (blackware)	108
1027	Pottery sherd (blackware)	103
1028	Pottery sherd	103
1029	Perforated stone (roofing material)	108
1030	Perforated stone (roofing material)	108
1031	Perforated stone (roofing material; mortar adhering)	107
1032	Perforated stone (roofing material)	107
1033	Perforated stone (roofing material)	107
1034	Perforated stone (roofing material)	107
1035	Perforated stone (roofing material; mortar adhering and ferrous corrosion in perforation)	107
1036	Iron rod fragment (circular-sectioned)	113
1037	Unperforated stone (possible roofing material)	108
1038	Brick	108
1039	Exotic stone	110
1040	Perforated stone (roofing material; mortared edge)	110
1041	Perforated stone (roofing material; mortar adhering)	110
1042	Perforated stone (roofing material)	110
1043	Perforated stone (roofing material)	110

Small Find No.	***Description***	***Context No.***
1044	Perforated stone (roofing material)	110
1045	Perforated stone (roofing material)	110
1046	Perforated stone (roofing material; mortar adhering)	110
1047	Unperforated stone (roofing material; mortared edge)	110
1048	Unperforated stone (roofing material; mortared edge)	110
1049	Perforated stone (roofing material; mortar adhering)	110
1050	Perforated stone (roofing material; mortar adhering)	110
1051	Perforated stone (roofing material; mortar adhering)	110
1052	Perforated stone (roofing material; mortar adhering)	110
1053	Perforated stone (roofing material; mortar adhering)	110
1054	Large perforated stone (possible roofing material?)	110
1055	Perforated stone (roofing material; mortared edge)	110
1056	Perforated stone (roofing material)	110
1057	Possible fragment of 'slate' (roofing material?) (not retained)	110
1058	Ferrous hearth cake	117
1059	Iron rod fragment (circular-sectioned)	Unstratified (Trench 1)
1060	Perforated stone (roofing material)	Unstratified (Trench 1)
1061	Perforated stone (possible roofing material)	Unstratified (Trench 1)
1062	Perforated stone (roofing material; mortar adhering)	Unstratified (Trench 1)
1063	Perforated stone (possible roofing material)	Unstratified (Trench 1)
1064	Perforated stone (roofing material; mortar adhering)	Unstratified (Trench 1)
1065	Perforated stone (roofing material; mortar adhering)	Unstratified (Trench 1)
1066	Perforated stone (roofing material; mortar adhering)	Unstratified (Trench 1)
1067	Perforated stone (roofing material)	Unstratified (Trench 1)
1068	Perforated stone (roofing material)	Unstratified (Trench 1)
1069	Perforated stone (roofing material)	Unstratified (Trench 1)
1070	Perforated stone (roofing material; mortar adhering)	Unstratified (Trench 1)
1071	Perforated stone (roofing material)	Unstratified (Trench 1)
1072	Perforated stone (roofing material)	Unstratified (Trench 1)
1073	Possible dressed stone fragment (mortar adhering)	Unstratified (Trench 1)
1074	Perforated stone (roofing material)	Unstratified (Trench 1)
1075	Perforated stone (roofing material)	Unstratified (Trench 1)
1076	Perforated stone (roofing material; mortar adhering)	Unstratified (Trench 1)
1077	Perforated stone (roofing material)	Unstratified (Trench 1)
1078	Perforated stone (roofing material; mortared edge)	Unstratified (Trench 1)
1079	Slag fragment	203
1080	White metal (tin?) foil	206
1081	White metal (tin?) foil	206
1082	Pot sherd	206
1083	Pot sherd	206
1084	Pot sherd	206
1085	Pot sherd (handle)	206
1086	Worked animal bone off-cut	206
1087	Pot sherd	207
1088	Iron / copper alloy composite plate fragment	207

Small Find No.	***Description***	***Context No.***
1089	Iron plate fragment (several fragments: possibly more than one artefact)	207
1090	Iron flanged fragment	207
1091	Pot sherd	207
1092	Pot sherd	207
1093	Pot sherd	207
1094	Perforated stone (roofing material?)	207
1095	Clay pipe stem	207
1096	Clay pipe stem	207
1097	Clay pipe bowl	207
1098	White metal (tin?) foil	207
1099	White metal (tin?) foil	207
1100	Copper alloy shotgun cartridge base	207
1101	Copper alloy shotgun cartridge base	207
1102	Possible sawn animal bone	207
1103	Possible worked animal bone	207
1104	Coin (*see Appendix Six for full report*)	207
1105	Copper alloy cartridge case	207
1106	Modern button	207
1107	Plastic sheet	207
1108	Ceramic baking ball / bottle stopper	207
1109	Pot sherd	207
1110	Pot sherd	207
1111	Pot sherd	207
1112	Pot sherd	207
1113	Pot sherd (handle)	207
1114	Iron spiked hook	207
1115	Cast iron plate fragment	207
1116	Iron nail (circular-sectioned)	207
1117	Iron nail (circular-sectioned)	207
1118	Iron nail (circular-sectioned)	207
1119	Iron nail (rectangular-sectioned)	207
1120	Iron nail (circular-sectioned)	207
1121	Iron nail (oval-sectioned)	207
1122	Iron nail (circular-sectioned)	207
1123	Iron nail (circular-sectioned)	207
1124	Iron nail (circular-sectioned)	207
1125	Iron nail (circular-sectioned)	207
1126	Iron nail (circular-sectioned)	207
1127	Iron rectangular-sectioned tapering bar fragment (nail shank?)	207
1128	Iron binding fragment	207
1129	Iron nail (rectangular-sectioned)	207
1130	Iron can / cylinder base	207
1131	Iron plate fragment	207
1132	Ferrous corrosion blister?	207
1133	Iron plate fragment	207

Small Find No.	***Description***	***Context No.***
1134	White metal (tin?) foil	207
1135	White metal (tin?) foil (three fragments)	207
1136	Iron nail (circular-sectioned)	207
1137	Brick fragment	211
1138	Brick fragment	211
1139	Glass fragment	211
1140	Brick fragment	211
1141	Mortar/plaster fragment	211
1142	Clay pipe bowl	307
1143	White metal (tin?) foil	307
1144	Pot sherd	307
1145	Pot sherd	307
1146	Pot sherd	308
1147	White metal (tin?) foil	308
1148	Pot sherd	309
1149	Iron nail (circular-sectioned)	311
1150	Pot sherd	311
1151	Pot sherd	311
1152	Pot sherd	311
1153	Iron nail (rectangular-sectioned)	313
1154	Pot sherd	313
1155	Pot sherd	313
1156	White metal (tin?) foil	313
1157	Iron strip fragment	316
1158	Pot sherd	316
1159	Pot sherd	316
1160	Pot sherd	314
1161	Pot sherd	314
1162	Pot sherd	314
1163	Pot sherd	314
1164	Pot sherd	314
1165	Pot sherd	314
1166	Pot sherd	314
1167	Pot sherd	314
1168	White metal (tin?) foil	211
1169	White metal (tin?) foil	211
1170	Perforated stone (roofing material)	Unstratified (Trench 1)
1171	Perforated stone (roofing material; possibly slate)	Unstratified (Trench 1)
1172	Perforated stone (roofing material; mortar adhering)	Unstratified (Trench 1)
1173	Perforated stone (roofing material; mortar adhering)	Unstratified (Trench 1)
1174	Perforated stone (roofing material)	Unstratified (Trench 1)
1175	Unperforated stone (roofing material; mortared edge)	110
1176	Unperforated stone (roofing material; mortared edge)	110
1177	Possibly perforated stone (roofing material; mortared edge)	110
1178	Perforated stone (roofing material; traces of mortared edge)	110

1179	Unperforated stone (roofing material; mortared edge)	110
1180	Possibly perforated stone (roofing material; mortared edge)	110
1181	Iron plate fragment	313
1182	Pot sherd	316

Appendix 6: Numismatic Report

1. Sixpence of Queen Victoria (old head issue) 1893-1901. Very worn. 2.47g. [C207; SF1104]

The sixpence continued in use after decimalisation (valued at 2.5 new pence), but was eventually demonetised in 1980. Given the coin's very worn condition, it could have remained in circulation well into the twentieth century.

Appendix 7: Catalogue of Roofing 'Slates'

1. **Small Find No.** 1020.
Context No. 103.
Description: The 'slate' has a single marked shoulder suggesting it may have been used adjacent to the edge of a hipped roof. Although incomplete the tail has a rounded edge suggesting it is an example of the so-called fish-scale type. Although in the absence of any distinctive mortar or a completely intact fixing hole, it is not possible to identify the bed and back of the 'slate', one surface of the 'slate' is markedly smoother than the other. This smooth surface bears several shallow, incised lines; no obvious pattern or design is observable.

Shape: Rectangular with single, marked shoulder
Completeness: Near complete
Weight: 370g

Fixing Hole Shape: Sub-rectangular (dimensions 5mm x 4mm).
Fixing Hole Comments: Both surfaces too damaged to comment.

Mortar: No mortar adhering.

Dimensions:
Overall length: 197mm (min)
Effective length: 180mm
Exposed length / margin: N/A

Length of unmortared overlap: N/A
Distance of hole below the head: 17mm (min)

Width of head: incomplete
Width of shoulders: 89mm
Width of tail: incomplete
Maximum width: 93mm
Original maximum breadth: 93mm

Thickness of head: 14mm
Thickness of tail: 12mm
Maximum thickness: 14mm

Other Comments: Not thinned towards head on bed face (batter). Worth illustrating as possible evidence for a hipped roof.

2. **Small Find No.** 1021
Context No. 103
Description: No marked shoulders, the fixing hole is located towards one corner of the 'slate's' head. The apparently intact head and tail corners are both slightly trimmed, otherwise the 'slate' is rectangular in shape.

Shape: Probably rectangular
Completeness: Incomplete
Weight: 140g

Fixing Hole Shape: circular (diameter 7mm)
Fixing Hole Comments: Significantly spalled on one side (back?), apparently neatly rebated or slightly spalled on the other.

Mortar: No mortar adhering

Dimensions:
Overall length: 109mm
*Effective length:*79mm
Exposed length / margin: N/A

Length of unmortared overlap: N/A
Distance of hole below the head: 30mm

Width of head: 53mm (min)
Width of shoulders: N/A
Width of tail: 80mm (min)
Maximum width: 92mm

Original maximum breadth: N/A

Thickness of head: 8mm
Thickness of tail: 8mm
Maximum thickness: 9mm

Other Comments Not obviously thinned towards head on bed face (batter).

3. Small Find No. 1029
Context No. 108
Description: Incomplete, however, the head was apparently straight.

Shape: uncertain-incomplete
Completeness: incomplete
Weight: 125g

Fixing Hole Shape: circular (diameter 5mm)
Fixing Hole Comments: spalled on one side (back?), apparently neatly rebated or slightly spalled on the other.

Mortar: No mortar adhering

Dimensions:
Overall length: 80mm (min)
Effective length: 55mm (min)
Exposed length / margin: N/A

Length of unmortared overlap: N/A
Distance of hole below the head: 25mm

Width of head: 108mm (min)
Width of shoulders: N/A
Width of tail: N/A
Maximum width: 108mm (min)
Original maximum breadth: N/A

Thickness of head: 9mm
Thickness of tail: N/A
Maximum thickness: 9mm

Other Comments Not thinned towards head on bed face (batter).

4. Small Find No. 1030
Context No. 108
Description: Small fragment.

Shape: uncertain-incomplete
Completeness: incomplete
Weight:

Fixing Hole Shape: circular (diameter 8mm)
Fixing Hole Comments: slightly spalled on both sides

Mortar: No mortar adhering

Dimensions:
Overall length: 74mm (min)
Effective length: 42mm (min)
Exposed length / margin: N/A

Length of unmortared overlap: N/A
Distance of hole below the head: 32mm

Width of head: 25mm (min)
Width of shoulders: N/A
Width of tail: N/A
Maximum width: 50mm (min)
Original maximum breadth: N/A

Thickness of head: 7mm
Thickness of tail: N/A
Maximum thickness: 7mm

Other Comments No evidence fragment was thinned towards head on bed face (batter).

5. Small Find No. 1031
Context No. 107
Description: Incomplete fragment showing evidence of a shoulder on at least one side (too incomplete to be definitive about the other side).

Shape: uncertain-incomplete
Completeness: incomplete
Weight: 175g

Fixing Hole Shape: Sub-rectangular (dimensions 6mm x 6mm)
Fixing Hole Comments: both surfaces too damaged to comment

Mortar:
A few traces of lime mortar adhere to one surface (bed?) close to the fixing hole (maximum distance 79mm). These might represent evidence for the rendering (torching) of the roof after it had been laid.

Dimensions:
Overall length: 90mm (min)
Effective length: 69mm (min)
Exposed length / margin: N/A

Length of unmortared overlap :N/A
Distance of hole below the head: 21mm (min)

Width of head: N/A
Width of shoulders: 118mm
Width of tail: N/A
Maximum width: 124mm
Original maximum breadth: N/A

Thickness of head: 8mm
Thickness of tail: N/A
Maximum thickness: 9mm

Other Comments No obvious evidence that 'slate' was thinned towards head on bed face (batter).

6. Small Find No. 1032
Context No. 107
Description: No evidence to suggest that the 'slate' had shoulders.

Shape: apparently rectangular
Completeness: incomplete
Weight: 100g

Fixing Hole Shape: sub-rectangular (dimensions 5mm x 4mm)
Fixing Hole Comments: spalled on both sides

Mortar: No mortar adhering

Dimensions:
Overall length: 79mm (min)
Effective length: 60mm (min)
Exposed length / margin: N/A

Length of unmortared overlap: N/A
Distance of hole below the head: 19mm

Width of head: 78mm (min)
Width of shoulders: N/A
Width of tail: N/A

Maximum width: 78mm (min)
Original maximum breadth: N/A

Thickness of head: 8mm
Thickness of tail: N/A
Maximum thickness: 8mm

Other Comments No evidence to suggest the 'slate' was thinned towards head on bed face (batter).

7. Small Find No. 1033
Context No. 107
Description: Fragment of a roof 'slate', only part of the head survives intact – this was straight.

Shape: uncertain-incomplete
Completeness: incomplete
Weight: 70g

Fixing Hole Shape: sub-rectangular (dimensions 7mm x 7mm)
Fixing Hole Comments: slightly spalled on one side, more significantly spalled on the other (back?)

Mortar: No mortar adhering

Dimensions:
Overall length: 58mm (min)
Effective length: 31mm (min)
Exposed length / margin: N/A

Length of unmortared overlap: N/A
Distance of hole below the head: 27mm

Width of head: 88mm (min)
Width of shoulders: N/A
Width of tail: N/A
Maximum width: 89mm (min)
Original maximum breadth: N/A

Thickness of head: 7mm
Thickness of tail: N/A
Maximum thickness: 7mm

Other Comments No evidence to suggest that the 'slate' was thinned towards head on its bed face (batter).

8. Small Find No. 1034
Context No. 107
Description: Small fragment which it is not possible to orientate with any certainty as no original edges or surfaces apparently survive.

Shape: uncertain-incomplete
Completeness: incomplete
Weight: 30g

Fixing Hole Shape: sub-rectangular? (dimensions uncertain)
Fixing Hole Comments: The fragment is broken across its apparently sub-rectangular shaped fixing hole. Both surfaces are too damaged to identify any spalling.

Mortar: No mortar adhering

Dimensions: 56mm x 45mm (orientation uncertain)
Overall length: N/A
Effective length: N/A
Exposed length / margin: N/A

Length of unmortared overlap: N/A
Distance of hole below the head: N/A

Width of head: N/A
Width of shoulders: N/A

Width of tail: N/A
Maximum width: N/A
Original maximum breadth: N/A

Thickness of head: N/A
Thickness of tail: N/A
Maximum thickness: 5mm (min)

Other Comments It is probable that the fragment has laminated and both its original surfaces are lost.

9. Small Find No. 1035 **Diagnostic of roofing arrangement.**
Context No. 107
Description: Near complete, rectangular-shaped roofing 'slate'. The corners are damaged and although it is possible that both the corners of the head and tail were slightly trimmed there is no evidence for definite shoulders.

Shape: rectangular
Completeness: mostly complete
Weight: 560g

Fixing Hole Shape: sub-rectangular (dimensions 5mm x 4mm)
Fixing Hole Comments: Secondary working on bed surface, and significantly spalled on back surface.

Mortar: Slight traces of the mortar bed /on the 'slate's' back surface survive (length approximately 64mm; thickness minimum 1mm). No other traces of mortar were adhering.

Dimensions:
Overall length: 181mm
Effective length: 160mm
Exposed length / margin: approximately 50mm

Length of unmortared overlap: approximately 67mm
Distance of hole below the head: 21mm

Width of head: 80mm
Width of shoulders: N/A
Width of tail: 80mm
Maximum width: 137mm
Original maximum breadth: 137mm

Thickness of head: 12mm
Thickness of tail: 11mm
Maximum thickness: 13mm

Other Comments: Possible candidate for illustration. The 'slate' was not thinned (battered) towards its head on its bed face.

10. Small Find No. 1037
Context No. 108
Description: In the absence of either a fixing hole or adhering mortar then certainty in identification of this fragment as a roofing 'slate' is not possible, however, the fragment has two neat edges consistent with it being a rectangular-shaped 'slate' whose head and tail ends are missing.

Shape: uncertain-incomplete
Completeness: incomplete
Weight: 130g

Fixing Hole Shape: N/A
Fixing Hole Comments: N/A

Mortar: No mortar is adhering.

Dimensions:
Overall length: 108mm (min)
Effective length: N/A
Exposed length / margin: N/A

Length of unmortared overlap: N/A

Distance of hole below the head: N/A

Width of head: N/A
Width of shoulders: N/A
Width of tail: N/A
Maximum width: 112mm
Original maximum breadth: N/A

Thickness of head: N/A
Thickness of tail: N/A
Maximum thickness: 8mm

Other Comments No evidence to suggest that the possible 'slate' was thinned (battered) towards its head on its bed face.

11. **Small Find No.** 1040 **Diagnostic of roofing arrangement.**
Context No. 110
Description: The sides of the 'slate' are damaged making it difficult to identify its form with certainty; it may have been either rectangular or tapered in form. Certainly, the slate had marked shoulders which lends the surviving fragment a tapered appearance.

Shape: uncertain
Completeness: mostly complete
Weight: 575g

Fixing Hole Shape: sub-rectangular (dimensions 6mm x 5mm)
Fixing Hole Comments: Damaged but apparently secondary working on bed surface, and significantly spalled on back surface.

Mortar: Mortar bed on the 'slate's' back surface survives (length 74mm; thickness minimum 10mm). A central, longitudinal seam, which is aligned with the 'slate's' fixing hole, is present within the mortar bed. This seam feature would have been created by the mortar squeezing up between the adjoining edges of the two 'slates' of the next course which were laid onto the mortar bed. This demonstrates that the roof they were fixed on to (presumably that of the east wing of Blundell's House) was made up of a simple pattern of 50% overlaps.
Some slight traces of mortar survive on the 'slate's' bed surface up to 40mm from the edge of the tail. No other traces of mortar were adhering.

Dimensions:
Overall length: 207mm
Effective length: 180mm
Exposed length / margin: 57mm

Length of unmortared overlap: 75mm
Distance of hole below the head: 27mm

Width of head: 57mm
Width of shoulders: approximately 92mm
Width of tail: 89mm (minimum)
Maximum width: 113mm
Original maximum breadth: 113mm

Thickness of head: 11mm
Thickness of tail: 14mm
Maximum thickness: 19mm

Other Comments: Illustrate. The 'slate' was possibly thinned (battered) towards its head on the bed face, however, this appearance might be the result of damage associated with the dismantling of the roof and the redeposition of the 'slate'.

12. **Small Find No.** 1041
Context No. 110
Description: The tail is missing, otherwise this would have been a usefully diagnostic 'slate'.

Shape: tapered, with slight shoulders
Completeness: mostly complete, although the tail is missing
Weight: 180g

Fixing Hole Shape: sub-rectangular (dimensions 6mm x 6mm)

Fixing Hole Comments: spalled on the back surface, the bed surface is too damaged for comment.

Mortar: Slight traces of the mortar bed /on the 'slate's' back surface survive (length approximately 56mm; thickness minimum 1mm). No other traces of mortar were adhering.

Dimensions:
Overall length: 145mm (minimum)
Effective length: 132mm (minimum)
Exposed length / margin: 24mm (minimum)

Length of unmortared overlap: 65mm
Distance of hole below the head: 13mm

Width of head: 45mm
Width of shoulders: 80mm
Width of tail: N/A
Maximum width: 90mm (minimum)
Original maximum breadth: N/A

Thickness of head: 7mm
Thickness of tail: 6mm
Maximum thickness: 10mm

Other Comments No evidence to suggest that the 'slate' was thinned (battered) towards its head on its bed face.

13. **Small Find No.** 1042 **Diagnostic of roofing arrangement.**
Context No. 110
Description: Incomplete 'slate', both the head and tail are missing. The 'slate' apparently has a slightly tapered form, narrowing towards the head.

Shape: apparently slightly tapered
Completeness: incomplete
Weight: 445g

Fixing Hole Shape: circular (diameter 8mm)
Fixing Hole Comments: Secondary working on unidentified surface, and significantly spalled on the other surface. The fixing hole contains a small fragment of iron, presumably the remains of an iron nail. Small areas of ferrous staining is visible on both surfaces around the edge of the fixing hole. Presumably the 'slate' was positioned over a rafter and the opportunity ws taken to use a nail, rather than a peg over a batten.

Mortar: No mortar is adhering.

Dimensions:
Overall length: 186mm (minimum)
Effective length: 144mm (minimum)
Exposed length / margin: N/A

Length of unmortared overlap: N/A
Distance of hole below the head: 42mm (minimum)

Width of head: N/A
Width of shoulders: N/A
Width of tail: N/A
Maximum width: 101mm
Original maximum breadth: 101mm

Thickness of head: N/A
Thickness of tail: N/A
Maximum thickness: 11mm

Other Comments No evidence to suggest that the 'slate' was thinned (battered) towards its head on its bed face.

14. **Small Find No.** 1043
Context No. 110
Description: Small fragment which it is not possible to orientate with any certainty as no original edges or surfaces apparently survive.

Shape: uncertain-incomplete
Completeness: incomplete
Weight: 200g

Fixing Hole Shape: rectangular (dimensions 5mm x 4mm)
Fixing Hole Comments: The fragment is broken across its rectangular shaped fixing hole. Both surfaces are damaged but some evidence of spalling is observable on both sides.

Mortar: No mortar is adhering.

Dimensions: 107mm x 100mm (orientation uncertain)
Overall length: N/A
Effective length: N/A
Exposed length / margin: N/A

Length of unmortared overlap: N/A
Distance of hole below the head: N/A

Width of head: N/A
Width of shoulders: N/A
Width of tail: N/A
Maximum width: N/A
Original maximum breadth: N/A

Thickness of head: N/A
Thickness of tail: N/A
Maximum thickness: 17mm

Other Comments No evidence to suggest that the 'slate' was thinned (battered) towards its head on its bed face.

15. **Small Find No.** 1044 **Diagnostic of roofing arrangement.**
Context No. 110
Description: Incomplete 'slate' fragment with a straight head, pronounced shoulders and apparently rectangular form. The lower half of the 'slate' is missing.

Shape: apparently rectangular, with pronounced shoulders
Completeness: incomplete
Weight: 275g

Fixing Hole Shape: irregular (dimensions 9mm x 7mm)
Fixing Hole Comments: Irregular-shaped fixing hole, significantly spalled on one surface and neatly rebated on the other surface. This neat rebating looks as if it is the result of careful working suggesting that it may have been deliberately done to accommodate the thickened end of a peg or the head of a nail. Holden has suggested that the naturally-spalled surface of a 'slate' would have formed the back surface and that the spalled surface would have accommodated the nail's head (1989, 79), **if** correctly identified as deliberate working, this 'slate' suggests that this was not always the case.

Mortar: No mortar is adhering.

Dimensions:
Overall length: 120mm (minimum)
Effective length: 92mm (minimum)
Exposed length / margin: N/A

Length of unmortared overlap: N/A
Distance of hole below the head: 28mm

Width of head: 72mm (minimum)
Width of shoulders: 139mm (minimum)
Width of tail: N/A
Maximum width: 139mm (minimum)
Original maximum breadth: N/A

Thickness of head: 10mm
Thickness of tail: N/A
Maximum thickness: 16mm

Other Comments: No evidence to suggest that the 'slate' was thinned (battered) towards its head on its bed face

16. **Small Find No.** 1045
Context No. 110
Description:
Rectangular-shaped fragment of uncertain orientation.

Shape: uncertain-incomplete
Completeness: incomplete
Weight: 70g

Fixing Hole Shape: sub-rectangular (dimensions 5mm x 4mm)
Fixing Hole Comments: Sub-rectangular-shaped fixing hole, significantly spalled on one surface and apparently neatly rebated on the other surface. This neat rebating looks as if it might be the result of careful working suggesting that it may have been deliberately done to accommodate the thickened end of a peg or the head of a nail.

Mortar: No mortar is adhering.

Dimensions: 55mm x 102mm (orientation uncertain)
Overall length: N/A
Effective length: N/A
Exposed length / margin: N/A

Length of unmortared overlap: N/A
Distance of hole below the head: N/A

Width of head: N/A
Width of shoulders: N/A
Width of tail: N/A
Maximum width: N/A
Original maximum breadth: N/A

Thickness of head: N/A
Thickness of tail: N/A
Maximum thickness: 9mm

Other Comments: No evidence to suggest that the 'slate' was thinned (battered) towards its head on its bed face.

17. **Small Find No.** 1046
Context No. 110
Description: Slightly tapered 'slate' which narrows towards the head. Slight, but definite shoulders present. Some damage to the corners of the tail making it impossible to assess whether the corners were trimmed. The tail and head are straight.

Shape: slightly tapered, with small shoulders
Completeness: mostly complete
Weight: 400g

Fixing Hole Shape: roughly circular (diameter 5.5mm)
Fixing Hole Comments: Slightly spalled on both surfaces

Mortar: Traces of the mortar bed on the back surface survive (length 38mm, thickness 0.5mm). Some slight traces of mortar survive on the 'slate's' bed surface up to 52mm from the edge of the tail. No other traces of mortar were adhering.

Dimensions:
Overall length: 180mm
Effective length: 155mm
Exposed length / margin: 59mm

Length of unmortared overlap: 83mm
Distance of hole below the head: 25mm

Width of head: 43mm (minimum)
Width of shoulders: 67mm (minimum)
Width of tail: 91mm (minimum)
Maximum width: 96mm
Original maximum breadth: 96mm

Thickness of head: 7mm

Thickness of tail: 14.5mm
Maximum thickness: 14.5mm

Other Comments Some evidence to suggest that the 'slate' was thinned (battered) towards its head on its bed face, although this might be the result of damage related to the demolition of the roof.

18. **Small Find No.** 1047
Context No. 110
Description: Slightly tapered 'slate' the head is missing and it is not possible to ascertain either the character of the fixing hole or whether the slate was embellished with shoulders. The tail has a straight edge, although its corners have not been trimmed.

Shape: slightly tapered
Completeness: mostly complete
Weight: 235g

Fixing Hole Shape: N/A
Fixing Hole Comments: N/A

Mortar: Traces of the mortar bed on the back surface survive (length 37mm, thickness 8mm). No other traces of mortar were adhering.

Dimensions:
Overall length: 166mm (minimum)
Effective length: 166mm (minimum)
Exposed length / margin: 49mm

Length of unmortared overlap: 80mm (minimum)
Distance of hole below the head: N/A

Width of head: N/A
Width of shoulders: N/A
Width of tail: 99mm
Maximum width: 99mm
Original maximum breadth: 99mm

Thickness of head: N/A
Thickness of tail: 9mm
Maximum thickness: 11mm

Other Comments No evidence to suggest that the 'slate' was thinned (battered) towards its head on its bed face.

19. **Small Find No.** 1048 **Diagnostic of roofing arrangement.**
Context No. 110
Description: The head of the 'slate' is missing. Consequently, it is not certain whether this 'slate' was originally embellished with shoulders. The surviving portion of the 'slate' has a tapered from which narrows (from 98mm at the tail to at least 79mm) towards the missing head. The mortar bed is not finished parallel to the tail edge of the 'slate'. This is interesting because (uniquely) on this 'slate' both the smoothed/pointed mortar edge and the straight edge of the tail survive intact. This observation suggests that the rows of 'slates' were not have been aligned too evenly – in this particular case varying by 4mm over a 'slate's' width of 98mm.

Shape: tapered
Completeness: mostly complete
Weight: 320g

Fixing Hole Shape: fixing hole not present – 'slate' identified by presence of mortar.
Fixing Hole Comments: N/A

Mortar: The mortar bed on the back surface partially survives (minimum length 62mm, thickness 12mm). The smoothed/pointed edge of the mortar bed survives intact. **If** this surface was originally vertical then the 'slate' would have had an effective pitch of approximately 22° to the horizontal. No other traces of mortar were adhering.

Dimensions:
Overall length: 175mm (minimum)
Effective length: 171 mm (minimum)
Exposed length / margin: 68-72mm

Length of unmortared overlap: 46mm (minimum)
Distance of hole below the head: N/A

Width of head: N/A
*Width of shoulders:*N/A
Width of tail: 98mm
Maximum width: 98mm
Original maximum breadth: 98mm

Thickness of head: N/A
Thickness of tail: 8mm
Maximum thickness: 8mm

Other Comments No evidence to suggest that the 'slate' was thinned (battered) towards its head on its bed face.

20. **Small Find No.** 1049 **Diagnostic of roofing arrangement.**
Context No. 110
Description: The head end of the slate is damaged and incomplete, probably as a result of apparently having been thinned. Consequently, it is uncertain whether the 'slate' was furnished with shoulders or not. The form of the surviving portion of the 'slate' is tapered narrowing from the tail (width 95mm) to a width of 82mm.

Shape: tapered
Completeness: mostly complete
Weight: 455g

Fixing Hole Shape: circular (diameter 5mm)
Fixing Hole Comments: slightly spalled on one surface, which other evidence suggests was probably the bed (contra. Holden 1989, 79 - but only if the hole accommodated a nail and not a peg. What this observation suggests is that it cannot be assumed that the spalled, or predominantly spalled, surface always formed the back of a 'slate' just because the spalling scar could have formed a recess to accommodate the head of a nail. Nails were probably only used where the fixing hole of a 'slate' coincided with a rafter.

Mortar: Traces of mortar are present on both surfaces of the 'slate', although it is uncertain which is the bed surface and which is the back surface. On one face the traces of mortar extend for a distance of 95mm from the edge of the tail suggesting that this face is probably the slate's bed. On the other face the majority of the mortar traces are restricted to an area between 36mm and 91mm from the edge of the tail; it is possible that the outlying traces of lime mortar present on what is probably the back of the 'slate' are the result of redeposition of material leached from elsewhere on the slate. No other traces of mortar were adhering.

Dimensions:
Overall length: 192 (minimum)
Effective length: 179mm
Exposed length / margin: 36mm

Length of unmortared overlap: 101mm (minimum)
Distance of hole below the head: 13mm (minimum)

Width of head: 95mm
Width of shoulders: N/A
Width of tail: N/A
Maximum width: 95mm
Original maximum breadth: 95mm

Thickness of head:
Thickness of tail:
Maximum thickness: 17mm

Other Comments The 'slate' has a distinct facet, which begins a distance of 25mm below the fixing hole, which is consistent with it having been deliberately thinned (battered) towards its head on its bed face.

21. **Small Find No.** 1050
Context No. 110
Description: Although the incomplete form of the 'slate' makes certainty impossible, this example had an apparently rectangular lower part and then a tapered upper part. Whether this is considered to be a result of the presence of two long shoulders, or deliberate tapering of the unexposed part of the 'slate' is a semantic distinction. The tail end of the 'slate' is damaged and the tail edge is probably missing.

Shape: tail rectangular – head tapered/long shoulders
Completeness: mostly complete, tail damaged
Weight: 500g

Fixing Hole Shape: sub-rectangular (dimensions 5mm x 4.5mm)
Fixing Hole Comments: spalled on back surface, probably worked on bed surface. This possible secondary re-working, which is apparent on a number of 'slates' in the assemblage, might be careful reworking of a partially created hole intended only to widen the hole far enough to accommodate a peg or nail.

Mortar: Traces of the mortar bed on the back of the slate survive (length 68mm, thickness 6mm)

Dimensions:
Overall length: 242mm (minimum)
Effective length: 205mm (minimum)
Exposed length / margin: 60mm (minimum)

Length of unmortared overlap: 114mm
Distance of hole below the head: 37mm

Width of head: N/A
Width of shoulders: N/A
Width of tail: 53mm
Maximum width: 110mm
Original maximum breadth: 110mm

Thickness of head: 9mm
Thickness of tail: N/A
Maximum thickness: 15mm

Other Comments No evidence to suggest that the 'slate' was thinned (battered) towards its head on its bed face.

22. **Small Find No.** 1051 **Diagnostic of roofing arrangement.**
Context No. 110
Description: It is possible that the corners of the tail were slightly trimmed, although damage makes certainty of this observation impossible.

Shape: slightly tapered with long, shallow shoulder on one side, the other side is incomplete and therefore undiagnostic.
Completeness: mostly complete
Weight: 320g

Fixing Hole Shape: sub-rectangular (dimensions 4.5mm x 4.5mm)
Fixing Hole Comments: damaged, but apparently spalled on back surface, either slightly spalled or worked on bed surface. This possible secondary re-working, which is apparent on a number of 'slates' in the assemblage, might be careful reworking of a partially created hole intended only to widen the hole far enough to accommodate a peg or nail.

Mortar: Traces of the mortar bed on the back of the slate survive (length 72mm, thickness 2mm). Traces of the mortar bed on the bed surface of the 'slate' are also observable extending up to 63mm from the edge of the tail. No evidence of a mortar render (torching) is present.

Dimensions:
Overall length: 199mm (minimum)
Effective length: 181mm
Exposed length / margin: 49mm

*Length of unmortared overlap:*78mm (minimum)
Distance of hole below the head: 18mm (minimum)

Width of head: N/A
Width of shoulders: N/A
Width of tail: 77mm (minimum)
Maximum width: 85mm
Original maximum breadth: 85mm

Thickness of head: N/A
Thickness of tail: 8mm
Maximum thickness: 12.5mm

Other Comments No evidence to suggest that the 'slate' was thinned (battered) towards its head on its bed face.

23. **Small Find No.** 1052 **Diagnostic of roofing arrangement.**
Context No. 110
Description: Fragment with an apparently straight head and pronounced shoulders, although the degree to which damage has affected the surviving form of the 'slate' is difficult to assess.

Shape: uncertain-incomplete
Completeness: incomplete
Weight: 310g

Fixing Hole Shape: circular (diameter 7.5-8mm)
Fixing Hole Comments: damaged, but apparently spalled on back surface, apparently carefully worked on bed surface. This apparent secondary re-working, which is apparent on a number of 'slates' in the assemblage although particularly marked on this example, is presumably intended to widen the initial hole in order for the perforation to be able to accommodate a peg or nail.

Mortar: Traces of mortar survive on one surface (probably the back) of the 'slate', although it is possible that some of these traces are the result of redeposition of material leached from elsewhere on the slate. As the 'slate' is broken across the spread of mortar it is not possible to measure its original length (length 32mm (minimum), thickness 1mm).

Dimensions:
Overall length: 119mm (minimum)
Effective length: 92mm (minimum)
Exposed length / margin: N/A

Length of unmortared overlap: 87mm
Distance of hole below the head: 27mm

Width of head: 51mm (minimum)
Width of shoulders: N/A
Width of tail: N/A
Maximum width: 138mm
Original maximum breadth: N/A

Thickness of head: 11mm
Thickness of tail: N/A
Maximum thickness: 17mm

Other Comments: No evidence to suggest that the 'slate' was thinned (battered) towards its head on its bed face. Consider photography of fixing hole to show careful secondary working.

24. **Small Find No.** 1053
Context No. 110
Description: Tapered 'slate', there is no evidence to indicate that it was embellished with shoulders, although given the damage to both ends it is possible that it originally had slight shoulders. The slate narrows towards the head from a width of 104mm to a width of (at most) 89mm.

Shape: tapered
Completeness: mostly complete, although both tail and head edges are missing
Weight: 325g

Fixing Hole Shape: apparently rectangular (width 7mm, length uncertain)
Fixing Hole Comments: The 'slate's is broken across the apparently rectangular fixing hole making measurement of its full dimensions impossible.

Mortar: Traces of the mortar bed on the back surface of the 'slate survive' (length49mm (minimum), thickness 6.5mm). No other traces of mortar were adhering.

Dimensions:
Overall length: 197mm (minimum)
Effective length: 185mm (minimum)
Exposed length / margin: 60mm (minimum)

Length of unmortared overlap: estimated minimum of 88mm
Distance of hole below the head: 12mm (minimum)

Width of head: N/A

Width of shoulders: N/A
Width of tail: N/A
Maximum width: 104mm
Original maximum breadth: 104mm

Thickness of head: N/A
Thickness of tail: N/A
Maximum thickness: 11mm

Other Comments No evidence to suggest that the 'slate' was thinned (battered) towards its head on its bed face.

25. **Small Find No.** 1054
Context No. 110
Description: A massive 'slate' of apparently tapered form. The fragment has a straight edge at its head end and the surviving portion of its length tapers towards the head, although it is possible that the missing element had a rectangular form and the tapered appearance is the result of two large shoulders.

Shape: tapered
Completeness: incomplete
Weight: 1390g

Fixing Hole Shape: circular (diameter 8mm)
Fixing Hole Comments: damaged, but apparently spalled on one (back?) surface, apparently careful secondary working on other (bed?) surface. This apparent secondary re-working, which is apparent on a number of 'slates' in the assemblage is presumably intended to widen the initial hole in order for the perforation to be able to accommodate a peg or nail.

Mortar: No mortar is adhering.

Dimensions:
Overall length: 190mm (minimum)
Effective length: 159mm (minimum)
Exposed length / margin: N/A

Length of unmortared overlap: N/A
Distance of hole below the head: 31mm

Width of head: 144mm
Width of shoulders: N/A
Width of tail: N/A
Maximum width: 152mm
Original maximum breadth: N/A

Thickness of head: 13mm
Thickness of tail: N/A
Maximum thickness: 29mm

Other Comments The 'slate' is markedly thinned towards the head on one face, however, it is uncertain whether this is not as a result of damage rather than evidence of a batter.

26. **Small Find No.** 1055 **Diagnostic of roofing arrangement.**
Context No. 110
Description: No evidence to suggest that the 'slate' was embellished with shoulders or that the corners of its tail were trimmed.

Shape: tapered
Completeness: mostly complete
Weight: 415g

Fixing Hole Shape: sub-rectangular (dimensions 6.5mm x 4mm)
Fixing Hole Comments: damaged, but spalled on back, apparently careful secondary working on bed. This apparent secondary re-working, which is apparent on a number of 'slates' in the assemblage is presumably intended to widen the initial hole in order for the perforation to be able to accommodate a peg or nail.

Mortar: Mortar bed on back (length 65mm, thickness 13mm). Slight traces of mortar bed on bed surface survive 42mm from the tail's edge. No other traces of mortar were adhering.

Dimensions:
Overall length: 204mm
Effective length: 181mm
Exposed length / margin: 48mm

Length of unmortared overlap: 91mm
Distance of hole below the head: 23mm

Width of head: 31mm (minimum)
Width of shoulders: N/A
Width of tail: 69mm (minimum)
Maximum width: 94mm
Original maximum breadth: 94mm

Thickness of head: 6mm
Thickness of tail: 9mm
Maximum thickness: 9mm

Other Comments The 'slate' is not thinned (battered) towards its head on its bed face.

27. **Small Find No.** 1056
Context No. 110
Description:

Shape: probably tapered
Completeness: incomplete
Weight: 180g

Fixing Hole Shape: sub-rectangular (dimensions 6mm x 5.5mm)
Fixing Hole Comments: damaged, but spalled on one surface (back?), apparently careful secondary working on other (bed?). This apparent secondary re-working, which is apparent on a number of 'slates' in the assemblage is presumably intended to widen the initial hole in order for the perforation to be able to accommodate a peg or nail.

Mortar: Only a few apparently redeposited traces of lime mortar adhere.

Dimensions:
Overall length: 102mm (minimum)
Effective length: 81mm (minimum)
Exposed length / margin: N/A

Length of unmortared overlap: N/A
Distance of hole below the head: 21mm (minimum)

Width of head: 59mm (minimum)
Width of shoulders: N/A
Width of tail: N/A
Maximum width: 99mm
Original maximum breadth: N/A

Thickness of head: N/A
Thickness of tail: N/A
Maximum thickness: 14mm

Other Comments The 'slate' is thins on one side towards its head, but it is uncertain on what surface this thinning occurs, or whether it is deliberate or the result of damage. Consequently, this is not definite evidence of battering.

28. **Small Find No.** 1060
Context No. Unstratified (Trench 1)
Description: Fragment of uncertain shape. Only one original edges survives, but when compared with the line of the mortar bed this suggests that at least the lower part of the 'slate' was rectangular in form. No evidence relating to shoulders, trimmed corners or the fixing hole survives.

Shape: uncertain / possibly rectangular
Completeness: incomplete
Weight: 210g

Fixing Hole Shape: N/A
Fixing Hole Comments: N/A

Mortar: The mortar bed on the back surface of the 'slate' survives (length 47mm, thickness 12mm). No other mortar adheres.

Dimensions:
Overall length: 134mm (minimum)
Effective length: 134mm (minimum)
Exposed length / margin: 48mm

Length of unmortared overlap: 39mm (minimum)
Distance of hole below the head: N/A

Width of head: N/A
Width of shoulders: N/A
Width of tail: N/A
Maximum width: 101mm
Original maximum breadth: N/A

Thickness of head: N/A
Thickness of tail: N/A
Maximum thickness: 10.5mm

Other Comments No evidence to suggest that the 'slate' was thinned (battered) towards its head on its bed face.

29. **Small Find No.** 1061
Context No. Unstratified (Trench 1)
Description: Fragment of uncertain shape, recognised only because of perforation.

Shape: uncertain-incomplete
Completeness: incomplete
Weight: 35g

Fixing Hole Shape: irregular (dimensions 6mm x 3.5mm)
Fixing Hole Comments: The perforation looks like it has been struck twice, producing an irregular shaped perforation. One side is spalled, the other appears to have been subject to some form of secondary working, which may have resulted in the double-strike/irregular form of the perforation.

Mortar: No mortar adhering

Dimensions:
*Overall length:*39mm (minimum)
Effective length: 27mm (minimum)
Exposed length / margin: N/A

Length of unmortared overlap: N/A
Distance of hole below the head: 12mm (minimum)

Width of head: N/A
Width of shoulders: N/A
Width of tail: N/A
Maximum width: 123mm
Original maximum breadth: N/A

Thickness of head: N/A
Thickness of tail: N/A
Maximum thickness: 6.5mm

Other Comments No evidence to suggest that the 'slate' was thinned (battered) towards its head on its bed face.

30. **Small Find No.** 1062
Context No. Unstratified (Trench 1)
Description: The tail of the 'slate' is missing. Assessment of its shape is difficult because of the missing tail end.

Shape: tapered upper part, rectangular lower part
Completeness: incomplete

Weight: 470g

Fixing Hole Shape: circular (diameter 6.5-7mm)
Fixing Hole Comments: spalled on one surface, apparently careful secondary working visible on the other. This apparent secondary re-working, which is apparent on a number of 'slates' in the assemblage is presumably intended to widen the initial hole in order for the perforation to be able to accommodate a peg or nail.

Mortar: Traces of apparently redeposited mortar are visible around the fixing hole on both sides. That on neither side is there evidence of a gap where the batten would have been indicates that these traces of mortar are redeposited and do not relate to rendering (torching) of the roof.

Dimensions:
Overall length: 156mm (minimum)
Effective length: 132mm (minimum)
Exposed length / margin: N/A

Length of unmortared overlap: N/A
Distance of hole below the head: 24mm

Width of head: 80mm
Width of shoulders: 120mm
Width of tail: N/A
Maximum width: 120mm
Original maximum breadth: 120mm

Thickness of head: 8mm
Thickness of tail: N/A
Maximum thickness: 16mm

Other Comments The 'slate' thins (from a point 95mm below the head) towards the head from one side, it is uncertain whether this is definite evidence of battering.

31. **Small Find No.** 1063
Context No. Unstratified (Trench 1)
Description: Fragment of an apparently tapered 'slate' with small but distinct shoulders.

Shape: apparently tapered, on one side a distinct shoulder is present
Completeness: incomplete
Weight: 170g

Fixing Hole Shape: sub-rectangular (length 5mm, width uncertain)
Fixing Hole Comments: the fragment is broken across the fixing hole, which is damaged on one side, and apparently has been subject to secondary reworking on the other.

Mortar: Undiagnostic traces of lime mortar are present on one side of the 'slate'.

Dimensions:
Overall length: 132 (minimum)
Effective length: 96mm (minimum)
Exposed length / margin: N/A

Length of unmortared overlap: N/A
Distance of hole below the head: 36mm (minimum)

Width of head: N/A
Width of shoulders: 48mm (minimum)
Width of tail: N/A
Maximum width: 66mm
Original maximum breadth: N/A

Thickness of head: N/A
Thickness of tail: N/A
Maximum thickness: 12mm

Other Comments No evidence to suggest that the 'slate' was thinned (battered) towards its head on its bed face.

32. **Small Find No.** 1064

Context No. Unstratified (Trench 1)
Description: Both the head and tail of the 'slate' are damaged or missing. As it survives the 'slate' has the impression of having been embellished with shoulders, however, this might e a result of damage.

Shape: apparently rectangular
Completeness: incomplete
Weight: 140g

Fixing Hole Shape: circular (diameter 7mm)
Fixing Hole Comments: damaged, but apparently spalled on one surface, slightly spalled on the other surface.

Mortar: Undiagnostic fragments of mortar adhere to both surfaces, however it is uncertain whether these patches relate to mortar beds, rendering/torching or are the result of secondary redeposition of lime mortar leached from elsewhere in the burial environment.

Dimensions:
Overall length: 115mm (minimum)
Effective length: 99mm (minimum)
Exposed length / margin: N/A

Length of unmortared overlap: N/A
Distance of hole below the head: 16mm (minimum)

Width of head: N/A
Width of shoulders: N/A
Width of tail: N/A
Maximum width: 85mm
Original maximum breadth: N/A

Thickness of head: N/A
Thickness of tail: N/A
Maximum thickness: 12mm

Other Comments No evidence to suggest that the 'slate' was thinned (battered) towards its head on its bed face.

33. Small Find No. 1065
Context No. Unstratified (Trench 1)
Description: Slightly tapered with a distinct shoulder on one side (right-hand of back surface) only. The surviving mortar bed on the back surface indicates that the original surface of the 'slate' was markedly uneven with a 6mm step on it.

Shape: rectangular / tapered / tail rectangular – head tapered / uncertain-incomplete
Completeness: complete / mostly complete / incomplete
Weight:

Fixing Hole Shape: sub-rectangular (dimensions 5mm x 5mm)
Fixing Hole Comments: spalled on the back surface, either slightly spalled or subject to some limited secondary working on the bed surface.

Mortar: Part of the mortar bed is preserved intact upon the back surface (length (minimum) 61mm, thickness 15mm). No other patches of mortar adhere.

Dimensions:
Overall length: 172mm (minimum)
Effective length: 141mm (minimum)
Exposed length / margin: N/A

Length of unmortared overlap: N/A
Distance of hole below the head: 31mm (minimum)

Width of head: N/A
Width of shoulders: N/A
Width of tail: N/A
Maximum width: 121mm
Original maximum breadth: N/A

Thickness of head: N/A
Thickness of tail: N/A
Maximum thickness: 14mm

Other Comments The 'slate' was not thinned (battered) towards its head on its bed face.

34. **Small Find No.** 1066
Context No. Unstratified (Trench 1)
Description: Both the head and tail of the 'slate' are missing, the sides suggest that the fragment was probably rectangular in shape, although it is uncertain whether it was embellished with shoulders or whether its tail had trimmed corners.

Shape: rectangular / tapered / tail rectangular – head tapered / uncertain-incomplete
Completeness: complete / mostly complete / incomplete
Weight: 340g

Fixing Hole Shape: sub-rectangular (width 5mm, length uncertain)
Fixing Hole Comments: The 'slate' is broken across the perforation. The back surface is heavily spalled, the bed surface is too damaged to be diagnostic.

Mortar: Traces of the mortar bed on the back surface of the 'slate' survive. It was unevenly applied (length 44-59mm, maximum surviving thickness 4mm). No other trace of mortar adheres.

Dimensions:
Overall length: 168mm (minimum)
Effective length: 156mm (minimum)
Exposed length / margin: 42mm (minimum)

Length of unmortared overlap: 67-82mm (minimum)
Distance of hole below the head: 12mm (minimum)

Width of head: N/A
Width of shoulders: N/A
Width of tail: N/A
Maximum width: 103mm
Original maximum breadth: N/A

Thickness of head: N/A
Thickness of tail: N/A
Maximum thickness: 12mm

Other Comments No evidence to suggest that the 'slate' was thinned (battered) towards its head on its bed face.

35. **Small Find No.** 1067
Context No. Unstratified (Trench 1)
Description:
Irregular-shaped fragment of uncertain orientation.

Shape: rectangular / tapered / tail rectangular – head tapered / uncertain-incomplete
Completeness: complete / mostly complete / incomplete
Weight: 185g

Fixing Hole Shape: sub-rectangular (dimensions 7mm x 7.5mm)
Fixing Hole Comments: One surface is slightly spalled, the other surface is too damaged to be diagnostic.

Mortar: No traces of mortar adhere to the 'slate' fragment.

Dimensions: 120mm x 119mm (orientation uncertain)
Overall length: N/A
Effective length: N/A
Exposed length / margin: N/A

Length of unmortared overlap: N/A
Distance of hole below the head: N/A

Width of head: N/A
Width of shoulders: N/A
Width of tail: N/A
Maximum width: N/A
Original maximum breadth: N/A

Thickness of head: N/A
Thickness of tail: N/A
Maximum thickness: 11mm

Other Comments No evidence to suggest that the 'slate' was thinned (battered) towards its head on its bed face.

36. **Small Find No.** 1068
Context No. Unstratified (Trench 1)
Description:
Damaged fragment of uncertain form.

Shape: uncertain-incomplete
Completeness: incomplete
Weight: 120g

Fixing Hole Shape: sub-rectangular (dimensions 4.5mm x 4.5mm)
Fixing Hole Comments: one surface is heavily spalled, the other surface is damaged but apparently shows evidence of secondary working.

Mortar: No traces of mortar adhere to the 'slate' fragment.

Dimensions:
*Overall length:*78mm (minimum)
Effective length: 55mm (minimum)
Exposed length / margin: N/A

Length of unmortared overlap: N/A
Distance of hole below the head: 23mm (minimum)

Width of head: N/A
Width of shoulders: N/A
Width of tail: N/A
Maximum width: 92.5mm
Original maximum breadth: N/A

Thickness of head: N/A
Thickness of tail: N/A
Maximum thickness: 12.5mm

Other Comments No evidence to suggest that the 'slate' was thinned (battered) towards its head on its bed face.

37. **Small Find No.** 1069
Context No. Unstratified (Trench 1)
Description:
'Slate' of substantial, but uncertain form.

Shape: uncertain-incomplete
Completeness: incomplete
Weight: 420g

Fixing Hole Shape: circular (diameter 5mm)
Fixing Hole Comments: one surface is heavily spalled, the other shows evidence of careful, secondary working.

Mortar: No traces of mortar adhere to the 'slate' fragment.

Dimensions: 108mm x 141mm (orientation uncertain)
Overall length: N/A
Effective length: N/A
Exposed length / margin: N/A

Length of unmortared overlap: N/A
Distance of hole below the head: N/A

Width of head: N/A
Width of shoulders: N/A
Width of tail: N/A

Maximum width: N/A
Original maximum breadth: N/A

Thickness of head: N/A
Thickness of tail: N/A
Maximum thickness: 16mm

Other Comments No evidence to suggest that the 'slate' was thinned (battered) towards its head on its bed face.

38. **Small Find No.** 1070
Context No. Unstratified (Trench 1)
Description: tapered with distinct shoulders, one of which is lower than the other. The tail is damaged.

Shape: tapered
Completeness: mostly complete
Weight: 705g

Fixing Hole Shape: sub-rectangular (dimensions 6.5mm x 5mm)
Fixing Hole Comments: slightly spalled on one side (back) and apparently subject to secondary working on the other side (bed).

Mortar: Traces of mortar survive on one edge of the 'slate'. These traces were displaced here when the mortar bed which was laid upon the 'slate's' back was squeezed when the overlying course of 'slates' were laid down, however, they are not diagnostic enough to identify the exposed length of the 'slate'.

Dimensions:
Overall length: 255mm
Effective length: 235mm
Exposed length / margin: N/A

Length of unmortared overlap: N/A
Distance of hole below the head: 20mm

Width of head: 53mm (minimum)
Width of shoulders: 94mm
Width of tail: N/A
Maximum width: 105mm
Original maximum breadth: 105mm

Thickness of head: 12mm
Thickness of tail: N/A
Maximum thickness: 15mm

Other Comments The 'slate' was not thinned (battered) towards its head on its bed face.

39. **Small Find No.** 1071
Context No. Unstratified (Trench 1)
Description: Fragment of uncertain form.

Shape: uncertain-incomplete
Completeness: incomplete
Weight: 135g

Fixing Hole Shape: sub-rectangular (dimensions 7mm x 5mm)
Fixing Hole Comments: damaged on both sides, but not obviously spalled or subjected to secondary working.

Mortar: No mortar adheres to this fragment

Dimensions:
Overall length: 102mm (minimum)
Effective length: 79mm (minimum)
Exposed length / margin: N/A

Length of unmortared overlap: N/A
Distance of hole below the head: 23mm (minimum)

Width of head: N/A

Width of shoulders: N/A
Width of tail: N/A
Maximum width: 79mm
Original maximum breadth: N/A

Thickness of head: N/A
Thickness of tail: N/A
Maximum thickness: 12mm

Other Comments No evidence to suggest that the 'slate' was thinned (battered) towards its head on its bed face.

40. **Small Find No.** 1072
Context No. Unstratified (Trench 1)
Description: Perforated triangular-shaped fragment. The character if the perforation is consistent with the other roof 'slates' recovered during the course of the excavation, although it is difficult to reconcile the artefact's shape with a functional roofing tile, unless it was located adjacent to a valley on the roof.

Shape: uncertain-incomplete
Completeness: incomplete
Weight: 255g

Fixing Hole Shape: sub-rectangular (dimensions 2mm x 2mm)
Fixing Hole Comments: slightly spalled on one surface, evidence for probable secondary working on the other surface.

Mortar: No traces of mortar adhere.

Dimensions: 185mm x 102mm (orientation uncertain)
Overall length: N/A
Effective length: N/A
Exposed length / margin: N/A

Length of unmortared overlap: N/A
Distance of hole below the head: N/A

Width of head: N/A
Width of shoulders: N/A
Width of tail: N/A
Maximum width: N/A
Original maximum breadth: N/A

Thickness of head: N/A
Thickness of tail: N/A
Maximum thickness: 11.5mm

Other Comments No evidence to suggest that the 'slate' was thinned (battered) towards its head on its bed face.

41. **Small Find No.** 1073
Context No. Unstratified (Trench 1)
Description: **UNAVAILABLE FOR STUDY**

Shape: rectangular / tapered / tail rectangular – head tapered / uncertain-incomplete
Completeness: complete / mostly complete / incomplete
Weight:

Fixing Hole Shape: circular / sub-rectangular / rectangular (diameter / dimensions)
Fixing Hole Comments:

Mortar:
Mortar bed / back (length / thickness)
Mortar bed / bed (length / thickness)
Evidence for mortar render / torching (length / thickness / batten gap present? and width)

Dimensions:
Overall length:
Effective length:
Exposed length / margin:

Length of unmortared overlap:
Distance of hole below the head:

Width of head:
Width of shoulders:
Width of tail:
Maximum width:
Original maximum breadth:

Thickness of head:
Thickness of tail:
Maximum thickness:

Other Comments

42. **Small Find No.** 1074
Context No. Unstratified (Trench 1)
Description:
Fragment of uncertain shape, largely incomplete.

Shape: uncertain-incomplete
Completeness: incomplete
Weight: 70g

Fixing Hole Shape: sub-rectangular (dimensions 5mm x 5mm)
Fixing Hole Comments: slightly spalled on both sides

Mortar: no traces of mortar adhere.

Dimensions:
Overall length: 100mm (minimum)
Effective length: 77mm (minimum)
Exposed length / margin: N/A

Length of unmortared overlap: N/A
Distance of hole below the head: 23mm (minimum)

Width of head: N/A
Width of shoulders: N/A
Width of tail: N/A
Maximum width: 62mm
Original maximum breadth: N/A

Thickness of head: N/A
Thickness of tail: N/A
Maximum thickness: 8.5mm

Other Comments No evidence to suggest that the 'slate' was thinned (battered) towards its head on its bed face.

43. **Small Find No.** 1075
Context No. Unstratified (Trench 1)
Description: 'Slate' of slightly tapering form. The tail and head are missing. It is uncertain whether the 'slate' originally had a pronounced shoulder on one side, or has 'fortuitously' broken across a line of natural fracture.

Shape: slightly tapered / tail rectangular
Completeness: complete / mostly complete / incomplete
Weight: 355g

Fixing Hole Shape: circular (diameter 5mm)
Fixing Hole Comments: Damaged on both sides, uncertain whether either side has spalled or been subject to secondary reworking.

Mortar: No mortar adheres.

Dimensions:
Overall length: 157mm (minimum)

Effective length: 149mm (minimum)
Exposed length / margin: N/A

Length of unmortared overlap: N/A
Distance of hole below the head: 8mm

Width of head: N/A
Width of shoulders: N/A
Width of tail: N/A
Maximum width: 110mm
Original maximum breadth: 110mm

Thickness of head: N/A
Thickness of tail: N/A
Maximum thickness: 11mm

Other Comments No evidence to suggest that the 'slate' was thinned (battered) towards its head on its bed face.

44. **Small Find No.** 1076 **Diagnostic of roofing arrangement.**
Context No. Unstratified (Trench 1)
Description: Rectangular fragment, both the tail and the head end are missing. No evidence for the presence of shoulders survives.

Shape: rectangular
Completeness: incomplete
Weight: 305g

Fixing Hole Shape: N/A
Fixing Hole Comments:

Mortar: Mortar bed on the back survives relatively intact (length 103mm, thickness 12mm). The smoothed/pointed edge of the mortar bed survives intact. **If** this surface was originally vertical then the 'slate' would have had an effective pitch of approximately 26° to the horizontal. Traces of the mortar bed on the bed surface also survive for a length of 63mm, although as the original tail edge is missing study of this mortar patch is not particularly informative.

Dimensions:
Overall length: 140mm (minimum)
Effective length: 140mm (minimum)
Exposed length / margin: 37mm (minimum)

Length of unmortared overlap: N/A
Distance of hole below the head: N/A

Width of head: N/A
Width of shoulders: N/A
Width of tail: N/A
Maximum width: 104mm
Original maximum breadth: 104mm

Thickness of head: N/A
Thickness of tail: N/A
Maximum thickness: 7mm

Other Comments No evidence to suggest that the 'slate' was thinned (battered) towards its head on its bed face.

45. **Small Find No.** 1077 **Diagnostic of roofing arrangement.**
Context No. Unstratified (Trench 1)
Description:
The slightly asymmetrical shoulders meet in a near point; consequently, the 'slate' has no head edge. This is one of the most extremely pronounced set of shoulders within the assemblage (see also SF No.1170). The edge of the tail is crudely chamfered, presumably to aid run off of rain water. The corners of the tail are damaged, rendering it impossible to record its original width or assess whether the corners were slightly trimmed.

Shape: tapered with pronounced shoulders which meet in a near point
Completeness: complete
Weight: 820g

Fixing Hole Shape: circular (diameter 5mm)
Fixing Hole Comments: Both surfaces are too damaged to identify any spalling.

Mortar: Slight traces of the mortar bed on the back surface are visible. No other traces of mortar adhere to the 'slate'.

Dimensions:
Overall length: 279mm
Effective length: 257mm
Exposed length / margin: N/A

Length of unmortared overlap: N/A
Distance of hole below the head: 22mm

Width of head: 0mm
Width of shoulders: 103mm
Width of tail: N/A
Maximum width: 122mm
Original maximum breadth: 122mm

Thickness of head: 14mm
Thickness of tail: 12mm
Maximum thickness: 14mm

Other Comments The 'slate' was not thinned (battered) towards its head on its bed face. The thinning around the fixing hole is present on both sides and is a result of spalling which presumably occurred during the creation of the fixing hole. Possibly illustrate.

46. **Small Find No.** 1078
Context No. Unstratified (Trench 1)
Description:
The missing head and damaged tail means it is impossible to assess whether the 'slate' was furnished with shoulders or had trimmed corners. The fixing hole is missing.

Shape: tapered
Completeness: incomplete
Weight: 355g

Fixing Hole Shape: N/A
Fixing Hole Comments:

Mortar: Part of the mortar bed on the back surface survives intact (surviving length 40mm, thickness 11mm). Traces of the mortar bed on the bed surface also survive (length from the 'tail' edge 64mm, thickness 0.5mm).

Dimensions:
Overall length: 182mm (minimum)
Effective length: 182mm (minimum)
Exposed length / margin: 58mm (minimum)

Length of unmortared overlap: 84mm (minimum)
Distance of hole below the head: N/A

Width of head: N/A
Width of shoulders: N/A
Width of tail: N/A
Maximum width: 88mm
Original maximum breadth: 88mm

Thickness of head: N/A
Thickness of tail: N/A
Maximum thickness: 16mm

Other Comments No evidence to suggest that the 'slate' was thinned (battered) towards its head on its bed face.

47. **Small Find No.** 1094
Context No. 207
Description:

Small fragment which it is not possible to orientate with any certainty as no original edges or surfaces apparently survive. The fragment is broken across the fixing hole.

Shape: uncertain-incomplete
Completeness: incomplete
Weight: 70g

Fixing Hole Shape: apparently circular (diameter 8mm)
Fixing Hole Comments: apparently spalled upon one surface, evidence of careful secondary working on the other.

Mortar: No mortar adheres to the fragment.

Dimensions: 65mm x 74mm (orientation uncertain)
Overall length: N/A
Effective length: N/A
Exposed length / margin: N/A

Length of unmortared overlap: N/A
Distance of hole below the head: N/A

Width of head: N/A
Width of shoulders: N/A
Width of tail: N/A
Maximum width: N/A
Original maximum breadth: N/A

Thickness of head: N/A
Thickness of tail: N/A
Maximum thickness: 14mm

Other Comments No evidence to suggest that the 'slate' was thinned (battered) towards its head on its bed face. The only roofing 'slate' to be recovered from the interior of the east wing, albeit from a mixed soil horizon which post-dated the dismantling of the roof and ruining of the east wing. The worn condition of the fragment's edges is consistent with residual deposition.

48. **Small Find No.** 1170 **Diagnostic of roofing arrangement.**
Context No. Unstratified (Trench 1)
Description:
The slightly asymmetrical shoulders meet in a near point; consequently, the 'slate' has no head edge. This is one of the most extremely pronounced set of shoulders within the assemblage (see also SF No.1077).

Shape: uncertain-incomplete
Completeness: incomplete
Weight: 335g

Fixing Hole Shape: circular (diameter 7mm)
Fixing Hole Comments: Too damaged (partly by spalling, or possibly by battering) to be diagnostic on one surface, the other surface has been subject to neat, secondary working.

Mortar: No mortar adheres.

Dimensions:
Overall length: 118mm (minimum)
Effective length: 75mm (minimum)
Exposed length / margin: N/A

Length of unmortared overlap: N/A
Distance of hole below the head: 43mm

Width of head: 0mm
Width of shoulders: N/A (the base of the shoulders does not survive intact)
Width of tail: N/A
Maximum width: 120mm
Original maximum breadth: N/A

Thickness of head: 11mm
Thickness of tail: N/A
Maximum thickness: 22mm

Other Comments The 'slate' thins (from a point 95mm below the head) towards the head from one side, it is uncertain whether this is definite evidence of battering, or the result of damage inflicted during the dismantling of the roof and the redeposition of the fragment.

49. Small Find No. 1171
Context No. Unstratified (Trench 1)
Description:
Broken across the fixing hole The surviving element of the head edge is straight, but no other edges survive and it is not possible to ascertain either the 'slate's' form or whether it was furnished with shoulders and trimmed corners.

Shape: uncertain-incomplete
Completeness: incomplete
Weight: 80g

Fixing Hole Shape: sub-rectangular (length 4mm, width uncertain))
Fixing Hole Comments: both sides damaged and incomplete, however, damage is consistent with spalling.

Mortar: No traces of mortar adhere.

Dimensions:
Overall length: 110mm (minimum)
Effective length: 90mm (minimum)
Exposed length / margin: N/A

Length of unmortared overlap: N/A
Distance of hole below the head: 20mm

Width of head: N/A
Width of shoulders: N/A
Width of tail: N/A
Maximum width: 89mm
Original maximum breadth: N/A

Thickness of head: N/A
Thickness of tail: N/A
Maximum thickness: 6.5mm

Other Comments No evidence to suggest that the 'slate' was thinned (battered) towards its head on its bed face. Possibly a different type of stone to the remainder of the assemblage.

50. Small Find No. 1172
Context No. Unstratified (Trench 1)
Description:
The head and tail are damaged making it impossible to record their dimensions.

Shape: apparently rectangular with tapering shoulders
Completeness: mostly complete
Weight: 380g

Fixing Hole Shape: circular (diameter 4.5mm)
Fixing Hole Comments: The 'slate' is broken across the fixing hole. The back surface is damaged but apparently spalled, the bed surface has been subject to secondary working.

Mortar: Traces of the mortar bed on the back surface survive (surviving length 57mm, thickness 2mm), however, the lower edge is not obvious. Slight traces of mortar are visible on the lower bed surface, however, it is uncertain whether these are redeposited leached material or the remnants of a mortar bed.

Dimensions:
Overall length: 179mm
Effective length: 157mm
Exposed length / margin: N/A

Length of unmortared overlap: N/A
Distance of hole below the head: 22mm

Width of head: N/A

Width of shoulders: N/A
Width of tail: 94mm
Maximum width: 94mm
Original maximum breadth: 94mm

Thickness of head: 9.5mm
Thickness of tail: 14mm
Maximum thickness: 16mm

Other Comments No evidence to suggest that the 'slate' was thinned (battered) towards its head on its bed face.

51. Small Find No. 1173
Context No. Unstratified (Trench 1)
Description:
The head and tail are damaged making it impossible to precisely record their dimensions. The 'slate' does not appear to have been furnished with shoulders.

Shape: rectangular
Completeness: mostly complete
Weight: 185g

Fixing Hole Shape: sub-rectangular (dimensions 7.5mm x 5.5mm)
Fixing Hole Comments: slightly spalled on one surface, possibly spalled more heavily on the other. Loss of both surfaces prevents certain recognition of secondary working.

Mortar: A single trace of mortar adheres to one surface a distance of 67mm from the tail edge.

Dimensions:
Overall length: 175mm
Effective length: 155mm
Exposed length / margin: N/A

Length of unmortared overlap: N/A
Distance of hole below the head: 20mm

Width of head: 58mm (minimum)
Width of shoulders: N/A
Width of tail: 60mm (minimum)
Maximum width: 77mm
Original maximum breadth: 77mm

Thickness of head: 5mm
Thickness of tail: 5.5mm
Maximum thickness: 6mm

Other Comments No evidence to suggest that the 'slate' was thinned (battered) towards its head on its bed face.

52. Small Find No. 1174
Context No. Unstratified (Trench 1)
Description:
The corners of the tail are apparently neatly trimmed into slightly rounded corners.

Shape: tapered, with small shoulders that meet in a point
Completeness: mostly complete
Weight: 230g

Fixing Hole Shape: sub-rectangular (dimensions 4.5mm x 4mm)
Fixing Hole Comments: the surface is too damaged to be diagnostic on one side, the other surface shows neat secondary working around the hole.

Mortar: Speckled traces of mortar, possibly from the mortar bed of the back surface of the 'slate', survive on one surface.

Dimensions:
Overall length: 181mm
Effective length: 155mm
Exposed length / margin: N/A

Length of unmortared overlap: N/A
Distance of hole below the head: 26mm

Width of head: 0mm
Width of shoulders: 41mm
Width of tail: 71mm
Maximum width: 71mm
Original maximum breadth: 71mm

Thickness of head: 10mm
Thickness of tail: 10mm
Maximum thickness: 12mm

Other Comments No evidence to suggest that the 'slate' was thinned (battered) towards its head on its bed face.

53. Small Find No. 1175 **Diagnostic of roofing arrangement.**
Context No. 110
Description: The head of the 'slate' is missing. Consequently, it is uncertain whether it was furnished with shoulders and its fixing hole is missing. The tail is relatively intact; the tail's corners were not trimmed. The back surface of the 'slate' has been incised or scored with fine lines which run perpendicular to the length of the 'slate'. These appear to be keying for a dark grey substance, which forms a thin layer that has been applied to the back of the 'slate'. These lines, and the surviving traces of the applied layer, are present beneath the area once covered by the mortar bed, indicating that they were applied prior to the 'slate' being laid onto the roof.

Shape: tapered
Completeness: incomplete
Weight: 220g

Fixing Hole Shape: N/A
Fixing Hole Comments:

Mortar: Part of the mortar bed on the back surface of the 'slate' survives (minimum length 57m, thickness 16mm). A longitudinal seam is present within the mortar bed. This seam feature would have been created by the mortar squeezing up between the adjoining edges of the two 'slates' of the next course which were laid onto the mortar bed. Impressions also survive within the mortar bed of the perpendicular seams created by the tails of the overlying 'slates', Interestingly, there is a difference of 15mm between the longitudinal position of these perpendicular seams suggesting that the courses of the 'slates' would not have had a particularly neat and even appearance. There is a height difference of 3mm between the flat facets either side of the longitudinal seam (caused by the bed surfaces of the overlying 'slates'), indicating that 'slates' of varying thickness were, at least on occasion, used next to each other in the roof. Presumably pushing the different sized slates to varying degrees into the thick mortar beds enable the exposed surfaces of the slates to be kept even. One of the results of this is that the mortar has been squeezed out approximately 40mm beyond the tail of the overlying slates. This excess has been pointed / finished off with an unsually long chamfer which is not present on any of the other 'slates'
Traces of the mortar bed on the bed surface of the 'slate' survive for a distance of 82mm from the tail.

Dimensions:
*Overall length:*158mm (minimum)
Effective length: 158mm (minimum)
Exposed length / margin: 23-63mm (see notes relating to mortar)

Length of unmortared overlap: 40mm (minimum*)*
Distance of hole below the head: N/A

Width of head: N/A
Width of shoulders: N/A
Width of tail: 63mm
Maximum width: 63mm
Original maximum breadth: N/A

Thickness of head: N/A
Thickness of tail: 7mm
Maximum thickness: 11mm

Other Comments: No evidence to suggest that the 'slate' was thinned (battered) towards its head on its bed face. The unusual character of the mortar bed and the presence of the applied dark grey layer suggest that this 'slate' may have been used for a special purpose upon the roof. The applied layer requires further analysis.

54. **Small Find No.** 1176
Context No. 110
Description: The head of the 'slate', including the fixing hole, is missing. It is not possible to ascertain whether the 'slate' was furnished with corners. The edge of the tail is crudely chamfered, presumably to aid run off of rain water. The tail's corners appear to have been slightly trimmed.

Shape: tapered
Completeness: incomplete
Weight: 305g

Fixing Hole Shape: N/A
Fixing Hole Comments:

Mortar: Traces of the mortar bed on the back surface survive (minimum length 39mm, minimum thickness 9mm). Slight traces of the mortar bed on the bed surface also survive up to a distance of 59mm from the tail edge.

Dimensions:
Overall length: 146mm (minimum)
Effective length: 146mm (minimum)
Exposed length / margin: 35mm

Length of unmortared overlap: 72mm (minimum)
Distance of hole below the head: N/A

Width of head: N/A
Width of shoulders: N/A
Width of tail: 89mm
Maximum width: 108mm
Original maximum breadth: 108mm

Thickness of head: N/A
Thickness of tail: 3mm – 10mm (chamfer)
Maximum thickness: 10mm

Other Comments No evidence to suggest that the 'slate' was thinned (battered) towards its head on its bed face.

55. **Small Find No.** 1177
Context No. 110
Description: The surviving element of the head indicates that it was straight. It is not possible to ascertain whether the 'slate' was furnished with shoulders. The tail is missing. This would originally have been a wide 'slate'; if the fixing hole was central then it would have had a minimum width of approximately 230mm.

Shape: uncertain-incomplete
Completeness: incomplete
Weight: 305g

Fixing Hole Shape: sub-rectangular (length 5.5mm, width uncertain)
Fixing Hole Comments: the 'slate' is broken across the fixing hole.

Mortar: Traces of the mortar bed are present on the back surface (length 63mm, thickness 9.5mm). No other mortar adheres.

Dimensions:
Overall length: 174mm (minimum)
Effective length: 150mm (minimum)
Exposed length / margin: 42mm (minimum)

Length of unmortared overlap: 69mm
Distance of hole below the head: 24mm

Width of head: 77mm (minimum)
Width of shoulders: N/A
Width of tail: N/A
Maximum width: 132mm (minimum)
Original maximum breadth: N/A

Thickness of head: 8.5mm
Thickness of tail: N/A

Maximum thickness: 9mm

Other Comments No evidence to suggest that the 'slate' was thinned (battered) towards its head on its bed face.

56. **Small Find No.** 1178
Context No. 110
Description: The head of the 'slate' is damaged and missing, however, the rectangular 'slate' had two even shoulders. It is not possible to ascertain whether they met at a point or were joined by a straight edge at the 'slate's' head. The edge of the tail is apparently crudely chamfered, presumably to aid run off of rain water. The tail's corners also appear to have been slightly trimmed.

Shape: slightly tapered, with shoulders
Completeness: mostly complete
Weight: 420g

Fixing Hole Shape: sub-rectangular (dimensions 4.5mm x 4mm)
Fixing Hole Comments: The surface is damaged on the back surface removing any diagnostic evidence, the bed side has been subject to secondary working.

Mortar: Traces of the mortar bed on the back surface survive (length 42mm, surviving thickness 2mm). Some traces of the mortar bed on the bed surface of the 'slate' are also present 6mm from the tail edge.

Dimensions:
Overall length: 166mm (minimum)
Effective length: 153mm (minimum)
Exposed length / margin: 40mm

Length of unmortared overlap: 84mm (minimum)
Distance of hole below the head: 13mm (minimum)

Width of head: N/A
Width of shoulders: 101mm
Width of tail: 109mm
Maximum width: 109mm
Original maximum breadth: 109mm

Thickness of head: N/A
Thickness of tail: 3mm – 16mm (chamfer)
Maximum thickness: 16.5mm

Other Comments No evidence to suggest that the 'slate' was thinned (battered) towards its head on its bed face.

57. **Small Find No.** 1179
Context No. 110
Description: No original edges survive and the 'slate' can only be orientated with reference to the longitudinal seam visible within the mortar bed on the fragment's back surface.

Shape: uncertain-incomplete
Completeness: incomplete
Weight: 125g

Fixing Hole Shape: the fixing hole is missing
Fixing Hole Comments:

Mortar: Part of the mortar bed on the back surface of the 'slate' survives (length 89mm, thickness 11mm). A longitudinal seam is present within the mortar bed. This seam feature would have been created by the mortar squeezing up between the adjoining edges of the two 'slates' of the next course which were laid onto the mortar bed.

Dimensions:
Overall length: 143mm (minimum)
Effective length: 143mm (minimum)
Exposed length / margin: 12mm (minimum)

Length of unmortared overlap: 42mm (minimum)
Distance of hole below the head: N/A

Width of head: N/A

Width of shoulders: N/A
Width of tail: N/A
Maximum width: 62mm (minimum)
Original maximum breadth: N/A

Thickness of head: N/A
Thickness of tail: N/A
Maximum thickness: 7mm (minimum)

Other Comments No evidence to suggest that the 'slate' was thinned (battered) towards its head on its bed face.

58. **Small Find No.** 1180
Context No. 110
Description: No original edges survive and the 'slate' can only be orientated with reference to the longitudinal seam visible within the mortar bed on the fragment's back surface.

Shape: uncertain-incomplete
Completeness: incomplete
Weight: 570g

Fixing Hole Shape: the fixing hole is missing
Fixing Hole Comments:

Mortar: Part of the mortar bed on the back surface of the 'slate' survives (minimum length 51mm, thickness 7mm). A longitudinal seam is present within the mortar bed. This seam feature would have been created by the mortar squeezing up between the adjoining edges of the two 'slates' of the next course which were laid onto the mortar bed.

Dimensions:
Overall length: 189mm (minimum)
Effective length: 189mm (minimum)
Exposed length / margin: 61mm (minimum)

Length of unmortared overlap: 67mm (minimum)
Distance of hole below the head: N/A

Width of head: N/A
Width of shoulders: N/A
Width of tail: N/A
Maximum width: 166mm (minimum)
Original maximum breadth: N/A

Thickness of head: N/A
Thickness of tail: N/A
Maximum thickness: 15.5mm

Other Comments No evidence to suggest that the 'slate' was thinned (battered) towards its head on its bed face.

Appendix 8: Excavated Ceramics Inventory *(prepared by Nick Brannon)*

Methodology

Each sherd was examined by hand. Measurements of rim and base diameters, and vessel height, were recorded where possible, and are expressed in imperial measurement (as obtained during manufacture) with metric equivalence in brackets. The inventory is laid out by trench stratum sequence (latest first) and small find number (lowest number first, save where sherds join or are clearly from the same vessel). Where sherds cross-match across strata, earlier stratified sherds are not counted in MNV totals.

Abbreviations used in the inventory are as follows:- Cxt = context; no. = number; MNV = minimum number of vessels; tpq = *terminus post quem* (date after which); h'ware = hollow ware (generically, containers); f'ware = flatware (plates, shallow dishes etc); f'pot = flowerpot; e'ware = earthenware; i/e = interior and exterior; int = interior; ext = exterior; glz = glaze; horiz = horizontal; corrug = corrugated; mid = middle; Staffs = Staffordshire; Derby = Derbyshire; 'late' means the last 2/3 decades of a century; 'later' means the second half of a century; 'early' means the first 2/3 decades of a century; 'earlier' means the first half of a century.

Cxt	Small find no.	Form	Fabric	Decoration	MNV	Date (tpq)	Summary
Trench	**One**						
101	1001	h'ware body	buff e'ware	i/e yellow glz, ext feathered brown slip	1	late 17th/ earlier 18th	Staffs/Bristol slipware h'ware[1]
101	1183; 1184; 1185; 1186	h'ware 4 body	hard red e'ware		1	19th	British/Irish e'ware h'ware (f'pot?)
101	1187	large bowl; 13" [33cm] club rim	hard, dark red e'ware	int white slip from rim, i/e lustrous brown glz	1	later 19th	British/Irish large e'ware bowl (possibly Castle Espie)[2]
101	1188; 1189; 1190	f'wares, 3 body	whiteware		2	19th	British/Irish whiteware f'wares
101	1191	h'ware body	hard, dark red stoneware	i/e brown glz	1	later 19th	British/Irish stoneware h'ware
101	1192	f'ware rim spall	whiteware	i/e purple underglz slip	1	19th	British/Irish whiteware f'ware (same vessel as 102/1195)
101	1193; 1194	plate; 9" [22.9cm] rim	whiteware	upper press-moulded rim, blue small ring and dot transfer print, slight traces of gilt	1	19th	British/Irish whiteware, transfer-printed f'ware[3]
101 subtotal	**13**				**8**	**later 19th**	
102	1195	f'ware body	whiteware	ext thin bands underglz purple slip	-	19th	British/Irish whiteware f'ware (same vessel as 101/1192)
102 subtotal	**1**				**-**	**19th**	
106	1203; 1204; 1205; 1206	h'ware, 5" [12.7cm] rim, 3 body	hard red e'ware		1	19th	British/Irish e'ware h'ware (flowerpot?)
106	1207	h'ware, 4" [10.2cm] upright rim	whiteware		1	19th	British/Irish whiteware h'ware
106	1208; 1209	f'ware, 2 body	whiteware	upper underglz blue floral transfer print	2	19th	British/Irish whiteware, transfer print f'wares
106 subtotal	**7**				**4**	**19th**	

104	1196; 1197; 1198; 1199; 1200; 1201; 1202	h'ware 7 body	hard red e'ware		1	19th	British/Irish e'ware h'ware (flowerpot?)
104 subtotal	**7**				**1**	**19th**	
103	1022	h'ware body (slight horiz corrug)	hard, dark red e'ware	i/e black glz	1	mid - later 18th	Jackfield-type h'ware (possibly same vessel as 207:1113)[4]
103	1027	h'ware body (horiz corrug)	variegated red/white e'ware	i/e black glz	1	early-later 18th	British/Irish blackware h'ware[5]
103	1028	h'ware body	whiteware	ext underglz blue floral transfer print	1	early 19th	British/Irish whiteware, transfer print h'ware
103 subtotal	**3**				**3**	**early 19th**	
108	1024	upright, straight-sided bowl; 10" [25.5cm] rounded rim, 2¾" [7cm] tall, 11" [28cm] flanged base	hard buff e'ware	i/e pale brown glz with dark brown specks (ext flanged base unglzd)	1	later 18th	Staffs/Derby e'ware [dog?] bowl[6]
108	1026	large h'ware body (ext horiz corrug)	dark red e'ware	ext black glz	1	early-later 18th	British/Irish blackware, large h'ware
108 subtotal	**2**				**2**	**later 18th**	
Trench	**Two**						
206	1082	plate, 10" [25.5cm] rim	whiteware	upper underglz blue floral transfer print (blurred)	1	early 19th	British/Irish whiteware, transfer print plate
206	1083; 1084	jug?, 3" [7.7cm] rim, body	whiteware	ext underglz green floral transfer print	1	early 19th	British/Irish whiteware, transfer print jug? (206/1083 joins 207/1112)
206	1085	jug, ¾" [1.9cm] wide hand-made strap handle with thumb sprig	hard buff e'ware	i/e cream glz, strip of int white slip near rim	1	late 18th	British e'ware jug
206 subtotal	**4**				**3**	**early 19th**	
207	1087	bowl, 5" [12.7cm] rim, 15/16" [2.3cm] tall, 3" [7.7cm] footring	whiteware	overglz red/ green floral transfer print, yellow/gilt rim	1	early 19th	British/Irish whiteware, transfer print bowl
207	1091	h'ware body	cream e'ware	ext narrow horiz white/cream/ brown slip bands, int cream glz	1	later 18th	British/Irish factory-made banded h'ware[7]
207	1092; 1093	plate, body, 4" [10.2cm] footring	whiteware		1	early 19th	British/Irish whiteware plate

207	1109	h'ware body	whiteware	ext dark cream glz	1	early 19th	British/Irish whiteware h'ware
207	1110	h'ware body	porcelain	ext overglz gold splashes	1	late 18th	British/Irish porcellanous h'ware
207	1111	rod handle, h'ware	whiteware		1	early 19th	British/Irish whiteware, handled h'ware
207	1112	jug? body	whiteware	ext underglz green floral transfer print	-	early 19th	British/Irish whiteware, transfer print jug? (joins 206/1083)
207	1113	h'ware, flattened rod handle	hard, dark red e'ware	i/e black glz	1	mid - later 18th	Jackfield-type h'ware (possibly same vessel as 103/1022)
207 subtotal	**9**				**7**	**early 19th**	
Trench	**Three**						
307	1144; 1145	h'ware, 5" [12.7cm] base, basal angle	hard, dark red e'ware	i/e black glz, ext overglz gold band near base	1	mid - later 18th	Jackfield-type h'ware
307 subtotal	**2**				**1**	**later 18th**	
309	1148	h'ware [vase?] base, 2" [5.1cm] footring	porcelain		1	19th	porcelain h'ware [vase?]
309 subtotal	**1**				**1**	**19th**	
308	1146	h'ware body	cream e'ware	i/e green glz	1	19th	British/Irish e'ware h'ware
308 subtotal	**1**				**1**	**19th**	
311	1150	dish, 5" [12.7cm] rim	whiteware	int purple/red floral transfer print; black/gold rim edging	1	19th	British/Irish whiteware, transfer print dish
311	1151	bowl, 5" [12.7cm] footring	whiteware		1	19th	British/Irish whiteware bowl
311	1152	h'ware body	whiteware	(trace of) ext pale brown glz	1	19th	British/Irish whiteware h'ware
311 subtotal	**3**				**3**	**19th**	
313	1154	bottle, body	cream stoneware		1	19th	British stoneware bottle
313	1155	h'ware body	whiteware		1	19th	British/Irish whiteware h'ware
313 subtotal	**2**				**2**	**19th**	
316	1158; 1182	dish, 6" [15.2cm] scalloped rim, body	whiteware	int press-moulded dot and curlicue; upper blue floral transfer print; lower blue transfer print '2'	1	19th	British/Irish whiteware, transfer print dish
316	1159	h'ware, irregularly flattened rod handle	red e'ware	i/e lustrous black glz	1	mid - later 18th	Jackfield-type h'ware

316 subtotal	**3**				**2**	**19th**	
314	1160; 1161; 1165; 1166; 1167	h'ware body	whiteware		3	19th	British/Irish whiteware h'wares
314	1162	h'ware, body and strap handle	buff e'ware	i/e manganese mottled glz	1	early 18th	British e'ware, handled h'ware[8]
314	1163	h'ware, 7"-9" [17.8 – 22.9cm] rim	pink e'ware	i/e white tin glz	1	late 17th/ early 18th	British tin-glzd e'ware h'ware
314	1165	bottle neck/ shoulder	cream stoneware		1	19th	British stoneware bottle
314 subtotal	8				6	19th	
total	66				44		

Notes

[1] For slipware manufacturing techniques, see Erickson, M. and Hunter, R. (2001), 'Dots, Dashes and Squiggles: Early English Slipware Technology' in Ceramics in America 2001 (ed. Hunter, R.)(Milwaukee), 95-114. For British slipwares generally, see Barker, D. (1993), Slipware (Shire).

[1] Castle Espie, near Comber, Co. Down, was a brick manufactory c. 1866-1879, see Gilmore, S. (2010), 'The building of Belfast: archaeological investigations at Annadale and Castle Espie', in Battles, Boats and Bones (Belfast), 73-79. It also produced slipped ceramic vessels; many were collected by the late Frank Maxwell and were passed to Down County Museum.

[3] Transfer printing was a technique first patented by John Brooks c.1753; see Francis, P. (2000) Irish Delftware, an illustrated history (London), 10.

[4] For a discussion of Jackfield-type wares (also known as Staffordshire blackwares), see Noël Hume, I. (2001), If these pots could talk – collecting 2,000 years of British household pottery (Milwaukee), 275-277.

[5] Blackwares, particularly those with variegated (agate) fabrics are often uncritically attributed to production sites in Buckley, Flintshire, North Wales. Francis, however, has shown that black-glazed, coarse earthenwares were being produced at the Belfast 'Potthouse' c.1725 (Francis (2000) 18-19) and it is likely that such wares were being produced by other 18th-century Irish potters.

[6] For a succinct summary of the role of post-medieval household animals/pets see Thomas, R. (2010), 'Translocated Testudinidae: the earliest archaeological evidence for land tortoise in Britain', in Post-Medieval Archaeology, 44:1, 165-171. Dog dishes 'are very heavily potted to prevent them slipping on floors and it is this aspect which betrays their function' (Coysh, A.W. and Henrywood, R.K. (2001), The Dictionary of Blue & White Printed Pottery 1780-1880 (vol.1), 110); these authors note that dog dishes were produced by Brameld & Co, Yorkshire (floruit 1806-1842) and Spode (fl.1784-1833).

[7] For manufacturing techniques, see Carpentier, D. and Rickard, J (2001), 'Slip Decoration in the Age of Industrialization' in Ceramics in America 2001 (ed. Hunter, R.)(Milwaukee), 115-134. For factory-made slipwares generally, see Sussman, L. (1997), Mocha, Banded, Cat's Eye, and Other Factory-Made Slipware (Monograph Series of the Council for Northeast Historical Archaeology, No.1, Boston University). For Irish examples, see Francis, P. (2001) A Pottery by the Lagan (Queen's University, Belfast).

[8] Manganese-mottled (also known as tortoiseshell) wares were produced in considerable volume at Stoke on Trent in the period 1700-1720, but were common throughout the 18th century, with production also at Buckley and Derby. See Williams, P. (2003), 'The Talbot Pit Group', Ceramics in America 2003 (ed. Hunter, R.)(Milwaukee), 111-137.

Summary of ware types by trench (subjective)

	table wares	**kitchen wares**	**other**
Trench 1	9	5	3 f'pots; 1 dog bowl
Trench 2	9	1	-
Trench 3	9	5	2 bottles
totals	27	11	6

Summary tabulation

Cxt	Nos of sherds.	MNV	Cxt Date (tpq)
10 l	13	8	later 19th
102	1	-	19th
106	7	4	19th
104	7	1	19th
103	3	3	early 19th
108	2	2	later 18th
206	4	3	early 19th
207	9	7	early 19th
307	2	1	later 18th
309	1	1	19th
308	1	1	19th
311	3	3	19th
313	2	2	19th
316	3	2	19th
314	8	6	19th
totals	66	44	

Discussion

It is clear from the totals of sherd count (66) against Minimum Number of Vessels (44), a ratio of 3:2, that, even taking into account the small-scale sampling approach, the pottery assemblage is very unlikely to reflect breakage *in situ*. The assemblage more closely resembles those excavated in cultivated gardens or fields, redeposited from kitchen middens used in manuring, with sherds widely scattered over time. Since Blundell House was unoccupied from at the latest 1758, only a small proportion of the pottery assemblage could be argued to derive from nearby occupation. Rather, most of the sherds would appear to have been imported within soils used to 'make up' ground levels.

The *terminus post quem* dating of the **pottery-bearing excavated strata** reveals nothing earlier than the later 18th century. The oldest sherd (Trench 1: 101:1001), from a Staffordshire/Bristol slipware vessel, was in a 'modern' context, stratified above later pottery. The same can be said of pottery stratification (eg, the Jackfield-type ware 307: 1144, 1145) in Trench 3. Note the absence (albeit this is also absence of evidence) of creamwares, pearlwares or 18th-century stonewares in the assemblage.

Appendix 9: Samples Register

Sample No.	*Context No.*	*No. of bags*	*Purpose*	*Retained ?*
1	105	1	Comparative purposes (not to be processed)	Yes
2	103	1	Comparative purposes (not to be processed)	Yes
3	108	1	Twenty stone inclusions for identification	Yes
4	113	1	Recovery of small inclusions (mortar) and finds	Yes
5	117	1	Recovery of small inclusions (mortar) and finds	Yes
6	115	1	Mortar sampled from mortar 'pad'	Yes
7	112	1	Mortar from angled stone revetment	Yes
8	311	1	Charcoal fragments (for identification)	Yes
9	313	1	Charcoal fragments (for identification)	Yes