Data Structure Report: Geophysical Survey and Excavation at Dundrum Castle, County Down 2012 and 2013

Volume I

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> (Licence Nos. AE/12/71 and AE/13/101) (SMR No. DOW 044:006)

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1 Summary

1.1 Introductory Remarks

1.1.1 Geophysical survey and two seasons of archaeological excavations (Licence Nos. AE/12/71 and AE/13/101) were undertaken at Dundrum Castle, County Down (Sites and Monuments Record No. DOW 044:006) during 2012 and 2013. The survey and excavations took place both within the inner and outer wards of the castle, as well as within the extramural area to the west of the curtain wall of the castle. The opening phase of the 2012 excavations was filmed for broadcast as an episode of the popular Time Team television programme. This fieldwork was a continuation of a project which began in 2009 with a small-scale excavation within Blundell's House – a seventeenth-century domestic building in the southern part of the outer ward. The principle aim of the Dundrum Castle project is to refine and expand the known archaeological sequence of the site. The work at Dundrum Castle is being undertaken with a view improving both the presentation of the monument to the public and informing the future management strategy of the site. It represents a successful institutional partnership between the Historic Environment Division of the Northern Ireland Environment Agency and Queen's University Belfast. Together with a consideration of the history of the site and an architectural survey of the standing remains of the castle it is intended to publish the archaeological investigations conducted at Dundrum Castle in a single volume which will form part of the Northern Ireland Archaeological Monograph series. As well as detailing the results of the fieldwork conducted in 2012 and 2013, this report outlines a programme of the future work, including a further season of excavation, required to meaningfully complete the project.

1.2 Geophysical Survey

1.2.1 In January 2012 resistivity and magnetometry geophysical surveys were conducted in partnership by Tim Young of GeoArch Ltd and the Centre for Archaeological Fieldwork at Queen's University Belfast within the inner and outer wards, and across parts of the extra-mural areas of the site to the south and west of the outer ward. The surveys revealed evidence for extensive spade cultivation within both wards, the presence of an abutting structure or complex of features adjacent to the circular great tower within the inner ward, and two hitherto unidentified structures within the outer ward that excavation subsequently demonstrated were lime kilns, as well as demonstrating that the terrace located immediately to the west of the outer ward was artificial.

1.3 Excavations 2012-2013

- 1.3.1 A total of nine trenches were excavated within both wards and the extra-mural area to the west of the castle during the summer months of 2012 and 2013. Mostly small in scale, all of the trenches were targeted at addressing specific research questions that addressed the principle aim of the project. In order to minimise the removal of valuable archaeological deposits, a number of old trenches dating to Dudley Waterman's pioneering investigation of the monument during the 1950s were re-opened and then extended. The excavations were also conducted with a presumption in favour of the preservation in situ of significant archaeological horizons and features.
- 1.3.2 Within the inner ward the truncated remains of a slightly elliptical, clay-bonded, stone platform were investigated. Excavation demonstrated that this structure represented the remains of a building platform located upon the original summit of the hill. Although no direct dating evidence was retrieved, it is argued that this platform dates to the pre-Norman

occupation of the site. Analysis of the available historical and literary evidence, combined with the study of finds recovered during Waterman's earlier excavations, suggests that the site was a high-status, secular settlement during the Early Christian period. Excavation across the outlying rock-cut and earthwork defences to the west of the inner ward is thought to have uncovered the remains of an enclosing ditch and counterscarp bank dating to this pre-Norman phase of occupation. Excavation within the inner ward also demonstrated that a sequence of deposits previously identified as the bank of a ringwork-like defence dating to the 'campaigning' phase of the Anglo-Norman conquest of Ulster was in fact a series of levelling deposits that post-dated the construction of the curtain wall of the inner ward. Interpreting the archaeological evidence in the light of the known historical sources suggests that these levelling deposits formed part of an extensive episode of remodelling of the inner ward that apparently involved the dismantling of the original hall and the erection of the circular great tower.

1.3.3 One of the geophysical anomalies within the outer ward was targeted for excavation and was demonstrated to be a remarkably well-preserved lime kiln of medieval date. Built into the back of a quarry and filled in shortly after its last firing, the bowl of the kiln preserved five metres of medieval stratigraphy that contained a wealth of artefacts that will cast considerable light upon the economic role of Dundrum Castle during the Anglo-Norman period. The lime kiln is provisionally dated on numismatic evidence to the second half of the thirteenth century, although investigative conservation of the coin and specialist analysis of the other finds will be required before this date can be confirmed. Excavation of a trench that abutted the curtain wall of the outer ward failed to recover any definitive evidence for the date of the outer ward. A trench was also excavated to the west of the outer ward across the artificial terrace that was identified during the geophysical survey. This feature is tentatively identified as being a formal garden feature dating to the first half of the seventeenth century.

1.4 Recommended Future Work

1.4.1 The report concludes with a recommended programme of future work for bringing the project to a successful conclusion. It is anticipated that the separate strands of historical, architectural and archaeological evidence will inform an interpretive narrative that explores how the castle and its setting has formed a series of material expressions of power, status and property ownership that reflects much of the history of Ulster. It is also recommended that a survey of the historically attested manorial estate associated with the site is undertaken in order to illustrate the non-military functions of the castle by placing it within its wider economic and landscape context. To achieve this a further season of limited excavations adjacent to the secondary gatehouse and within the northern corner of the outer ward are proposed. It is also recommended that a landscape survey of the manorial estate associated with the castle is undertaken. Proposals for additional historical and pictorial research are outlined, as well as a recommendation for the completion of an architectural survey of the monument. Recommendations for a programme of radiocarbon dating and specialist analysis of the artefacts recovered during the course of the excavations are also detailed. A phased, project management plan for completing the proposed programme of work accompanies the recommendations.

2 Introduction

2.1 General

- Dundrum Castle (Sites and Monuments Record No. DOW 044:006) is situated on the summit of a prominent hill 2.1.1 overlooking the small coastal town of Dundrum and the adjacent tidal inlet of Inner Dundrum Bay. The site has a long and complex history. The surviving upstanding remains consist of an inner (upper) and an outer (lower) ward. The inner ward dates to the Anglo-Norman period and contains the remains of a large circular tower and an apparently asymmetrical gatehouse with a single projecting semi-circular tower, whilst a seventeenth-century domestic structure, known as Blundell's House, is located on the edge of the outer ward. Artefactual and place-name evidence suggests that the Anglo-Norman castle was, almost certainly, built upon the site of an enclosed, high-status, settlement dating to the Early Christian period. Following the decline 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 other prominent Gaelic figures and various representatives of the Crown. During this later medieval phase the upper floor of the circular tower within the inner ward was significantly altered. It is uncertain whether the outer ward dates to the Anglo-Norman period or the later Gaelic phase of medieval occupation. Following the Nine Years' War (1594-1603) 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, local tradition maintains that the castle was slighted by Parliamentarian forces in the mid seventeenth century. There is no evidence to suggest that the castle was occupied after this date, although its associated manorial estate continued to be farmed by tenants of the Blundell family. During the late eighteenth century the castle and its estate passed into the hands of the Hill family and became part of the Downshire Estates. Dundrum Castle was placed into State Care by Arthur Robin Ian Hill, the Eighth Marquess of Downshire in 1954.
- Resistivity and magnetometry geophysical surveys were conducted by the Centre for Archaeological Fieldwork at Queen's 2.1.2 University Belfast, in partnership with Tim Young of GeoArch Ltd, in both the inner and outer wards, as well as across the extra-mural terraces located immediately to the south and west of the outer ward in January 2012. The geophysical surveys were followed by two seasons of small-scale excavations, which were jointly directed by Philip Macdonald (Queen's University Belfast) and Liam McQuillan (Northern Ireland Environment Agency: Historic Environment Division) in both the inner and outer wards, as well as in extra-mural areas, during the summers of 2012 and 2013 (Licence Nos. AE/12/71 and AE/13/101). The geophysical surveys and excavations were generously funded by the then Northern Ireland Environment Agency: Built Heritage. The 2012 excavations were conducted in two phases. Initially, the excavations had an evaluative character and were filmed for an episode of the television programme Time Team, which was first broadcast under the title 'The Lost Castle of Dundrum' on the 24th February 2013.1 Following the departure of the cameras, the excavation progressed on a research footing. During the 2012 season a total of six trenches were opened, five in the inner ward (Trench Nos.1-4 and 6) and a sixth within the outer ward (Trench No.5). The 2013 season of excavations was essentially a continuation of the research phase of the 2012 excavations. Within the inner ward Trench No.4 was extended towards the circular great tower, whilst within the outer ward excavation within Trench No.5 was continued. In addition, new trenches were opened up within both the outer ward (Trench No.7) and the extra-mural areas immediately to the west

¹ The broadcast programme can be viewed at http://www.channel4.com/programmes/time-team/4od#3513438 (consulted on the 21st March 2014). Additional video footage from the *Time Team* phase of the 2012 excavations can be accessed at the *Time Team* Digital website at http://www.timeteamdigital.com/digs/anglo-norman-castle?page=2 and http://www.timeteamdigital.com/digs/anglo-norman-castle?page=3 (all consulted on the 21st March 2014).

of the monument (Trench Nos. 8 and 9). It is notable that whilst the 2012 excavation season was focussed principally on the inner ward, in 2013 excavation was largely concentrated in the outer ward and extra-mural areas of the castle.

2.1.3 This report details the results of the geophysical surveys and both seasons of excavation and assesses them within the historical, architectural and landscape context of Dundrum Castle. A detailed analysis of the historical background (Section 2.5) of the monument, as well as brief reviews of early representations of the castle (Section 2.6), previous archaeological investigations of the monument (Section 2.7) and the evidence arising from an architectural study of the ruins (Section 2.8) are incorporated into this introductory chapter. The results of the geophysical surveys are described in Chapter 3, whilst Chapter 4 is devoted to a comprehensive account of the 2012 and 2013 excavation results. The success of the fieldwork and the historical significance of the excavation results are considered in a concluding discussion (Chapter 5), whilst a number of recommendations for further work necessary to meaningfully publish the project, including a further season of excavation, are presented in Chapter 6. The data generated during the course of the excavations is detailed in a series of appendices compiled into an accompanying volume, along with a tabulated report on the results of processing of soil samples (Appendix 9) and copies of reports in the local press on the excavations (Appendix 10).

2.2 Research Objectives

- 2.2.1 It is intended that along with the 2009 excavations conducted at Blundell's House (Macdonald 2011a), the geophysical surveys and excavations undertaken in 2012 and 2013, along with a further season of excavations, will be published in a single volume that will form part of the Northern Ireland Archaeological Monograph series. In addition to reporting on the results of the excavations, the monograph will present a reassessment of Dundrum Castle that draws the separate to evidential strands of the castle's architecture, history and landscape setting into a single narrative that will form a significant contribution to castle studies and situate Dundrum Castle in both its local and wider, historical and archaeological contexts. It is envisaged that, in addition to the academic publication represented by the monograph, the results of this research project will also be disseminated in a diverse range of traditional and innovative formats easily accessible to both the local population and visitors to the monument. With the publication of an account of the 2009 excavations in the *Lecale Review* (Macdonald 2011b) this process of wider dissemination has already begun.
- 2.2.2 The principal aim of the fieldwork reported upon here is to refine and expand the known archaeological sequence of Dundrum Castle with a view to improving both the presentation of the monument to the public and informing the future management strategy for the site. In order to do this the following six research themes and priorities have been identified by the Northern Ireland Environment Agency's Inspectorate:
 - Establish the character and date of the pre-Norman settlement at Dundrum.
 - Investigate the validity and character of the hypothesised, initial, 'campaigning' phase of Anglo-Norman fortification.
 - Determine the date of the great circular tower and the place of its construction within the developmental sequence of the inner ward.
 - Establish the date of the outer ward.
 - Investigate the nature of the 'kiln' anomalies in the outer ward first identified during the 2012 geophysical survey.
 - Investigate the character of the near-rectangular artificial terrace located to the west of the outer ward.

2.2.3 These research themes have variously arisen from an integrated study of the upstanding remains and topography of the site, provisional analysis of the results of the geophysical surveys conducted at Dundrum Castle in January 2012 and the results of the 2009 excavations at Blundell's House (Macdonald 2011a). The research themes are all directly relevant to informing the content of the proposed monograph on Dundrum Castle and the excavated trenches were all targeted at addressing the priorities outlined in Paragraph 2.2.2. The excavation methodology employed has been designed to extract the maximum amount of information relevant to addressing the research priorities, whilst simultaneously reducing the removal of the valuable archaeological deposits preserved at Dundrum Castle to a practical minimum. In practice this has been achieved by keeping trench sizes to a minimum and, where possible, reopening old excavation trenches, rather than excavating previously undisturbed areas (see Section 4.3).

2.3. Geology and Soils

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 Inner Dundrum Bay. The underlying geology of the site consists of the interbedded red shales and greywacke of the Hawick Group of the Southern Uplands-Down-Longford Terrane (Anderson 2004, 53), which are arranged in a series of near-vertically dipping beds. These mudstones and sandstones formed in deep water mainly as a result of submarine slumps or turbidity currents that transported large quantities of sandy sediments down the sides of a subsiding geosyncline (Wilson 1972, 18). The greywackes vary in thickness from a few centimetres to a couple of metres thick, whilst the interbedded shales are generally thinner and where exposed at Dundrum tend to break into thin chips with roughly parallel upper and lower surfaces. These chips of shale form a common inclusion within the deposits excavated at Dundrum Castle and can give archaeological deposits the appearance of being a natural mineral subsoil. The bedrock supports a thin, free-draining, mineral soil of brown ranker (information derived from the Geological Survey of Northern Ireland's Strangford Lough Soil Map (Sheet 21) 1:50000). No deposits of glacial till have been uncovered at the site during the course of the excavations. The natural subsoil, where it does occur, is a sterile, mineral-rich deposit dominated by small chips of weathered shale and is usually restricted to small 'pockets' formed by hollows within the uneven surface of the bedrock. For a discussion of how the underlying geology affected the geophysical surveys conducted at the site cf. Section 3.3.

2.4 Place-name Evidence

2.4.1 The earliest recorded forms of the place-name Dundrum are *Duni Dromma* and *Dún Droma* ('hillfort of the ridge'). The name *Duni Dromma* is featured in a tract on the mothers of the Saints of Ireland preserved within the Book of Leinster (formerly known as *Lebar na Núachongbála*), which is a composite work compiled *c*.1160 AD (Trinity College Library, MS no.1339, shelf ref. H.2.18) and from which the form *Duine droma* preserved in the late fourteenth- to early fifteenth-century (Great) Book of Lecan (*Leabhar (Mor) Leacain*) is derived (Royal Irish Academy Ref. MS 23 P 2: Cat. No. 535; Reeves 1853, 271). The form *Dún Droma* is featured in an entry for 1147 AD in the *Annals of the Four Masters* (MacCarthy 1895, 526-529, 624-625, fn.18) that was presumably derived from a now lost, earlier, annalistic source. It is argued below (see Paragraph 2.5.1) that the 'hillfort of the ridge' was located upon the site of the Anglo-Norman castle of Dundrum. During the Anglo-Norman period, Dundrum Castle was known as *Castrum de Rath* (Savage-Armstrong 1906, 17, 19; Orpen 1909). A fuller consideration of both the place-name evidence and the Gaelic literary references attributed to Dundrum are integrated into the opening section of the account of the historical background of the monument (see

Paragraphs 2.5.1 - 2.5.6). The website of the Northern Ireland Place-name Project provides a comprehensive summary of the place-name evidence relating to Dundrum.²

2.5 Historical Background

- 2.5.1 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 historical reference being a passage in the Annals of the Four Masters, dating to AD 1147, in which the Ulidian army is described as having been pursued by an army 'led by Muircheartach Mac Neill Ua Lochlainn and the Cinel-Eoghain, and Donnchadh Ua Cearbhaill and the Airghialla ... till they reached the shore of Dun-droma, in Leath-Chathail' where 'the Ulidians gave them battle ... on the festival of Paul and Peter; but ... were defeated, and a great number of them slain, together with Archu Ua Flathrai, lord of Leath-Chathail' (O'Donovan 1856, 1082-1083, fn.q). Residually-deposited, highstatus artefacts of Early Christian date were recovered during Waterman's excavations at Dundrum Castle (Waterman 1951, 23) and, as O'Donovan suggested (1856, 1082, fn.q), 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. Although it is yet to be demonstrated beyond reasonable doubt, it is argued below that the revetted platform excavated in 2012 within the inner ward (see Paragraphs 4.4.1 - 4.4.7) and the outer ditch and associated counterscarp bank excavated in 2013 (see Paragraphs 4.6.1 - 4.6.11) are both elements of the eponymous, pre-Anglo-Norman 'hillfort of the ridge'. Whether the site was a residence of Archu Ua Flathrai, lord of Leath-Chathail is a more contentious question.
- 2.5.2 It is unknown from what source, or sources, the 'Four Masters' derived their account of the battle on the 'shore of Dundroma' in 1147. Two of the principal sources for the compilation of the first part of the *Annals of the Four Masters*, which extends to 1207, were the *Annals of Ulster³* and the *Annals of Loch Cé* (Simms 2009, 24; Cunningham 2010, 46-54). Unfortunately, the date of 1147 falls into a gap within the surviving coverage of both of these sources, nor is this particular incursion into Ulidia recorded within the *Annals of Tigernach*. The gap in the mid-twelfth century section of the *Annals of Ulster* and *Loch Cé* is, curiously, also mirrored in the manuscript of the *Annals of Inisfallen* (Simms 2009, 29). Gearóid Mac Niocaill has insinuated that the relevant folios from these sets of annals may have been abstracted by a single antiquarian who had access to all of them (Mac Niocaill 1975, 25). If this is the case, then Katherine Simms has noted that the 'abstraction' must have occurred after Sir James Ware numbered the pages of the Trinity manuscript of the *Annals of Ulster* at some point between 1620 and 1632 (Trinity College Library, MS no.1282, shelf ref. H.I.8; cf. Simms 2009, 29). Given the positive light the 1147 reference within the *Annals of the Four Masters* throws upon a military victory of one of the Ó Néill kings of Tír Eoghain, it is reasonable to suggest that the passage may have been derived from a now lost section or copy of the *Annals of Ulster*. The *Annals of Ulster* were compiled in the late fifteenth century by the scribe Ruaidhrí Ó Luinín, under the patronage of Cathal Óg MacMaghnusa, the archdeacon of Clogher on the island of Senat (Belleisle, Co.

² http://www.placenamesni.org/resultdetails.php?entry=12865 consulted on the 21st March 2014.

³ The only specific manuscript confidently identified as being consulted by the 'Four Masters' is the copy of the *Annals of Ulster* held by Trinity College Library, (MS no.1282, shelf ref. H.I.8) cf. Gwynn 1958-59, 370-371.

Fermanagh). Not unsurprisingly, given its compilation in Fermanagh, the *Annals of Ulster* gives an especial prominence to the deeds of not only the Mág Uidhir (Maguire) rulers of the area, but also their Ó Néill overlords (Simms 2009, 22).

- 2.5.3 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 the adjacent part of Dundrum Bay. Taken at face value, the 1147 reference also appears to indicate 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 Blackstaff which physically define the western boundary of the peninsula cf. Buchanan 1997, 277. Orpen, however, has questioned this assumption by noting that it was a common practice of the 'Four Masters' to anachronistically add later names to the annalistic notices they compiled in order to indicate the location of the places mentioned (1909, 26). Orpen believed that Dundrum did not become part of Lecale until after the Anglo-Norman conquest of Ulster. Whilst this is a historically plausible suggestion, it may have prompted Orpen's assumption that the reference to Lecale was an interpolation of the 'Four Masters'. The 'Four Masters' reworded and abbreviated many, if not most, of the original entries that they compiled and their work must be considered the product of an extensive process of editing and revision of the available sources, rather than a faithful transcription of entries found in earlier annals (Simms 2009, 20, 31-33; Cunningham 2010, 102-135). The question to what degree the 'Four Masters' added new material into their work is essentially unanswerable due to the subsequent loss of much of their source material. Consequently, Orpen's suggestion that Lecale was not extended to include Dundrum prior to the Anglo-Norman period cannot be dismissed.
- 2.5.4 The lament Aeidhe ma Chroidhe, Ceann Bhriain, composed by the thirteenth-century poet Giolla Brighde Mac Conmidhe concerning the death of his patron Brian Ó Néill of the Cinel Eoghain and the defeat of the Irish at the battle of Downpatrick in 1260, contains a reference to another battle 'fought ... at another time at Dún-droma Dairinne' (O'Donovan 1849, 158-159). The poem survives in five manuscripts, the earliest of which was compiled in the early seventeenth century (National Library of Ireland Ref. No. MS G992). O'Donovan noted that Dún-droma Dairinne was 'the fort of Dairinne's ridge, (Dundrum,) in the barony of Lecale, county of Down ... here are the ruins of a strong castle of great antiquity, which occupies the site of the primitive dun, or earthen fort' (1849, 159, fn.s). In her comprehensive contribution to the Northern Ireland Place-name Project website's entry on the townland of Dundrum, Kay Muhr notes that a more accurate translation of Dún-droma Dairinne is probably 'Dún Droma / Dundrum of the Dáirine'.⁴ Ptolemy's Geography, compiled in Alexandria in the second century AD although, for the Irish section at least, derived from significantly earlier sources, consists of a gazetteer of place-names and various peoples whose locations are recorded using a system of latitudes and longitudes. From these co-ordinates it is possible to construct 'Ptolemy's Map', which shows that a tribe called the Darini were approximately located in either the south Antrim or north Down area (e.g. Mallory and McNeill 1991, 143-146, fig.5.1; Waddell 2010, 395, fig.10.1). Although in Irish tradition the Dáirine, meaning Érainn, were usually located in Munster (Hogan 1910, 329, s.v. dairine; O'Rahilly 1946a, 7; O'Brien 1962, 461, s.v. Dáirfhine), O'Rahilly has argued that their name implies descent from Darios, later Dáire, who was a traditional ancestor of both the Dál Riada of the Antrim Glens and the Ulaidh or Dál Fiatach of Lecale (1946a, 7, fn.4; 1946b, 7). This association of the Dáirine with the Ulaidh of Downpatrick confirms O'Donovan's identification of Dún-droma Dairinne with Dundrum, even if the accuracy of his translation of the place-name is questionable.⁵ Notwithstanding O'Donovan's suggestion 'that the battle is not noticed in

⁴ http://www.placenamesni.org/resultdetails.php?entry=12865 consulted on the 21st March 2014.

⁵ Richard Bartlett placing of the *Darnii* in mid-Antrim on his *c*.1602-1603 map the 'Generalle Description of Ulster' (National Archives, London Ref. MPF 1/35; reproduced in Andrews 2008, pl.19) adds little to the identification of Dún-droma Dairinne with Dundrum. Bartlett's use of four obsolete Ptolemaic tribal names

the Irish annals' (1849, 159, fn.s), it is a distinct possibility that the battle at Dún-droma Dairinne where the Ó Néill were victorious referred to in the *Aeidhe ma Chroidhe, Ceann Bhriain* was that recorded in the *Annals of the Four Masters* for 1147 (see Paragraphs 2.5.1 - 2.5.3).

- Eugene O'Curry suggested that the site now occupied by Dundrum Castle was probably Dún Rudhraighe 'Rudhraighe 's 2.5.5 hill-fort' the location of Bricriu of the Poisoned Tongue's feast in the story of Fled Bricrenn in the Ulster Cycle of Tales (1873, 17; see also O'Laverty 1878, 69, fn.; for John T. Koch's recent revision of Henderson's translation of the story cf. Koch and Carey 2003, 76-105).⁶ Despite recent reiteration (i.e. MacKillop 1998, 51), this identification remains problematic. Although Inner Dundrum Bay was known in early Irish as Loch Rudhraighe 'Rudhraighe's Lough', Rudhraighe (a personal or tribal name) was used in medieval Irish tradition to name the common ancestor of the Ulster Cycle warriors, and this is almost certainly the meaning intended within the *Fled Bricrenn*. It is more plausible to suggest that Bricriu's fort of Dún Rudhraighe was located near Loughbrickland in Co. Down. The townland of Brickland and the adjacent Lough Brickland lake (Irish Loch Bricreann, later Loch Bricleann) are both probably named after Bricriu himself and intended to indicate the site of the Fled Bricrenn story cf. Muhr 1996, 27-28, 54-57. Although there is not a hill-fort within Brickland comparable with that which, it is argued below, formed the pre-Norman enclosure at Dundrum (see Paragraphs 4.6.2 and 4.6.11), the townland does contain a large (external diameter 45 - 52 metres), elliptical, henge-like enclosure with an external bank and wide, internal ditch, which contains no obvious entrance and is located upon a prominent hilltop overlooking the lake of Lough Brickland. This site is known as Water Hill Fort and has previously been misidentified as a rath and a ring barrow (SMR No. DOW 034:075; Anon. 1966a, 154, no.460, fig.94). Given that the Fled Bricrenn explicitly describes Bricriu as constructing Dún Rudhraighe 'so as to be like [the assembly hall] of the Cráeb Ruad ('Red Branch') in Emain Macha' (Koch and Carey 2003, 76), itself identified with the henge-like enclosure of Navan Fort, Co. Armagh (SMR No. ARM 012:015; Waterman 1997; Lynn 2003; Neill 2009, 182-197, no.133, figs.84-89, pls.141-154), it is reasonable to suggest that the comparable Water Hill Fort is the site of Dún Rudhraighe.
- 2.5.6 The meaningful study of the medieval history of Dundrum Castle only began in the early twentieth century with the realisation that the ruins were those of the historical '*Castrum de Rath*'. In a paper read to the Royal Society of Antiquaries of Ireland in November 1908, Goddard H Orpen noted that whilst '*studying the early Anglo-Norman fortresses in Ulster, I was struck by two somewhat anomalous facts, viz.: that the Castrum de Rath, which is repeatedly mentioned in our thirteenth-century records, and was clearly one of the most important castles in John de Courcy's lordship, has never been identified with any existing remains; while the Castle of Dundrum, the remains of which clearly manifests its importance in Anglo-Norman times, is, apparently, never mentioned. Both anomalies are cleared away at the same time by the simple hypothesis that the castle of Rath and the castle of Dundrum are one and the same' (Orpen 1909, 23). Orpen had already intimated in print his belief that the <i>Castrum de Rath* could be identified with Dundrum Castle cf. Orpen 1908, 245, fn.1, however, it was his paper of November 1908, which was published the following year, that convincingly laid out the case

on this map is almost certainly a result of its creation being largely an act of compilation from existing sources, rather than the product of original survey and fieldwork (Andrews 2008, 40).

⁶ *Fled Bricrenn* ('Bricriu's Feast') was probably composed in the eighth century, although the story was undoubtedly drawn from significantly earlier antecedents. Four variant texts of the story survive, the earliest of which is preserved in the *Leabhar na hUidre* ('Book of the Dun Cow') (Royal Irish Academy Ref. MS 23 E 25: Cat. No. 1229; published as a lithograph facsimile by Longan and Gilbert 1870), which was compiled by Moelmuiri Mac Ceileachair whose death in AD 1106 is recorded by the 'Four Masters' (O'Donovan 1856, 982-983, fn.d). *Fled Bricrenn* should not be confused with *Fled Bricrenn ocus Loinges mac nDuíl Dermait* ('The Feast of Bricriu and the Exile of the Sons of Dóel Dermait') which is a separate tale within the Ulster Cycle that can be dated on linguistic grounds to the ninth century AD and survives in only one manuscript, the *Leabhar Buidhe Lecain* ('Yellow Book of Lecan') (Trinity College Library, MS no.1318, shelf ref. H.2.16), in a section dated to the late fourteenth century (Hollo 1992, 18; 1994).

for the identification and simultaneously solved both a historical and an archaeological problem that had long bedevilled studies of medieval Ulster. Although Orpen's identification of Dundrum Castle with the *Castrum de Rath* has been universally accepted since the publication of his paper in 1909, he may not have been the first scholar to make this connection. In his *Genealogical History of the Savage Family in Ulster*, George Francis Savage-Armstrong (1845-1906) twice noted that the castle of 'Rath' was Dundrum Castle cf. 1906, 17, 19. Whether Savage-Armstrong, who is now best remembered as a poet, but had been a professor of history and English literature at Queen's College Cork from 1870-1905 (O'Donoghue 2004; Lunney 2009a), independently identified Dundrum Castle with the historic *Castrum de Rath*, had been privately informed by Orpen of the connection prior to Orpen's lecture in 1908, or was the unacknowledged source of the idea which Orpen developed into his 1909 paper is uncertain.⁷

- 2.5.7Prior to the identification of Dundrum Castle with the historical 'Castrum de Rath', the Anglo-Norman history of the site was, not surprisingly, 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 that 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 (e.g. 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).
- 2.5.8 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 brother-in-law the Manx king Rognvaldr (frequently referred to in the historical literature by either the Gaelic form of his name 'Rag(h)nall' or the Latinized form 'Reginald'), commenced a siege of the '*castellum de Rath*' prior to their forces being routed by Hugh de Lacy. The Manx Chronicle records that '*In the year 1205 John de Courcy regained his strength and collected a massive force, and also took with him Reginald*

⁷ Orpen is not acknowledged in the preface of the *Genealogical History of the Savage Family in Ulster* (Savage-Armstrong 1906, vii-x), suggesting that the two authors had not communicated, although Savage-Armstrong's death during the final preparations to print the book may have prevented an intended acknowledgement to Orpen being included in the book's preface. Orpen would have almost certainly been aware of Savage-Armstrong's work. Although ostensibly a work of family history, the *Genealogical History of the Savage Family in Ulster* was favourably reviewed, and its relevance to the study of Anglo-Norman Ulster noted, in the final part of the 1906 volume of the *Journal of the Royal Society of Antiquaries of Ireland* (Anon. 1906). Orpen, however, failed to cite Savage-Armstrong's work in either his 1909 paper, which contains a reference to the Savages of Lecale (1909, 28, fn.1), or the four volumes of his *Ireland under the Normans* (1911a; 1911b; 1920a; 1920b). Savage-Armstrong's references to the *Castrum de Rath* (1906, 17, 19) are not made in his earlier genealogical study of the *Ancient and Noble Family of the Savages of the Ards* (Armstrong 1888), suggesting that he was only made, or became aware of, the identification with Dundrum Castle after this date.

King of the Isles with about a hundred ships to Ulster. When they landed at the haven called Strangford they laid siege to the castle of Rath in a leisurely manner. However, Walter de Lacy arrived on the scene with a large army and put them to flight in great confusion. From that time on John de Courcy never recovered his estate' (Broderick 2004, f.41r)⁸. Rognvaldr and de Courcy's expedition is also recorded in the Annals of Loch Cé thus 'A fleet was brought by John de Curci from Innis-Gall, to contest Uladh with the sons of Hugh de Laci and the Foreigners of Midhe. No good resulted from this expedition, however; but the country was destroyed and plundered; and they afterwards departed without obtaining power. John made his covenant and amity with O'Neill and the Cenel-Eoghain' (Hennessy 1871, 234-235).

2.5.9 Although this is not the place to rehearse in detail the well-known story of the Anglo-Norman Conquest of Ulster, John de Courcy was the Anglo-Norman knight who, leading a comparatively small army drawn from the Dublin garrison of the English king Henry II, had begun his successful conquest of the kingdom of Uladh with the defeat of Ruaidrí Mac Duinn Sléibe at Downpatrick in 1177AD.9 In a few short years of campaigning, de Courcy established the Anglo-Norman settlement of much of eastern Ulster. The scope of de Courcy's ambitions in conquering Ulster are perhaps best reflected by Jocelin of Furness who styled him Princeps Ulidiae (Prince of Ulster) in the dedicatory introduction of the Vita Patricci (Life of Saint Patrick) which de Courcy had jointly commissioned with the Irish ecclesiastics Archbishop Tomaltach of Armagh and Bishop Malachy of Down (Birkett 2010, 141). That royal authority was distant and largely ineffective would have encouraged de Courcy in his ambitions and, in essence, his lordship in Ulster was a small, semi-independent kingdom (Flanders 2008, 154). De Courcy had married Affrica Guðrøðardóttir, the daughter of the Manx king and niece of Somerled MacGillebrigte the powerful lord of Argyll and the Isles. The date of the marriage is recorded as being in 1180 within the so-called Dublin Annals of Inisfallen (Trinity College Library, MS no.1281, shelf ref. H.I.7). Although the reliability of this eighteenth-century compilation is questionable (Mac Airt 1951, vii-viii; Ó Cuilleanáin 1947, 184-185; Duffy 1995, 25, fn.167; Simms 2009, 37), a date of c.1180 for the union is not historically implausible, given that by the early 1180s de Courcy had successfully consolidated his hold on Ulster (Martin 1987a, 116; 1987b, 135). For de Courcy the marriage further secured his position within the network of political alliances that existed between the various lordships and kingdoms within the northern Irish Sea region that aspired to remain independent, or at least semi-independent, of the rising power of the English and Scottish kings (Flanders 2008, 159). Similarly, from the perspective of the Manx king Guðrøðr Óláfsson (Guthred or Godred), establishing an alliance with de Courcy through marriage to his daughter would have been perceived as a useful means of realigning Manx interests in Ireland and checking the spread of influence and power of the English crown on both sides of the Irish Sea which threatened the continued autonomy of the Kingdom of Man. The value to de Courcy of his alliance with the Manx kingdom was demonstrated by Rognvaldr's assistance following his expulsion from Ulster in 1204, although what the cost to de Courcy would have been if their attempt to re-take Ulster in 1205 had been successful remains an open question. Although the precise circumstances surrounding, and reasons for, de Courcy's fall from power remain are uncertain (Martin 1987b, 135; McDonald 2007, 128), what is clear is that he eventually aroused the enmity of King John who sanctioned de Courcy's rivals, the de Lacys, to invade and seize Ulster. As a consequence, John de Courcy was dispossessed of his lordship in 1204 (Flanders 2008, 163-164). Although de Courcy gave hostages to

⁸ The Manx Chronicle is a reasonably reliable source and the siege of Dundrum it records can be accepted as having taken place despite being only partially confirmed by only one other source - *The Annals of Loch Cé*. The Manx Chronicle was composed in the thirteenth century, probably in the Cistercian abbey of St Mary's, Rushen and possibly as a commission to mark the dedication of St Mary's Church in Rushen in 1257. The chronicle survives in the form of a fourteenth-century Latin copy (British Library Ref. Cotton MS Julius A VII) cf. Broderick 2004, vii; McDonald 2007, 37. As a source the Manx Chronicle is not without problems caused, in the case of de Courcy's expulsion from Ulster and his and Rognvaldr's subsequent expedition in 1205, by it being compiled over fifty years after the events it describes. For example, it mistakenly describes de Courcy as being Rognvaldr's son-in-law, rather than brother in law cf. Broderick 2004, f.41r.

⁹ For more comprehensive accounts of what is known of the life of John de Courcy and his conquest of Ulster cf. Orpen 1911b, 8-23, 114-118; McNeill 1980, 3-14; Duffy 1995; Flanders 2008, 9-19, 127-165; Flanders *forthcoming*.

King John and had his English holdings restored, Hugh de Lacy was awarded his lands in Ulster along with the title of Earl in May 1205, prompting de Courcy to rebel. As recorded in the Manx Chronicle (see Paragraph 2.5.8), de Courcy travelled to Rognvaldr's court, 'was honourably received by him' (Broderick 2004, f.41r) and began his preparations for what would turn out to be his failed attempt to regain his lordship in Ulster by force.

- 2.5.10 That Rognvaldr and de Courcy lay siege to Dundrum 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 expulsion, it is almost certain that de Courcy was responsible for having it built. As Edwin C. Rae memorably noted, de Courcy 'had built too well for his own good fortune' (1987, 755). 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 Lecale, it is probable that construction began shortly after de Courcy invaded Dál Fiatach in 1177. Although the excavation results reported upon below demonstrated that Waterman (1958, 64-65) and Sweetman (1999, 36-37) were incorrect in identifying the apparent earthen bank¹⁰ uncovered in Waterman's excavations as part of a ringwork-like defence (see Paragraph 4.4.15), the initial Anglo-Norman occupation of the hill probably dates to the early, 'campaigning' phase of de Courcy's Ulster enterprise. It is likely that de Courcy would have initially reused the defensive earthworks of the pre-Norman 'hillfort of the ridge', as Giraldus Cambrensis's *Expugnatio Hibernica* apparently records him doing at Downpatrick upon his arrival in 1177 (Scott and Martin 1978, 176-177; Flanders 2008, 143), before moving relatively quickly to construct the curtain wall of what would become the inner ward of Dundrum Castle within the circuit of the pre-existing defences.
- Initially, Hugh de Lacy was to enjoy Dundrum Castle and the Earldom of Ulster for only five years. In 1210, King John 2.5.11 came to Ireland determined to reduce his barons there to submission, and in particular break the power of both the fugitive William de Braose and his protectors, the de Lacys, who had become a significant challenge to his authority. Interestingly, John de Courcy was amongst the knights who joined King John in his Irish expedition, although if he harboured any ambitions to having his former holdings in Ulster returned to him he was to be disappointed. King John probably always intended to take the lordships of Meath and Ulster, held by Walter de Lacy and Hugh de Lacy respectively, into royal control in order to financially compensate himself for the cost of his expedition (Martin 1987b, 141). Historical sources relating to this expedition are relatively scarce, however, study of the surviving official royal accounts for the period provide us with some insight (for a detailed and readable account of the campaign cf. Orpen 1911b, 242-268). As King John moved northwards during July 2010, Hugh de Lacy is recorded in the so-called Dublin Annals of Inisfallen as having slighted the castles 'which had been erected by the Earl of Ulster and the men of Oriel and ... fled to Carrickfergus' (O'Donovan 1854, 164, fn.t; Orpen 1909b, 251). Although, as noted above (see Paragraph 2.5.9), uncritical use of the socalled Dublin Annals of Inisfallen is problematic and no corroborating reference to de Lacy burning his castles is known, that de Lacy would have slighted his castles in advance of King John's progress into Ulster is historically credible. Orpen plausibly suggests, partly drawing upon details of John's expenditure and itinerary contained within the prestita roll of the twelfth year of his reign and partly influenced by the account preserved within the problematic so-called Dublin Annals of Inisfallen, that de Lacy intended to make a stand at Dundrum, but seeing themselves outmanoeuvred by John's advance into south Down the defenders abandoned the castle and retreated to Carrickfergus (1911b, 253). Orpen's reconstruction of events has been broadly accepted by subsequent historians (Martin 1987b, 142; Bardon 2001, 40) without the problematic nature of some of his source material being acknowledged. Certainly, the prestita roll records that King John entered Dundrum Castle on Wednesday the 14th July and whilst there made several payments to workmen, including carpenters, quarrymen, ditchers and miners whom he had apparently brought to Ireland as part of his army (Hardy 1844,

¹⁰ Excavation demonstrated that these were actually a series of truncated levelling deposits (see Paragraph 4.4.15).

196; Sweetman 1875, 62, no.404). That 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 work at Dundrum was conducted by a team who accompanied the king during his expedition into Ulster. These craftsmen had presumably formed part of the King's army in case he was obliged to take any castles by force (Martin 1987b, 140), however, they would have been equally capable of undertaking repairs to the fabric of a castle. Whether at Dundrum the need for repairs arose from a skirmish (as suggested by Bardon 2001, 40) or was the result of an attempt to slight the castle by de Lacy's men before they fled is uncertain. The small size of the payments made does indicate, however, that only minor works were carried out (Orpen 1909, 24) suggesting that any skirmish or attempt to slight the castle that did take place was relatively minor in scale.

2.5.12 The outcome of King John's expedition into Ulster was that Hugh de Lacy was expelled and the Earldom was taken into royal control. Dundrum Castle remained a royal possession until 1226 when it was committed to Walter de Lacy (Sweetman 1875, 207, 210, nos.1371, 1385) prior to being restored to Hugh de Lacy the following year (Sweetman 1875, 226-227, no.1498). This turn of events is useful for the historian as it ensured that a greater number of documents relating to Dundrum Castle survive (mostly in the National Archives) than would be the case if the castle had remained in the hands of Hugh de Lacy between 1210 and 1226. The most significant of the surviving early thirteenth-century sources is the 1211-12 pipe roll. Pipe rolls consist of a set of nominally annual compilations of audited accounts prepared by officials who received or spent money on behalf of the Crown. Unfortunately, the surviving Irish pipe rolls were destroyed in the Four Courts Fire of 1922 (Connolly 2002, 21), however, a volume containing a seventeenth-century copy of the 1211-12 pipe roll prepared for the antiquarian Sir James Ware (1594-1666) survives in the collections of Armagh Public Library (Davies and Quinn 1941, 1-2). The copy of the 1211-12 pipe roll is significant because it strongly suggests that the castle at Dundrum was associated with a manorial estate, although there is a degree of uncertainty over the identification of the castle featured in the relevant section of the document.¹¹ The section of the pipe roll identified with Dundrum Castle accounts for work on a large tower (magne turris - presumably the circular great tower within the inner ward), a lesser tower, a hall and a new granary costing a total of £11-8s-6d (Davies and Quinn 1941, 58-59, line 1), which is a sum too small to indicate that the structures being listed were built from scratch that year (McNeill 1997a, 27-28)¹². Significantly for the study of the sequence of construction within the inner ward, if correctly identified as referring to Dundrum, then the entry in the 1211-12 pipe roll suggests that the circular great tower had already been built by this date.

¹¹ Unfortunately, the part of the 1211-12 pipe roll that contained the name of site being referred to must have been damaged or incomplete when James Ware's copy was made. Consequently, the identification of the site being detailed has to be inferred. The content of the entries indicates that the site is an important castle and Davies and Quinn initially thought it was possibly Carrickfergus (1941, 58, fn.222). Quinn promptly revised this opinion, noting that payments for staff which belonged to Carrickfergus Castle were recorded in a later section of the pipe roll (i.e. Davies and Quinn 1941, 60-61, line 9) and that this demonstrated that the castle being referred to in the earlier passage could not be Carrickfergus (Quinn 1943, 36). Quinn considered the entry to, in fact, refer to Dundrum (1943, 36) and his identification has been widely accepted (e.g. McNeill 1980, 41; Barry 1987, 59; McNeill 1997a, 27; Macdonald 2011a, 7). Identification of the site being referred to as Dundrum is based, in part, upon the realisation that the character of the detailed expenditure relates to a masonry castle (large tower and a lesser tower) with a coastal location (salt-pan - see Paragraph 2.5.13). The identification is confirmed by an appreciation of the way in which the expenditure recorded in the pipe roll is organised in a geographically systematic manner. Within the document, expenditure is related to specific sites, which are listed in an order that moves broadly from west to east and then progressively northwards in a series of ill-defined rows across the Irish landscape. Interestingly, this method of organisation is not dissimilar to that employed by the Ordnance Survey in the 1830s when individual sheets of the 6" survey were also numbered or sequenced in west-to-east-running rows, albeit rows which progressed from the north to the south. The site identified as being Dundrum in the Pipe Roll is detailed immediately between entries relating to Maycove (probably Ballyroney, Co. Down cf. McNeill 1980, 6) and Ardglass

¹² McNeill mistakenly cites the total figure as £4-15s-2d (1997a, 27), however, his point that the accounted sum is too small for the buildings to have been totally constructed from nothing in that year remains valid.

- 2.5.13 Subsequent lines in the pipe roll, which almost certainly also relate to Dundrum, detail expenditure on, amongst other things: a new stable, a cable (suggesting the presence of a draw-bridge),¹³ supplies for a smithy, and wages for two knights, a chaplain, ten men-at-arms and seven unarmed men, as well as a new grange or barn¹⁴ and associated fulling mills, and a salt-pan (Davies and Quinn 1941, 58-59). It should be noted that the location of the lesser tower, hall, granary, stable, smithy and salt-pan detailed in the pipe roll are all unknown. Nor is the location of the chapel implied by the wages for a chaplain known (although it is suggested below that the chapel was probably located at the early ecclesiastical site of Kilmegan see Paragraph 5.4.8). With the exception of the salt-pan, which was presumably located somewhere on the edge of Inner Dundrum Bay, many of these features could have been located within the inner ward, however, it is equally possible that the granary and smithy were associated with the new grange or barn on the site of an outlying farm located elsewhere within the manorial estate attached to Dundrum Castle. In addition to the fulling mills recorded in the 1211-12 pipe roll, the manorial estate would also have had a mill for processing grain. Presumably all of these mills would have drawn their water from, and been located adjacent to, the Moneycarragh River which runs to the west of the Castle and into Inner Dundrum Bay, although it is possible that they may have been tidal mills sited on the edge of Inner Dundrum Bay. That expenditure on a new grange or barn is recorded in the 1211-12 pipe roll suggests that, following Dundrum Castle coming under royal control, there was some reorganisation of the castle's associated manor. If the term grangia is meant to signify an outlying farm then this reorganisation could have been on a significant in scale suggesting the possibility that prior to 1210 the manorial estate was managed directly from the castle itself.
- Immediately following de Lacy's expulsion, King John appointed Roger Pipard as seneschal of Ulster to administer the 2.5.14 Earldom and essentially act as the King's deputy in Ulster (Smith 1999, 48). At some point in the late twelfth century, Pipard had married Alice de Lacy, daughter of the late Hugh de Lacy (d.1186) and sister of both Walter de Lacy and the expelled Hugh de Lacy, (Smith 1999, 41). A faithful servant to King John, he had taken part in John's campaign against his brother-in-laws in the summer of 1210, and was made seneschal of Ulster immediately afterwards - an office, along with the custody of the castles of Dundrum, Antrim and Carlingford, which he apparently held until July 1215 when he received a command, preserved in the patent rolls, from King John to deliver the castles, along with the bailiwicks of Hulton [Ulster] and Uriel, to representatives of Henri de Londres, Archbishop of Dublin, who was at that time justiciar (i.e. chief governor) in Ireland (Sweetman 1875, 95, no.611; Pat. 17 John, m.19). Whether Pipard was able to surrender responsibility for Dundrum Castle at this date is uncertain. The patent rolls preserve another command issued in the name of the boy-king Henry III in January 1217, but presumably originating from William Marshall acting as regent of England, instructing Pipard to surrender the King's 'Castle of Rath' to Geoffrey de Mariscis, who then held the position of justiciar in Ireland, and noting that Pipard's custody of the castle derived from the counsel of the King's barons of Ireland (Sweetman 1875, 113, no.741; Pat. 1 Hen. III, m.13). It is notable that this change in custody of Dundrum Castle promptly followed the death of King John in October 1216 and the establishment of the minority of Henry III. The change in custody probably related to the new government's desire to restore the displaced feudatories in Ireland, including that of Ulster to Hugh de Lacy cf. Lydon 1987, 158. For uncertain reasons, the restoration of the Earldom of Ulster to Hugh de Lacy in 1217 did not, however, come to pass. It is possible that Walter de Lacy had confused matters by seizing Carlingford and Dundrum

¹³ It should be noted that the word *cabula*, which is used in the pipe roll and is here translated as cable, could equally signify a stout rope, such as one used for the purposes of haulage or drawing water from a well cf. Latham and Howlett 1975-97, 233.

¹⁴ Davies and Quinn's translation of '*grangia*' as grange is problematic cf. 1941, 59. *Grangia* is used in medieval documents to signify both a repository for grain (barn) and an outlying farm or farm buildings (grange) (Latham and Howlett 1975-97, 1095-1096). It is uncertain from the entry within the pipe roll whether the expenditure of 42 shillings refers to the construction of a new complex of farm buildings or the construction of a single barn (M.Gardiner pers.comm.).

Castles - an instruction to deliver these castles to Geoffrey de Mariscis in late January 1217 (Sweetman 1875, 114, no.755) suggests that he may have seized them. Despite being offered safe passage to come to the king, Hugh de Lacy apparently remained in France participating in the Albigensian Crusade until 1219 (Lydon 1987, 158). The death of William Marshall in May 1219 and the replacement of Geoffrey de Mariscis as justiciar in Ireland with Henri de Londres in 1221 apparently brought about a hardening of attitude in government policy towards appeasing Hugh de Lacy. A derisory offer to only restore his wife's estates and a parcel of land that he had received from his brother was made to Hugh de Lacy in late 1222 (Sweetman 1875, 164, no.1073) and, in the light of subsequent events, was undoubtedly rejected.

- 2.5.15 Hugh de Lacy decided to regain his confiscated lands by force of arms. The Annals of Ulster record that he returned to Ulster in 1223 and joined Aed Ó Néill in raids on Meath, Leinster and within Ulster, including Coleraine Castle (MacCarthy 1893, 271). The regency government in England failed to persuade the Earls of Chester, Salisbury and Gloucester, along with Walter de Lacy, to accept custody of the confiscated lands in Ulster (Lydon 1987, 158), although, as part of the preparations to fortify the royal castles in Ulster against de Lacy during the summer of 1223, William de Serland was appointed to the seneschalship of Ulster and custody of Dundrum was given to John de Tiwe (Sweetman 1875, 171, nos.1124 and 1128). Despite these and other significant preparations, by early 1224 a full-scale war had broken out in Ireland and whilst during that year Hugh de Lacy besieged Carrickfergus Castle (McNeill 1980, 18), no record of military activity at Dundrum Castle survives. Although William Marshall II, Earl of Pembroke who had been appointed justiciar in response to de Lacy's rebellion, managed to relieve Carrickfergus and successfully besieged the rebels occupying Trim Castle, the English Crown's position in Ulster was weak and within two years Hugh de Lacy had been fully restored in Ulster despite being a rebel twice over (Lydon 1987, 159-160). As part of this process of restoration, 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) who held the castle, and the Earldom of Ulster, until his death in 1243.
- 2.5.16 Unfortunately, little direct historical evidence relating to Hugh de Lacy's second tenure as Earl of Ulster survives (McNeill 1980, 21) and for Dundrum Castle there are no extant sources. McNeill has plausibly speculated that, concerned by how easily Dundrum had fallen to King John in 1210, de Lacy was probably responsible for strengthening Dundrum Castle by adding the new gatehouse (1980, 22; 1997a, 91-92). This action would have been part of a wider strategy to improve the security of the southern part of the Earldom against royal authority, which probably also included the construction of Greencastle, Co. Down (1980, 22-23). In so much that Greencastle commands the ferry to Carlingford, and by extension controls the route into Ulster from Dublin, the castle built there reinforces, if not replaces, Dundrum. The addition of the new gatehouse appears to have been the last significant episode of construction of Anglo-Norman date at Dundrum. The form of, and arrangement of access to, the new gatehouse at Dundrum is a subject of some debate and a fresh interpretation of this matter is offered below (see Paragraphs 2.8.6 2.8.8)
- 2.5.17 Following the death of Hugh de Lacy, the Earldom of Ulster, and by extension Dundrum Castle, reverted to the Crown probably as a condition of his grant in 1227. Hugh had no legitimate male issue and the reversion of his lands in Ulster to the Crown was not contested (Orpen 1920a, 264-265). The Earldom was held directly by the Crown and administered by the king's seneschals until 1254 when it was granted, as part of the Lordship of Ireland, to Prince Edward who subsequently granted the Earldom to Walter de Burgh in 1264 (McNeill 1980, 29). Only a single historical reference to Dundrum Castle dates to this period of royal control. The Irish pipe roll for the year 1260-61 records that freestone was brought from Down and iron from Drogheda to repair the gates and doorways of Dundrum Castle (Orpen 1920a, 279; McNeill 1980, 22-23).

Since the middle of the 1240s tension and conflict had been increasing between the Anglo-Norman settlement and the Cinel Eoghain, which reached a climax with the defeat of Brian Ó Néill at the battle of Downpatrick in May 1260 and the concomitant collapse of attempts by the Ó Néills to revive the Irish high kingship (Orpen 1920a, 275; McNeill 1980, 29-30; for contemporary accounts of the battle see Hennessy 1871; Sweetman 1877, 107, no.661; MacCarthy 1895, 328-329; see also Paragraph 2.5.4). Whether the repairs to the castle at Dundrum recorded in the pipe roll for 1260 were made in anticipation of a raid by Brian Ó Néill or were completely unrelated is uncertain - that the account records money received early in 1260 and spent by 1261 suggests that the repairs were not made in response to damage caused by Brian Ó Néill (Orpen 1920a, 279). The 1260-61 pipe roll also records that, with the exception of the Twescard (located in the northern part of County Antrim), the farm of Ulster was let to the seneschal Nicholas de Dunheved (Orpen 1920a, 277-278). Unfortunately, this means that there are no entries recording the payment of rent for specific properties and therefore we do not have an indication of the economic value of the manorial estate associated with Dundrum Castle during the mid-thirteenth century.

The revival of the Lordship under Walter de Burgh, Lord of Connacht in 1264 probably reflects an acknowledgement from 2.5.18 the English Crown and the Dublin authorities that reviving the Earldom was the most practical way of checking the Cinel Eoghain (McNeill 1980, 30). With the exception of a single reference 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) that was made when Walter de Burgh's son and successor was in his minority, this means that we have no historical sources for Dundrum until the Inquisition Post Mortem which was prepared following the murder of the last resident Earl of Ulster, William de Burgh in 1333. William de Burgh, the fourth Earl of Ulster, was murdered by his barons as a result of a local political dispute and divisions within the de Burgh lineage. The Inquisition Post Mortem 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 castle and its associated manor are recorded as being formerly worth £20, but now worth nothing 'because [they were] waste owing to the said war' (Orpen 1914, 61). The £20 figure is presumably derived from an assessment made in 1326 following the death of William's father Richard de Burgh. The war referred to in the Inquisition Post Mortem is described elsewhere in the document as 'de Logan's war' (e.g. Orpen 1913, 139). John de Logan was one of the Earl's murderers (Butler 1849, 24; Williams 2007, 210-211) and the phrase 'de Logan's war' either relates to the dispute between de Burgh and his barons that led to the Earl's murder, or, more probably, the conflict which followed the murder, between the rebel barons and John Darcy, the Justiciar, in alliance with John de Mandeville and other loyal settlers. For Dundrum Castle to have become ruinous and needing so much repair that it was of no value, as the Inquisition Post Mortem records, suggests that it was either besieged or comprehensively slighted during the conflict. The document also provides some insight into the character of the manor and its holdings. It records that there are two carucates in demesne formerly being worth £2, but now worthless 'because waste owing to the said war' and the remainder of the manor's holdings consist of some 18 carucates, which were then held by John MacArtan and other Irishmen, which were formerly worth £18, but now worth nothing (Orpen 1914, 54, 61). This sum is comparable with the figures quoted in the Inquisition Post Mortem for other manorial estates in Ulster such as Greencastle and Le Ford (Belfast), although significantly less than the income generated by the estates of Carrickfergus and Northborough (Orpen 1913, 137-138, 139; Orpen 1914, 60; Orpen 1915, 127). It is likely that the manor would have had a larger income prior to the devastation caused to the Earldom of Ulster following Robert the Bruce's Irish Wars of 1315-1318. A single carucate is defined as the area a plough team of eight oxen could cultivate in a year (nominally equivalent to 120 acres). In practice, the size of a carucate could vary considerably and areas of other less productive land types, such as bog or wood, could also be appended to the cultivated land represented by a carucate (McErlean 1983, 322). Consequently, whilst the figure of two carucates indicates that the demesne was only approximately 240 acres (97 hectares) in size - in practice it may have been significantly larger. The outlying possessions of the manor are recorded as consisting of 18 carucates (approximately 2160 acres / 875 hectares), but again could have been much larger.

- 2.5.19 The devastation caused by both Robert the Bruce's Irish Wars (1315-1318) and the death of William de Burgh in 1333 prompted the loss of English power in this part of Ulster. The authority of the Anglo-Norman Earls had always been dependent upon their warlike energy and diplomatic skills, and as Tom McNeill memorably observed 'absentee little girls make poor marcher barons (1980, 33). 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). This final surviving Anglo-Norman reference suggests that Dundrum had once again become a royal possession and that the damage inflicted during the early 1330s to both the castle and its associated manorial estate had been, at least partially, set right.
- At some point after 1346, as a consequence of the contraction of the area of English settlement and influence following the 2.5.20 slow decline of the Anglo-Norman settlement in 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 begun 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 arguable 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.
- 2.5.21 The next extant notices of Dundrum Castle relate to the Lord Deputy Leonard Grey's campaign, or campaigns, to expel Scots settlers in Lecale and the Ards, and capture Gerald FitzGerald, the Eleventh, so-called 'Wizard', Earl of Kildare in Ulster during the late 1530s. It is unclear from the extant sources whether there were separate campaigns in the late summer of both 1538 and 1539, or whether there was just a single campaign that took place in 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 also 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. The 1538 hosting into Lecale led by Grey is also referred to in a letter written by Thomas Allen to Thomas Cromwell, Henry VIII's chief minister, from Dublin on the 20th October and attributed to 1538, in which Allen reports 'my Lord Deputie [i.e. Leonard Gray] and Mr Tresorer [i.e. William Brabazon] been now in the northe parties, for to expulse the Scottes, which have lately by force usurped and taken the Kingis lands in Lecale' (Anon. 1834, 103, no.257). Grey's campaign, or campaigns, in Ulster was also the subject of a letter he wrote to Thomas Cromwell from Maynooth on the 31st October, 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, both by sea and land; for the sayd Lecayle ys invyroned rounde abowte with the see, and noo way to goo by lande into the sayd countrey, but only by the sayd castell of Dundrome' (Anon. 1834, 155, no.279; Hamilton 1860, 50, no.33). Grey's positive description of the merits of Dundrum Castle and Lecale, which he elsewhere in his letter describes as never having seen 'a plesannter plot of grounde, then the sayd Lecayll, for comoditie of the lands' (Anon. 1834, 155, no.279), need to be treated with caution. as it is likely that he exaggerated in order to persuade Cromwell to make a new settlement in Lecale that would mitigate against further incursions of Scots, Manx and Gaels (Magee 1984, 31).

It seems that the Crown authorities may have aspired to retain a garrison at Dundrum Castle for a number of years following 2.5.22 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 and a number of their men by Andrew Brereton. The brothers were members of a party sent into Down by the First Earl of Tyrone, Conn O'Neill, to collect rent from the McCartans. During the unrest that followed the killings, Bereton took the opportunity to expel the Prior Magennis of the College of Down from his church lands and had him seized by Roger Broke, presumably 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 temporarily 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 Radclyffe, 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 2.5.20). 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. The Kildare Rental, begun in 1518 and now preserved among the Harleian Collection of manuscripts in the British Library does not contain any reference to Dundrum in the section on the Countie of Lecale (Magee 1984, 26) suggesting that the FitzGeralds could not extract rent from the estate. 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 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).

- 2.5.23 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 5.4.6).*
- 2.5.24 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 and 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 suggested 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).

- 2.5.25 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.
- 2.5.26 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). This was upon the occasion of FitzGarrett and the High Sheriff of Lecale, Randal Brereton, setting out from Newry for Dungannon in the hope of securing the release of the Constable of Down and Patrick Bedlow of Lecale who had been carried off as prisoners after a raid by the McCartans cf. Magee 1984, 66. 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. The harbour of Strangford is well able to contain all the Queen of England's shipping and the King of Spain's likewise with safety' (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). On 9th September 1596 Christopher Russell, Sheriff and Walter Fitzgerald reported that Lecale had been overrun several times recently. First by Brian MacArt MacBaron about 12th August; 5 days later by the son of Sorley Boy MacDonnell who carried off the Savages, and made prisoners of Simon Jordan, Constable of Ardglass and Rowland Bethill;

and three days later again, the town of Downpatrick was sacked by MacCartan and Glaisne MacAgholy. Indeed, he said, Lecale had suffered so much from these incursions that at the end of the year Sir Geoffrey Fenton reported to Cecil from Dundalk, that when the Lord Deputy had requested 200 head of cattle from the barony it had not been possible to find that number of cattle there cf. Magee 1984, 67. 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).

- 2.5.27 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.
- 2.5.28 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). A sense of the degree of isolation and the weakness of the garrison can be gained from a report upon conditions in Lecale and the surrounding parts of east Down that was secured by Sir Ralph Lane in May 1599 and which described the region as one 'where the rebels were very strong in all those parts, which indeed they wholly possessed' (Atkinson 1899, 69, no.100). How long the isolated garrison at Dundrum Castle held out for, and in what circumstances the Castle was abandoned or surrendered, 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 Inner Dundrum Bay ('the River of Dundrum') 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 or that the garrison was so ineffectual that it was unable to operate effectively even within the immediate vicinity of the Castle.

- 2.5.29 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 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 outer ward at the beginning of the seventeenth century.
- 2.5.30 It is reasonable to presume that after its surrender to Mountjoy, Dundrum Castle was re-garrisoned for the remainder of the Nine Years' War. Certainly, accounts written by Sir Ralph Lane in March 1602 indicate that the Crown authorities still feared that the Spanish might land in the area (Mahaffy 1912, 315-316) emphasising the need to maintain a garrison at Dundrum. 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 confirmed 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 2009b). Edward Cromwell died in September 1607 and was interred in the ruined chancel of Down Cathedral where his tombstone, not raised until the death of his grandson, Oliver, in 1668, is preserved in the vestibule (Clarke undated, 2-3; Parkinson 1927, 34-35, pl. opp. p.34; Wilson 1995, 95; Rankin 1997, 84). 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 his 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).
- 2.5.31 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 2.5.7), 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).¹⁵ 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, although this was a family name cf. Cokayne 1900, 225, fn.(a). That William Blundell was a relation of Francis Blundell is, however, certain as the County Down volume of the Book of Survey and Distribution records that the landowner of Dundrum in 1641 was Sir George Blundell (Public Record Office of Northern Ireland Ref. D/1854/1/18) the eldest surviving son and heir of Francis Blundell (Cokayne 1900, 225) and 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 2.5.34).

The history of Dundrum Castle during the 1641 rebellion and the subsequent war of the 1640s is complicated. An extract 2.5.32 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, compiled by William 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

¹⁵ 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.

(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.

- 2.5.33 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 outer 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 2.5.31). the Books of Survey and Distribution record Sir George Blundell as still being the landowner in 1670 (Public Record Office of Northern Ireland Ref. D/1854/1/18). 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, 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.
- 2.5.34 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.
- 2.5.35 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



1925

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.

Blundell's House. The maps also show that until at least 1859, access to the inner 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 outer ward was sub-divided by a boundary that ran from the northeastern corner of Blundell's House towards the southeastern angle of the inner ward. This boundary is represented in a number of late eighteenth-century representations of both Blundell's House and Dundrum Castle. That the eastern section of the curtain wall of the outer 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 outer ward on the 1859 revision suggests that this episode of restoration took place between 1834 and 1859. Waterman argued that the presence of a probable latrine opening in the base of the northeast section of the wall, possibly 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, 210). 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 6).

The second edition map of 1859 does not include 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.

The Third Marquess of Downshire (1788-1845) undertook significant improvements at Dundrum apparently after residing 2.5.36 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 Macdonald 2011a, 16), 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); reproduced below as Figure 4) 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 outer ward was removed and part of the curtain wall of the outer 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). An account of a visit to the Castle by the Belfast Naturalists' Field Club to the Castle in May 1878 records, in somewhat obsequious prose, 'the noble family of Downshire – the present proprietors – have, within the past few years, judiciously spent a large sum upon the ruins to prevent their further decay' (Anon. 1878). This report indicates that some works to stabilise or improve the ruins were undertaken in the 1870s. The character of those works is describes as being 'very properly no attempt ... at restoration, but from what has been done it is evident that archaeologists will not have to lament the further decay of these important historical remains, as is too often the case with similar buildings' (Anon. 1878). Various notices in the Down Recorder reflect how the Castle was used as an attraction to encourage visitors to the recently improved town of Dundrum throughout the nineteenth century and into the early twentieth century (e.g. Anon. 1862; Anon. 1863; Anon. 1883). The Castle grounds always seem to have been accessible, and were certainly opened up for visitors attending events organised by the Downshire Estates with the intention of attracting visitors to Dundrum, such as the town's annual regattas (Anon. 1852; Anon. 1904). Facilities at the Castle had become neglected and run-down by the end of the nineteenth century - in 1900 the Down Recorder reported that 'a grumble has been received concerning the lack of proper facilities for visitors who may wish to examine the ruins of the fine old castle at Dundrum' (Anon. 1900). The female complainant provides an insight into the late nineteenth-century visitor experience at Dundrum Castle by noting 'there was formerly a stile, I believe, and a key of a gate used to be kept in a certain place; but for a lady to have to scramble over a wall is rather undignified'.

- 2.5.37 As well as being a visitor attraction, during the nineteenth century, Dundrum castle was also used by the local population to mark and celebrate social and political events, often with the approval and possibly encouragement of representatives of the Downshire Estates. For example, when members of the Hill family came of age, were married or stayed at nearby Murlough House, 'immense bonfires' were lit on 'the top of the old castle' in celebration (Anon. 1851; Anon. 1870; Anon. 1892; Anon. 1895). Lord Arthur Hill's electoral success in the July 1885 County Down Election, which took place during the period when the Home Rule issue was a major political concern, was reported as being of significant interest to the inhabitants of Dundrum. The Down Recorder reported that 'everyone fully expected to hear that his lordship would head the poll, but, when the gratifying news arrived that he had such a "thumping" majority, the excitement reached a climax never before witnessed even by the oldest inhabitant. Bunting was run up all over the village. On the old castle four handsome flags immediately appeared In the evening the Orangemen marched out with fife and drum to commemorate in a fitting manner the victory achieved over not Liberalism, but Liberalism and Nationalism combined. The Seaforde Conservative Flute Band, accompanied by a host of friends, joined the brethren here, and, after parading the village for some time, all wended their way to the old castle, where a grand pyrotechnic display took place, lasting for fully two hours. Shots were also fired at short intervals from a brass cannon, placed on the battlements of this historical old ruin. The castle hill as seen from the village presented a magnificent appearance, two immense bonfires illuminating the country for miles around' (Anon. 1885). A similar event took place following the defeat of the Home Rule Bill in June 1886. Again, the Down Recorder reported that 'at Dundrum, which had been decorated with a profusion of bunting during the day, the advent of dusk saw the village paraded by members of Dundrum L.O.L. No.1014, and Ballyloughlin L.O.L. No.1725, each with its individual band. The former company bore with them effigies of Gladstone and Parnell, which, after having been carried through the streets, were taken up the hill to the Old Castle, when a brilliant display of rockets, blue-lights, &c., was made, and a glorious illumination, which could be seen for miles by sea and land, effected by the ignition within the Castle grounds of three large bonfires. At intervals during the evening salvos were fired from two small cannon belonging to the East Downshire steamship Lord Arthur Hill. Great enthusiasm prevailed and cheers were frequently given for the Queen and Lord Arthur Hill, sounds of disapprobation being cheerfully rendered on demand in reference to Parnell and the G.O.M. At half-past nine the procession re-formed, and marched to the green opposite the post-office, where, after a further display of fireworks, the two effigies (of which that of Gladstone bore the inscription upon a card, "A traitor cutting at the root of the Union") were satisfactorily disposed of by fire. During the evening Mr. George Maitland, the manager of the local Downshire Estates, distributed refreshments with a lavish hand to the many exuberant Loyalists present, and generally contributed to the enjoyment of the evening. We are happy to say that everything passed off quietly, inasmuch as at half-past ten the little village had resumed its ordinary tranquil state' (Anon. 1886). That small cannons from the East Downshire Company's steamer were brought to the Castle and George Maitland, the manager of the local Downshire Estates, distributed refreshments indicates that, rather than being a purely spontaneous celebration, the events at the Castle were, to at least a degree, organised and stage-managed by senior staff of the Downshire Estates.
- 2.5.38 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 1933-34, 76; see Paragraph 2.5.23). 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 its associated manorial estate (see Paragraph 6.4.2).

2.6 Early Representational Evidence

2.6.1 The studies of the early photographic and pictorial representations of both Mahee Castle, Co. Down and Blundell's House at Dundrum have successfully demonstrated how a consideration of the early representations of masonry monuments can meaningfully inform both their historical and architectural study (Macdonald 2003, 61-65, pls.1-3; Macdonald 2011a, 16-22, figs.2-4). It has not been possible to undertake a full analysis of the available pictorial sources for Dundrum Castle prior to preparing this report, however, a few provisional comments on two eighteenth-century images of the castle are offered below. It is recommended that, as a priority, a comprehensive survey of the available early representational evidence of the castle is undertaken (see Paragraph 6.5.1).

Two Eighteenth-Century Images of Dundrum Castle

- 2.6.2 The earliest known representation of Dundrum Castle is a sketch produced by Mary Delaney and dated to 1758 (Day 1991, 226; the image is reproduced below as Figures 2 and 3). 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 fishingboats; 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.
- 2.6.3 The sketch depicts Dundrum Castle from the north and was probably made from the summit of Cloghram Hill (Irish Grid Reference J40253770).¹⁶ Cloghram Hill is situated halfway between Delaney's some-time residence at Mount Panther and

¹⁶ Cloghram Hill long remained a favourite place from which to sketch to Dundrum Castle in its landscape setting. An apparently uncatalogued watercolour of the castle in blue tones was painted from the same vantage point by J.J. Phillips. By profession an architect, J.J. Phillips had antiquarian interests and wrote about

Dundrum Castle. The sketch shows the curtain wall of the inner ward and the upper part of the circular great tower. To the south and downslope of the inner ward, Blundell's House is depicted as a ruin (for a fuller consideration of Delaney's



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.

depiction of Blundell's House see Macdonald 2011a, 16). Significantly, the illustration does not depict the curtain wall of the outer ward suggesting that by the middle of the eighteenth century at least the eastern and southern sections of this wall had been greatly reduced. That the picture does not show the surviving length of the outer ward's curtain wall that butts up against the east wing of Blundell's House indicates, however, that Delaney employed more than a touch of artistic licence when undertaking her sketch. Combined with the naive style of its execution, this suggests that the interpretive weight that can be placed upon a study of the illustration is limited. Delaney shows two mature trees growing within the inner ward. Their presence is hard to reconcile with the episodes of spade cultivation imaged during the resistivity survey of the inner ward that show cultivation ridges extending throughout the inner ward (Paragraph 3.4.2; Figure 14). This suggests that, if the representation of the trees is accurate, then the cultivation soils excavated within the inner ward

Dundrum Castle during the early 1880s (i.e. Phillips 1883; 1883-84). It is reasonable to assume his watercolour was painted at a similar date. The not inconsiderable contribution of Phillips to the study of Dundrum Castle is evaluated below (see Paragraph 2.7.1). His watercolour of Dundrum Castle is in a private collection.

probably post-date the middle of the eighteenth century. The sketch also appears to depict the circular great tower as being significantly taller than it is today. Rather than indicating that a significant part of the tower has been lost since the middle of the eighteenth century, it is more likely that this is a consequence of Delaney employing a degree of vertical exaggeration in her depiction of the castle. It has previously been noted that her depiction of the gables of the east wing of Blundell's House also employs a degree of vertical exaggeration (Macdonald 2011a, 16). The depiction of the curtain wall of the inner ward appears to include an attempt to represent the three gun loops present in the northern part of the wall, albeit at a greater height and more spread out than they genuinely are. Delaney does not represent the reduced sections of the northern and northeastern sections of the inner ward's curtain wall. Whether this is because these parts of the curtain wall were only robbed subsequent to her sketch or is, once again, a product of artistic licence is uncertain.



Figure 3: Detail from '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.

2.6.4 Dundrum Castle is also depicted in an engraving that was published in 1791 and based upon a drawing made in 1789 or 1790 by T. Cocking, (Elmes 1975, 133, no. 1976TX(13); the engraving was produced for the first volume of Grose's *The Antiquities of Ireland* (1791-95, pl.5) and is reproduced below as Figure 4). For a discussion of a second engraving reproduced in *The Antiquities of Ireland* (Grose 1791-95, pl.6), which depicts Blundell's House and part of the castle's outer ward (for a discussion of this image see Macdonald 2011a, 16-19, fig.3). The engraving shows that most of the western line of the curtain wall of the outer ward had been removed by the late eighteenth century. The illustration also depicts what appears to be a relatively recent, low boundary wall aligned north-south running through the centre of the outer ward. The southern part of this boundary wall is represented in the 1791 engraving of Blundell's House where it is shown running up to the northeastern corner of Blundell's House. No trace of this feature was imaged in the geophysical survey of the inner ward (see Chapter 3) suggesting that it was either not built with any meaningful foundation or that its foundation has subsequently been truncated, perhaps as a result of cultivation. Interestingly, the engraving also shows that the archway situated through the northwestern section of the curtain wall of the outer ward has remained largely unchanged



Figure 4: 'Dundrum Castle' an engraving published in 1791 based upon a drawing made by T. Cocking in 1789 or 1790.



Figure 5: Dundrum Castle taken from the same perspective as the 1791 engraving (13th March 2014).

since 1790. Studying the fabric of the entrance before modern conservation works had taken place, Waterman considered that the entrance already showed evidence of restoration (Anon. 1966a, 210). If this is the case then the close similarity in form between the archway today and its representation in the engraving indicates that episode of restoration predated 1790.

Unfortunately, there are a number of discrepancies between the 1791 engraving and the surviving ruin (Figure 5), which 2.6.5 indicate that the illustration's accuracy is questionable. For example, the engraving shows what appears to be an opening to the north of the archway that is not visible in the surviving fabric of the wall. Either this reflects an accidental error that has occurred during the engraving of the original drawing or is the product of the deliberate application of artistic licence by either the artist or engraver. Another apparent example of artistic licence is that the gap in the southern section of the curtain wall of the inner ward, which is represented in a number of early photographic studies of the monument and is marked as having been recently restored by Waterman on his 1955 plan (Anon. 1966a, fig.133), is not represented on the engraving. Instead the image shows the curtain wall, with a comparatively large window or opening within it, extending up to the gatehouse. That the representation of this section of the curtain wall is fictitious is demonstrated by the observation that in the engraving the curtain wall passes in front of the extant section of curtain immediately adjacent to the western part of the gatehouse. The engraver has made a poor attempt of representing the base of the apsidal projection of the east tower of the gatehouse - the lowest course of masonry is represented as a series of irregular blocks that are drawn as if they were set back from, rather than overhanging, the vertical rock face immediately adjacent to and below the gatehouse. A final inaccuracy in the engraving appears to be the representation of the rear of the circular great tower through the gap in the fabric of the tower's upper storey. From the angle that the artist has drawn the castle, it is not possible to see the far side of the tower through this gap (compare Figures 4 and 5).

2.7 Past Archaeological Investigations and Excavations at Dundrum Castle

2.7.1The earliest ground plan of Dundrum Castle and its immediate environs was produced by James J. 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). Largely forgotten by today's archaeological community, J.J. Phillips (1841/42-1936) was by profession an architect who became, by the early twentieth century, the leading designer of Methodist Churches in the north of Ireland (Snoddy 2002, 525). Not unusually for a late nineteenth- and early twentieth-century church architect, he had an antiquarian interest in early ecclesiastical sites. In addition to his research on Dundrum Castle, he also published a monograph on Grey Abbey containing his own illustrations (1874), as well as a study of the architectural remains of Downpatrick Abbey (1879). As an artist, Phillips was a more than competent watercolourist and painter of landscapes - the Ulster Museum has the original drawings for the illustrations used in his monograph on Grey Abbey, as well as a number of his other watercolours and pen and ink drawings amongst its fine art and history collections (Black 2000, 102, 160-161).¹⁷ Unfortunately, Phillips' plan of Dundrum castle (Figure 6) is poor by his own standards, and should be regarded as a measured sketch rather than an accurate survey. That said, its study is not without value. For example, Phillips' representation of the stubs of a semi-circular projection from the western tower of the inner ward's gatehouse is of considerable significance in evaluating Waterman's problematic interpretation of the results of his excavation of the gatehouse (Waterman 1951, 20; see Paragraphs 2.8.6 - 2.8.8). 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 on Dundrum were mostly concerned with the Anglo-Norman elements of the castle, and in

¹⁷ Phillips' watercolours include a landscape study of Dundrum Castle see fn.16.

particular the circular great tower although he did describe the post-medieval domestic structure in the outer ward Blundell's House as 'an Elizabethan mansion' despite attributing its construction to the Blundell family after they had acquired possession of the castle in 1636 (Phillips 1883-84, 157, 161-162).



Figure 6: Ground plan of Dundrum Castle and its immediate environs produced by James Phillips (1883, pl. opp.17; 1883-84, pl. opp.160).

2.7.2 H.C. 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 prestita roll, a number of years previously (1928, 126-127) and it had already been dismissed by Leask (1936, 161-162). As previously noted, 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 prestita roll could be usefully employed on repairs to stone castles. 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).

- 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 inner ward that were principally intended to establish the date and character of the circular great tower, curtain wall and gatehouse (Waterman 1951) (Figures 7 and 18). 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 earlier horizons containing occupation material (1951, 17-19, 21). The excavations also uncovered evidence that suggested the northern sections of the curtain wall were built upon a deposit of loose rubble that had been dumped in order to increase the footprint of the hill's summit (Waterman 1951, 21). In addition, Waterman also uncovered evidence for a number of medieval structures, represented by the remains of beaten-earth floors within the inner ward, as well as a dry-stone revetment that may have been pre-Norman in date (1951, 21, 22). Waterman also claimed that his excavation results demonstrated that the gatehouse only had a single semi-circular projection (1951, 20), however, this interpretation is considered problematic (see Paragraphs 2.8.6 - 2.8.8). 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 during the 'campaigning' phase of his Ulster enterprise, and prior to the construction of the curtain wall of the inner ward (1951, 19, 23-24). Re-excavation of this trench in 2012 demonstrated that the earthwork bank Waterman identified as an Anglo-Norman ringwork, is actually the remains of a series of later levelling deposits that post-date the construction of the inner ward's curtain wall, but apparently pre-date the construction of the great circular tower (see Paragraph 4.4.15). Although not explicitly discussed by Waterman, the published sections of his trenches indicated that a considerable depth of topsoil exists within much of the inner ward (maximum depth approximately 0.60 metres) (1951, fig.2). The results of the geophysical surveys conducted in 2012 suggest that this superficial deposit represents a cultivation soil (see Paragraph 3.4.1).
- 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) (Figure 18). For Waterman, this excavation confirmed the presence of the bank and demonstrated that it overlay a buried soil horizon containing souterrain ware (a type of indigenous coarse ware pottery found in eastern Ulster and ranging in date from the seventh or eighth century AD to the thirteenth or fourteenth century) and that it was sealed by a deposit containing thirteenth-century, wheel-thrown, glazed pottery (1958, 64). Although the stratigraphic observations appear to have been sound, as noted above, Waterman's interpretation was suspect. The exposed part of the 'bank' he uncovered in 1954 had been disturbed by an eighteenth-century pit that had been dug against the curtain wall meaning that the true character of the deposits that he considered to form the bank could not be ascertained. Despite this, 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). As noted above (see Paragraph 2.7.3), excavation in 2012 demonstrated that the earthwork 'bank' is actually the remains of a series of levelling deposits that post-date the construction of the inner ward's curtain wall, but apparently predate the construction of the great circular tower (see Paragraph 4.4.15).



Figure 7: Trench location plan for Dudley Waterman's 1950 excavations (from Waterman 1951, fig.1).

2.7.5 In the winter of 1959-60 the great tower within the inner ward was cleared of debris prior to conservation of the structure'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. Finds recovered during the clearance of the cistern are held by the Northern Ireland Environment Agency.
- 2.7.6 During 1960 limited excavations were undertaken by Waterman in the outer 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 outer ward. The locations of the trenches are preserved in a plan which has been incorporated into the Sites and Monuments Record and finds from the excavation are held by the Northern Ireland Environment Agency. Despite a sustained search, no further elements of the 1960 excavation archive have been identified and it is doubtful whether much else of the 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. Tim Young has observed that both the 'bridge pit' between the two wards and the 'postern' entrance in the northern part of the inner ward's curtain wall must have been cleared prior to being incorporated into Waterman's 1955 plan of the castle (Anon. 1966a, fig.133; reproduced here with additions as Figure 18), although whether this work was supervised by Waterman is uncertain. Certainly, no record of any excavations in these areas has been identified and a comprehensive archival search has failed to establish whether these and other excavations at the site were conducted by Waterman in the 1950s.
- 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 (Anon. 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 inner 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 on the medieval aspects of Dundrum Castle. The site has been considered in a number of general surveys of both Irish Castles (e.g. McNeill 1997a; 26-28, 53, 91-92, 194-196, 198; Sweetman 1999, 36-37, 40, 58-59, 88, 105) and archaeological sites in Northern Ireland (e.g. Donnelly 1997, 84-86), but has not been the subject of a specific or detailed study.
- 2.7.8 In January 2007 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 was undertaken (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), the position of the feature coincides with the southern boundary of a small orchard depicted on the first edition Ordnance Survey 6" map of 1834. This suggests 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.
- 2.7.9 In 2009 three small trenches were excavated at Blundell's House with a view to informing the future management strategy for the ruined post-medieval structure located in the southern part of the outer ward. Two of the trenches were located within the east wing of the building and their excavation demonstrated that the earliest floor of the building had been removed and that the earliest deposit overlying the rock-cut terrace upon which the east wing had been built was a soil that accumulated after occupation of the site had ended. The third trench was located outside of the east wing's southern wall.

Its excavation 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, to construct the terraces suggests that this episode of landscaping 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. The full extent of this late phase of landscaping is undetermined, although it is possible that it was a relatively modest exercise. The creation of the terraces would have provided improved views of Inner Dundrum Bay. Serpentine lakes formed an important aspect of landscape park design and it may have been considered that the serpentine form of Inner Dundrum Bay provided a striking and pleasing view from the site of Blundell's House (Macdonald 2011a; 2011b).

2.8 Towards an Architectural Description of Dundrum Castle

2.8.1The account of Dundrum Castle that Dudley Waterman contributed to the Archaeological Survey of County Down remains nearly fifty years later the best overall description of the monument (Anon. 1966a, 207-211). Although it must be acknowledged that Waterman's account is not a definitive narrative of the site's architectural sequence, prior to the excavations reported upon here, the broad sequence that he proposed for the development of the castle was widely accepted (e.g. Hamlin 1982; Anon. 1983, 99-101; Donnelly 1997, 84-86; Anon. 2009, 60-61; Macdonald 2011a, 25). On the basis of both the results of his excavations and architectural analogy, Waterman argued that the main phases of the building sequence at Dundrum were: an earthwork bank that possibly represented a temporary Anglo-Norman ringwork defence, followed by the present curtain wall of the inner ward, the circular great tower, the inner gatehouse, the curtain wall of the outer ward and finally the post-medieval building, known as Blundell's House, built within the southern part of the outer ward. The excavations undertaken in 2012 and 2013 largely confirmed the validity of the sequence established by Waterman, although his thoughts on the earliest phase of construction at the site can no longer be accepted. As noted above (Paragraphs 2.7.3 and 2.7.4) and reported upon in detail below (Paragraph 4.4.8 - 4.4.9 and 4.4.15), excavation in 2012 demonstrated that the apparently early early work 'bank' identified by Waterman is actually a series of levelling deposits that post-date the curtain wall of the inner ward and pre-date the construction of the circular great tower. In addition, following an observation made by Stewart Ainsworth during the Time Team phase of the 2012 excavations, a hitherto unrecognised section of an early, potentially pre-Norman, defensive ditch was excavated to the west of the inner ward in 2013 (see Paragraphs 4.6.1 - 4.6.11).

2.8.2 Unfortunately, a detailed account of the upstanding medieval remains of Dundrum Castle to compliment the recent architectural description of Blundell's House (Macdonald 2011a, 25-43) falls outside of the parameters of the present report. It is in no way to denigrate the value of either Waterman's account (Anon. 1966a, 207-211) or the various studies of individual aspects of the medieval structures within the castle that have been prepared since the publication of the *Archaeological Survey of County Down* (i.e. McNeill 1980, 7-9; 1997a, 26-28, 53, 91-92, 194-196, figs. 34 and 50; 2003; Sweetman 1999, 58-59, fig.46), that it is strongly recommended that a comprehensive architectural description of the monument should be researched and compiled (see Paragraph 6.6.1). What is offered below are a number of comments upon aspects of the medieval fabric of the castle that either arise from the results of the excavations conducted in 2012 and 2013 or inform the objectives of the proposed further season of excavation at the site (see Paragraphs 6.2.1 - 6.2.7).

Evidence for Two Early Anglo-Norman Halls

- 2.8.3 Built integrally into the southeastern section of the curtain wall of the inner ward, almost immediately adjacent to the later circular great tower, is a recess for a double latrine (for an early photograph of this feature cf. Anon. 1966a, pl.45). The privies are connected to two, well-preserved, angled chutes that discharge on to the berm that surrounds the curtain wall. Shallow pilasters either side of the latrine recess originally supported a timber lintel (represented by a void when photographed by Waterman during the 1950s, but replaced in recent years), above which is a triangular pediment. The floor of the latrine lies approximately 1.2 metres above the current ground surface within the inner ward. There is no evidence preserved within the fabric of the curtain wall to suggest that the latrine recess is a later insertion into the curtain wall. Indeed the angled passage of the chutes through the fabric of the curtain wall suggests that the double latrine (and be extension the building it formed the southwestern end of), were built at the same time as the curtain wall, most probably during the late 1170s or the early 1180s (see Paragraph 2.5.10).¹⁸ If, as seems reasonable to assume, the triangular pediment preserved the outline of a gable roof, then the building which was furnished with the double latrine must have projected northeastwards into the inner ward. As the circular great tower is built only 2.1 metres away from the double latrine recess, this would indicate that whatever structure the double latrine formed part of was demolished prior to the construction of the great tower. A terminus ante quem of 1211-12 is widely accepted for the construction of the great tower on the assumption that the 'great tower' recorded in the pipe roll for that year is the circular great tower within the inner ward (see Paragraph 2.5.12).
- 2.8.4 One of the questions answered by the excavations in 2012 within the inner ward is why, at approximately 1.2 metres above the modern ground surface, the double latrine is situated at a level that would be between the ground and first floor of any building? As described in detail below, a series of levelling deposits (111/137, 110/121/122/138 and 115/119), which were apparently deposited prior to the construction of the great tower, was identified within Trench No.1 (see Paragraph 4.4.15). These deposits indicate that the ground level was raised by at least 0.45 metres as part of a successful attempt to create a level surface within the inner ward. As Trench No.1 was located only 8.0 metres to the southeast of the double latrine, it is reasonable to assume that the levelling deposits extended as far as the latrine itself. This suggests that the ground floor of the building that contained the double latrine was at least 0.45 metres below the modern ground surface meaning that the double latrine was almost certainly located on the upper floor of a two-storied building. To be furnished with a double latrine this building would have had to have been of a relatively high status and it is suggested that it was part of a hall

¹⁸ The great tower at Carrickfergus Castle also contains a double latrine, accessed via a mural staircase from the first floor, but built at second floor level (McNeill 1981, 24, fig.7). Recent excavations have demonstrated that construction of the great tower at Carrickfergus commenced between 1177 and 1181 (Donnelly *et al.* 2005; Ó Baoill 2008, 18).

built by John de Courcy. As well as recording the presence of a great tower whose construction would have necessitated the demolition of de Courcy's hall, the 1211-12 pipe roll also refers to a hall. This must be a second hall, which would have been constructed as a replacement for that built by John de Courcy. No trace of this second hall survives at Dundrum. That the recessed double latrine and associated chutes were recorded by Phillips (1883, pl. opp. p.16; see Figure 6) suggests that they were never filled in after the demolition of the original hall and may have continued in use.

The Secondary Gatehouse

2.8.5 The gatehouse that separates the inner and outer wards consists of a pair of two-storied, rectangular towers that flank a central passageway. The gatehouse is badly preserved, however, enough of its fabric survives to demonstrate, as Waterman first observed, that it was built of rubble larger, more regularly bedded and of stone darker in colour than that used elsewhere in the castle (Anon. 1966a, 208). That the gatehouse was built over a reduced length of the curtain wall indicates that it was not the original entrance into the inner ward. The original entry is presumed to have been located in the eastern angle of the inner ward adjacent to the bridge-pit which was cleared out in an unrecorded episode of excavation prior to 1955. Waterman, not unreasonably, suggested that this original entrance consisted of a simple gate adjacent to the bridge-pit on the basis of the partial survival of a single jamb (Anon. 1966a, 207). As it currently stands, the secondary gatehouse has an asymmetrical form with the eastern tower having a semi-circular projection, with a battered base, which extends beyond the line of the curtain wall.



Figure 8: Detail from a Downshire Estate map dated to *c*.1800 (Public Record Office of Northern Ireland Ref. No. D671.M.5.8.1). The surveyor has depicted the gatehouse between the inner and outer wards as having two drum towers that project beyond the line of the curtain wall. A rectangular extension to the circular great tower is also represented.

- 2.8.6 The asymmetrical form of the secondary gatehouse has long been considered problematic, despite being unconvincingly 'demonstrated' by Waterman's excavations in 1950 to be genuine (1951, 20). On the possibility that the gatehouse would also have had a western apsidal projection, Waterman wrote that 'a little excavation sufficed to show that it had, in fact, never existed. The outer face of the S. wall of the tower continued without a break at the point where the projection would have been bonded into it, and further search failed completely to locate any indication of its foundations' (1951, 20). Waterman's own plan of the castle, prepared in 1955, indicates that none of the outer face of the south wall of either the gatehouse or the adjacent section of curtain wall, 'in fact', survived (cf. Anon. 1966a, fig. 133), invalidating the interpretive weight that could be placed upon his observation that there was no evidence to suggest the wall was bonded with an apsidal projection. Waterman's failure to uncover any surviving foundations in his excavation trench must be accepted, however, his failure to publish a section of his trench outside the western tower of the gatehouse makes it impossible to evaluate his interpretation of his trench's stratigraphy. Few archaeologists of the 1950s were trained to recognise horizontal discontinuities within stratigraphic sequences and the possibility that evidence for the truncation of earlier deposits and features was not recognised by Waterman should not be dismissed. In order to meaningfully evaluate this latter issue, it is recommended that part of Waterman's trench is re-excavated in a further season of excavation (see Paragraphs 6.2.3 -(6.2.4). Undermining Waterman's suggestion that the gatehouse had only a single projecting tower is the fact that a c.1800Downshire Estate map (Public Record Office of Northern Ireland Ref. No. D671.M.5.8.1) shows the gatehouse as having two projecting semi-circular, if not circular, drum towers (Figure 8). Furthermore, Phillips' 1883 plan of the castle depicts the remnant stubs of the 'missing', western tower (Figure 6). Despite his awareness of the plans showing that the gatehouse had two projecting towers (Waterman 1951, 20), Waterman seems to have based his interpretation that the structure had only a single projecting tower on a series of potentially flawed observations and the assumption that the only practical line of approach to the gatehouse was from the southwest, nearly parallel to the line of the curtain wall and through the area shown in the c.1800 map as having contained the 'missing' tower (cf. Waterman 1951, 20).¹⁹
- 2.8.7 On architectural grounds the gatehouse is conventionally dated to the second half of the thirteenth century (Anon. 1966a, figs.133-134; Donnelly 1997, 85), although McNeill has argued that historically it is more plausible to suggest it was built by Hugh de Lacy during his second tenure as Earl of Ulster between 1227 and 1243 (McNeill 1980, 22; McNeill 1997a, 91-92; see Paragraph 2.5.16). Gatehouses furnished with two flanking towers with apsidal projections of D-shaped plan are conventionally dated to the thirteenth century. However, recent research, prompted by the late twelfth-century numismatic and dendrochronological date for the main gatehouse at Chepstow Castle (Miles and Worthington 1998, 127; Avent and Miles 2006, 52-53), suggests that some early British and Irish examples may date to the end of the twelfth century (Avent 2006). This recognition that the vogue of the typical thirteenth-century gatehouse with twin drum towers has late twelfth-century origins does not necessarily invalidate the conventional architectural date for the Dundrum gatehouse, it does however raise the possibility that the gatehouse may be significantly earlier than has hitherto been acknowledged. Unfortunately, Waterman's excavations within the gatehouse only uncovered a sequence of disturbed deposits and he found it impossible to corroborate the architectural date of the gatehouse on archaeological grounds (cf. Waterman 1951, 20).

¹⁹ Gatehouses with asymmetrical plans are rare. The only parallel cited for the apparent asymmetrical form of the Dundrum Castle gatehouse is that provided the great gatehouse of Pembroke Castle (King 1978; see also McNeill 1980, 22; Barry 1987, 59). Admittedly, the close similarities between the circular great tower at Pembroke Castle with the example at Dundrum rhetorically reinforces the parallel and by extension the validity of Waterman's interpretation of the gatehouse (cf. McNeill 1997a, 92), however, it must be emphasised that the early cartographic evidence and the weaknesses inherent within Waterman's interpretation indicate that the chances are the gatehouse was not built with only one projecting tower.

2.8.8 If a double projecting tower plan for the gatehouse is accepted as genuine this would indicate that the inner ward was originally approached directly from the south, rather than the southwest as at present (and as suggested by Waterman). Such an approach would require the ground level within the northern part of the outer ward to be considerably higher than it is today. It is provisionally suggested that the rock-cut scarp slope below the front of the gatehouse represents the modified remains of the inner edge of the rock-cut ditch that originally surrounded the inner ward and that the outer edge of this ditch would have been defined by a, now removed, counterscarp bank, the base of the ditch being broadly equivalent to the line of the modern path that provides access to the inner ward via its presumed 'original' entrance. This being the case, access through the gatehouse would have been provided by a drawbridge crossing this outer ditch. That no trace of a counterscarp bank survives or is depicted in the earliest representations of the castle (Paragraphs 2.6.4 - 2.6.5; Figure 4), indicates that, if the bank did once exist, then it must have been removed prior to c.1790. Perhaps the counterscarp bank was removed when the outer ward was created, the displaced earth potentially being used to fill the quarry located in the southeastern corner of the outer ward which contains the remains of the lime kiln excavated in 2012 and 2013 (see Paragraph 4.5.6). This would have necessitated the area conventionally identified as containing the original entrance to the inner ward (Anon. 1966a, 207) being reused as a means of providing access between the two wards. It is possible that the rock-cut scarp slope that formed the back of the ditch surrounding the southern edge of the inner ward was further cut back to undermine the apsidal projections of the gatehouse towers during the late eighteenth or early nineteenth centuries as part of the efforts of the Hill family to create a 'picturesque' ruin of the monument (for a discussion of this late eighteenth- or early nineteenth-century episode of landscaping see Macdonald 2011a, 83-85; Macdonald 2011b, 57-59). Such an action would explain the prominent overhang noted by Waterman (Waterman 1951, 20), which no longer exists following the insertion of a mound of earth in recent years by the then Environment and Heritage Service to support the projecting element of the gatehouse. That neither the suggested western nor the definite eastern apsidal projection was represented on the c.1790 engraving of the castle (Figure 4) suggests that these elements of the gatehouse had been largely removed by the late eighteenth century.

The Possible Location of the Lesser Tower

2.8.9 It is uncertain where the 'lesser tower' recorded in the 1211-12 pipe roll (see Paragraph 2.5.12) was located. One potential clue to its location is the presence of a probable latrine chute (Figure 9) in the northeastern part of the outer ward's curtain wall immediately adjacent to the gap in the curtain wall of the inner ward, which Waterman interpreted as representing the original entrance to the castle (Anon. 1966a, 207). The presence of the probable latrine chute was first recorded by Waterman who noted that the overlying courses of the curtain wall 'had been rebuilt in recent times' (Anon. 1966a, 210). Phillips' plan of c.1883 (Figure 6) suggests that this rebuilding dates to the nineteenth century. Although its form is neither as accomplished or as practical as the angled chutes that serviced the double latrine within the inner ward, it is reasonable to conclude that the opening is an original feature and not a nineteenth-century creation. If correctly identified, the presence of the latrine chute suggests that in the northeastern part of the outer ward there was once a structure - possibly the 'lesser tower' attested in the pipe roll which, given its location, may have also formed part of the original entrance into the castle. If this was the case then it is reasonable to suggest that the base of the northeast wall of this structure subsequently became incorporated into the northern section of the curtain wall of the outer ward. It should be noted, however, that it is also possible that the structure furnished with the latrine chute was built at the same time as the curtain wall of the outer ward in which case it is highly unlikely to be the 'lesser tower' recorded in the 1211-12 pipe roll. Study of the surviving fabric of the lower courses of the curtain wall surrounding the probable latrine chute does not reveal any obvious evidence for two distinct episodes of construction. In order to investigate the character and archaeological survival of the structure

associated with the probable latrine chute, it is recommended that the adjacent area within the northern part of the outer ward is excavated during a final season of excavation (see Paragraphs 6.2.5 - 6.2.6).



Figure 9: Probable latrine chute in the external face of the northeastern section of the outer ward's curtain wall, looking west.

2.9 Credits and Acknowledgements

- 2.9.1 The geophysical surveys and both seasons of excavation reported upon here were generously funded by the then Northern Ireland Environment Agency: Built Heritage. The resistivity and magnetometry geophysical surveys were conducted by Tim Young (GeoArch Ltd) and Philip Macdonald (Queen's University Belfast), with the capable assistance of Brian Sloan (Queen's University Belfast), whilst both seasons of excavations were jointly directed by Philip Macdonald (Queen's University Belfast) and Liam McQuillan (Northern Ireland Environment Agency: Historic Environment Division), with (once again) the capable assistance of Brian Sloan (Queen's University Belfast).
- 2.9.2 The first week of the 2012 excavations were filmed were filmed for an episode of the television programme *Time Team* and the contribution of Jimmy Adcock, Stewart Ainsworth, Ian Barclay, Paul Blinkhorn, Rachel Brown, Raksha Dave, Kerry Ely, John Gater, Maddy Gerry, Phil Harding, Jim Mower, Cassie Newland, Ian Powlesland, Sian Price, Francis Pryor, Tony Robinson, Tracey Smith, Tim Taylor, Matt Williams and Emma Wood of the *Time Team* during this phase of the project is gratefully acknowledged. In particular, the insights Stewart Ainsworth provided into the development of the castle represented a valuable contribution to the author's appreciation of the development of Dundrum Castle and it is a

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- 2.9.3 The 2013 season of excavations was jointly crewed by volunteers from the Ulster Archaeological Society, undergraduate students from Queen's University Belfast and staff from the Centre for Archaeological Fieldwork. For all their hard work and efforts the author is grateful to Chris Ayers, Alexander Cupples, George Rutherford and Ken Pullin from the Ulster Archaeological Society. Other volunteers who participated in the excavations included Gillian Allmond, Matthew Kelly, Brendan Murphy, Caroline Murphy and David Pullin. It is no exaggeration to state that the excavation would not have been successfully completed without the valuable assistance of the volunteers and the author is grateful to Harry Welsh for suggesting that participation in the excavation was opened up to members of the Ulster Archaeological Society. The undergraduate students from Queen's University Belfast who participated in the excavation during 2013 were Allix Baxter, Aodhan Brady, Alexandra Burnside, Scott Ingram, Simon Kane, Michael Lavery, Matthew McClean, Alexander McKeegan, Kate McKinney, Lindsay Meaklim, Jake Morris, Michael O'Mahony, Roisin O'Neill, Hannah Parker, Ruben Ramos-Almeida, Jonathan Small, Edward Taylor and Raymond Wilson. In addition to his participation as a student, Raymond Wilson also volunteered on the closing stages of the excavation and his hard work and enthusiasm was very much appreciated. The members of the Centre for Archaeological Fieldwork who participated in the 2013 season of excavations included: Stuart Alexander, Naomi Carver, Sarah Gormley, Ruth Logue, Grave McAlister, Sapphire Mussen, Dermot Redmond, Brian Sloan and Harry Welsh. It is a pleasure to acknowledge their hard work and professionalism.
- 2.9.4 Logistical assistance during the course of the excavations was kindly provided by Mark Davis and James McEvoy (both of the Northern Ireland Environment Agency: Historic Environment Division). Robert Noade and his team from the Northern Ireland Environment Agency's Direct Labour Organisation provided much excellent support during the course of both seasons of excavation. It is no exaggeration to say that without their advice and assistance in providing a safe system of access that the excavation of the lime kiln would not have been possible. Valuable health and safety advice during the course of the 2013 excavations was also supplied by Harry Welsh (Queen's University Belfast). Charlotte Macdonald (Belvoir Park Primary School) ably assisted with the initial post-excavation processing of the artefact assemblages recovered during both the 2012 and 2013 seasons of excavation.
- 2.9.5 Preparation of this report has greatly benefited from the advice and assistance of Tom McNeill, Cormac McSparron and Ruairí Ó Baoill (all of Queen's University Belfast), Siobhan Stevenson (National Museums Northern Ireland), Tony Corey, Paul Logue, John O'Keeffe and James Patience (all of the Northern Ireland Environment Agency: Historic Environment Division), Robert Heslip (Belfast City Council), R.H. Buchanan, and the staff of the Heritage Gallery, Downpatrick Library. The original illustrations were variously prepared by Tim Young (GeoArch Ltd) and Sapphire Mussen (Queen's University Belfast).

3 Geophysical Survey (*Tim Young and Philip Macdonald*)

3.1 Introductory Remarks

3.1.1 In January 2012 resistivity and magnetometry surveys were undertaken in both the inner and outer wards, as well as within the extra-mural area to the south and west of the outer ward. These surveys were undertaken by Tim Young, GeoArch Ltd working in partnership with the Centre for Archaeological Fieldwork. In addition, ground penetrating radar and magnetometry surveys were conducted under the direction of John Gater during the initial *Time Team* phase of the 2012 excavation. The results of this latter set of surveys are not included within this report.

3.2 Methodology

- 3.2.1 A ground resistivity survey with a 0.5 metre probe spacing was undertaken in the inner ward, outer ward and extra-mural area. In addition, a resistivity survey was also undertaken with a 1.0 metre probe spacing in the inner ward. The ground resistivity surveys were conducted using a Geoscan RM15 Advanced resistivity meter, on a PA5 frame with an MPX15 multiplexer. The mobile probes were in a parallel Twin Probe (3-probe) configuration with 0.5 metre probe-spacing, allowing the outer electrodes to be used alternatively for a single Twin Probe array with 1.0 metre mobile probe spacing. Data were collected with the 0.5 metre mobile probe spacing at 0.5 metres intervals on traverses 0.5 metres apart. Within each grid square data collection started at x = 0.25 metres, y = 0.25 metres; this symmetrical acquisition pattern allowed grids to be collected on east-west traverses where appropriate, as well as the normal north-south traverses. With the 1.0 metre mobile probe spacing at 0.5 metre intervals on traverses 1.0 metre apart, commencing at x = 0.5 metre, y = 0.25 metre.
- 3.2.2 Data were downloaded from the resistivity meter, assembled and processed in Geoscan's Geoplot software. Data processing was limited to basic tidying through edge-matching and a single pass of the despike function. The measured resistance values were not converted to true resistivity (following normal practice), so all illustrations of the data have a scale of resistance measured in ohm. These resistance data are presented in Figures 10 to 14 in a non geo-referenced form. The resistivity data were further processed by a single application of a high pass filter (x and y radii of 10, uniform weighting) to remove some of the variation due to geological background. Both standard and filtered resistivity data were interpolated using Golden Software's Surfer package to reduce pixilation. The modelled grid was produced using kriging to a node spacing of 0.125 metres x 0.125 metres.
- 3.2.3 Magnetic gradiometry was undertaken with a Bartington Grad 601 Dual. Data were collected at 0.125 metre intervals on traverses 0.5 metres apart. Data were downloaded from the instrument, assembled and cleaned using DW Consulting's ArcheoSurveyor software. The grids were assembled, the zero adjusted where necessary, and a de-striping function employed for data in which there was an imbalance between the two gradiometers. The data were exported from ArcheoSurveyor and interpolated using Golden Software's Surfer package to reduce pixilation. The modelled grid was produced using kriging to a node spacing of 0.125 metres x 0.125 metres. The results of the magnetometry survey are presented in Figures 15 and 16 in a non geo-referenced form.

3.3 Geological Background

- 3.3.1 The Dundrum Castle site shows a variable depth of cover over the rockhead. The bedrock is formed of cleaved mudrocks and sandstones of the Hawick Group (see Section 2.3). In several locations the bedrock is exposed at surface within the area surveyed, most notably in the area to the west of the outer ward and in the eastern end of the inner ward. The bedrock is exposed extensively outside the surveyed area.
- 3.3.2 The variable rockhead is expressed in the survey data by strong contrasts within the ground resistivity survey, both on the surveys with 0.5 metre and 1.0 metre probe spacings. The areas of elevated rockhead appear to have a morphology with both eastnortheast- and approximately north-trending components. Within the outer ward a further influence of the rockhead is shown by low-amplitude eastnortheast-directed banding, possibly the result of variable water-retention in the cover rather than imaging of the rockhead itself.
- 3.3.3 The gradiometry survey does not show significant influence from the rockhead, although the slightly mottled background over much of the outer ward may reflect the same eastnortheast-directed variations in cover.

3.4 Results: Post-Medieval Cultivation

- 3.4.1 Much of the surveyed area within both the inner and outer wards showed evidence for spade-cultivation. The eastern side of the outer ward is marked by extant spade-cultivation ridges that are still visible as topographic features. These topographic ridges correspond to positive magnetic and positive resistivity anomalies, suggesting that the cultivation soils are both thinner and damper in the furrows (an inference subsequently confirmed by excavation, see Paragraph 4.5.2). The spade-cultivation ridges are directed towards approximately 140° and their average spacing is 2.7 metres. The area of ridges is bounded to the west by a marked linear positive magnetic anomaly (see below) and to the south they stop short of an area east of Blundell's House and north of the surviving stretch of the curtain wall, suggesting this space was possibly occupied by a structure or building during the period of cultivation. Although the continuation of the spade-cultivation ridges over the locations of the two anomalies which, in once case at least, excavation has demonstrated reflect the presence of lime kilns (see below) is not entirely clear from the results of the geophysical surveys, that continuity was clear from the topographic expression of the ridges. It therefore follows that the cultivation post-dates the lime kilns a second inference subsequently demonstrated by excavation, see Paragraphs 4.5.2 4.5.16).
- 3.4.2 In the inner ward the probable cultivation is marked solely by lineation in the ground resistivity data (Figure 14) there is no surviving topographic expression. Three sets of lineation are present (the positive resistivity anomalies of sets oriented towards 036° and 158° marked in green and of a set aligned towards 131° marked in brown). Two of these sets are approximately perpendicular, so probably represent a deliberate reorganisation of use of the inner ward for cultivation. These sets of lineation are all marked by much more closely-spaced geophysical anomalies than the cultivation in the outer ward, with spacings typically of around 1.6 metres.

3.5 Results: Inner Ward

3.5.1 In general, the strong lineation resulting from spade cultivation present in the resistivity survey data mask any anomalies derived from earlier structures or features. This fact, coupled with the great depth of deposits over much of the area

demonstrated in Waterman's and the 2012 and 2013 excavations, means that features that might have been hoped to be imaged have not been identified. The magnetic gradiometer survey of the inner ward was also not capable of resolving archaeological features, being almost largely masked by the influence of the modern iron fittings such as railings (around the keep and the steps to the viewing points) and to a lesser extent by ferrous debris.

- 3.5.2 The twin dashed lines on Figure 17 indicate the location of Waterman's Trench 3 (Figures 7 and 18), which is visible as a zone of disturbance in both the magnetic and resistivity datasets. Waterman's other trenches in the inner ward cannot be identified in the geophysical surveys with any certainty, although there are some slight irregular anomalies in the resistivity data close to their reported positions.
- 3.5.3 A strong resistivity anomaly on the southeast side of the circular great tower has a rectangular outline, approximately 5.6 metres long and extending out 2.6 metre from the wall of the tower, with extremely low margin resistivity and moderately lowered internal resistivity (Figure 17 'a'). This anomaly lies below the original door at first-floor level and may represent a complex of cut features which supported an external wooden staircase providing access to the doorway. Perhaps significantly, a comparable-sized projecting feature, depicted as being appended to the circular great tower in nearly the same position, is represented upon a Downshire Estate map of the Dundrum Estate of *c*.1800 (Public Record Office of Northern Ireland Ref. No. D671.M.5.8.1) (Figure 8). It may be that the anomaly represents a structure of more recent date that was built against the great tower *c*.1800. Unfortunately, apart from the geophysical survey data, no evidence exists to corroborate the validity of the feature depicted upon the *c*.1800 Downshire Estate map. The appended feature is not represented on the first edition Ordnance Survey 6" map of 1834 (Figure 1).
- 3.5.4 To the north of the circular great tower there are several rather irregular areas of elevated resistivity (pink tone on Figure 17 'b'). Their alignment suggests that some of these probably represent areas of moderately elevated bedrock (Waterman reported elevated rockhead at either end of the inner ward's circular revetted platform (Waterman 1951, 23, fig.2.EE) and excavation in 2012 confirmed that the revetted structure was located upon the natural summit of the hill at a point within the inner ward where the bedrock lay close to the present ground surface, see Paragraphs 4.4.1 4.4.7). The area of elevated resistivity immediately north of the keep might indicate a continuation of the revetment to the southwest, but this interpretation is extremely tentative and is not supported by the results of the 2012 excavation.
- 3.5.5 The eastern end of the area of elevated rockhead near the early gate appears to be truncated quite abruptly as marked by a rapid transition from high to low resistivity (Figure 17 'c'). Although this may be entirely natural, there is a possibility that this transition might represent a rock-cut ditch.

3.6 Results: Outer Ward

3.6.1 The most significant geophysical anomalies with the outer ward are two annular magnetic anomalies. The northernmost of these anomalies (Figure 17 'e') comprises an approximately rectangular strong positive magnetic anomaly, approximately 3 metres northwest-southeast and 2 metres northeast-southwest in extent. The northern half of the anomaly is of much higher amplitude (mostly >100 nT) than the southern (<40 nT). The interior of the anomaly shows a moderately strong negative anomaly (down to approximately -30 nT). The anomaly lies on rising ground, so its form suggests the presence of a structure with its northern part, represented by a relatively strong anomaly, cut into the hillside and a less well marked southern end. The second strong anomaly (Figure 17 'f') is also sub-rectangular, extending approximately 4

metres northwest-southeast and 3 metres southwest-northeast. The annular positive anomaly is weakest on the eastern side - possibly again suggesting an opening into the structure on the downhill side. The interior of the anomaly lies at about the local background. This feature shows a larger negative external anomaly. Despite the difference in size, these two anomalies are suggestive of rather similar structures - a kiln-like structure, with the kiln walls probably carrying most of the magnetic anomaly, with a suggestion of a reduction or opening on one side. The size of the features makes an origin as metalworking structures unlikely. The provisional interpretation of the anomalies as being either lime kilns or glass furnaces was confirmed by excavation of the southernmost anomaly during 2012 and 2013, which demonstrated that it reflected the presence of a well-preserved lime kiln (see Paragraphs 4.5.1 - 4.5.16).

- 3.6.2 The northwestern part of the outer ward shows some complex magnetic anomalies. An area of rather raised magnetism (Figures 15 and 16) corresponds to a hollow in the bedrock suggested by the resistivity data. Whether this anomaly (Figure 17 'g') is simply due to an accumulation of garden soil, or whether there was some specific activity/occupation in the area is not determinable. Some linear negative magnetic anomalies occur in this area. In the absence of a distinct pattern to their distribution, it is unclear whether they simply indicate disturbance of the magnetic material suggested above, or perhaps more likely, that they just mark the edges of the upstanding bedrock areas.
- 3.6.3 The central zone suggested above to be a north-south band of raised rockhead, is cut obliquely by a linear feature represented by a moderately strong positive magnetic anomaly and by a negative resistivity anomaly (Figure 17 'h'). These characteristics suggest it is a cut/worn feature. It lies to the west of, and may have formed the boundary of, the area of spade cultivation. Its southern end appears to have been aligned on the chimney servicing the west wing of Blundell's House which projects from the building's north wall between the two doorways. This alignment seems inappropriate for either a path or a drainage gully. It might represent a robbed-out wall footing, but the geophysical anomalies are of wrong sense for any surviving masonry.
- 3.6.4 A narrow linear negative resistivity anomaly apparently forming a large arc in the southwest of the ward to the rear of Blundell's House, might possibly reflect a garden feature, but equally may simply be the product of intersecting natural features in the rockhead (Figure 17 'i').
- 3.6.5 In the southeast of the ward, close to the edge of the surveyed area, an abrupt line across which resistivity increases slightly lies parallel to, and just to the northwest of the line of a 'modern' wall recorded by Waterman (Anon. 1966a, fig.133). The anomaly (Figure 17 'j') would appear highly likely to be related to the wall, but whether it indicates the wall itself is uncertain.

3.7 Results: Extra-Mural Area

- 3.7.1 The area to the west of the outer ward is marked by intense featuring within the resistivity data. This featuring probably represents a combination of a variable rockhead, buried archaeological features and strong drainage contrasts induced by the terrace-like topography of this part of the site.
- 3.7.2 In the centre of the area to the west of outer ward, approximately rectilinear resistivity anomalies (Figure 17 'k') are associated with a topographic terrace, with positive anomalies bounding the northern (upslope) and eastern margins, as well as running slightly obliquely across the downslope terrace edge. These anomalies are strongly suggestive of the line

of stone walls, although they are complicated by the effects of the free-draining terrace margin. The position of these anomalies corresponds closely to the line of boundaries depicted on the second edition 6" Ordnance Survey map of 1859 (Figure 1). The southern boundary appears to be aligned on the end of the surviving stub of the western 'curtain' wall of the outer ward, the significance of this correspondence is uncertain (for a discussion of this issue see Paragraph 4.6.19).

- 3.7.3 To the west and south of the rectilinear anomalies there are three areas of strong positive resistivity anomalies (Figure 17 '1', 'm' and 'n'). These lie in locations very close to the mapped positions of small buildings on the 1859 Ordnance Survey 6'' map (Figure 1), and are consequently identified as the remains of those structures. The high resistivity would suggest stone rubble or remains. Immediately to the southwest of the enclosed area is a negative resistivity anomaly, lying with the southwest toe of the terrace (Figure 17 'o'). This anomaly suggestive of a cut into the terrace edge perhaps the rear of a building platform for the fourth structure in the area indicated on the 1859 Ordnance Survey map (Figure 1).
- 3.7.4 To the south of Blundell's House a rather large area of elevated resistivity (Figure 17 'p') shows a spatial relationship to the two lines of mortared stones, identified by Macdonald as terrace revetments associated with late eighteenth-century landscaping (Macdonald 2011a; 2011b). This broad area of elevated resistivity suggests an extended distribution of rubble in this area, possibly as part of the same landscaping feature. To the southeast of Blundell's House there is an extremely strong and well-demarcated positive resistivity anomaly (Figure 17 'q'), suggestive of a length of substantial stone wall. The location corresponds to the line of a wall on the 1859 Ordnance Survey 6" map, but the anomaly appears too wide for a simple nineteenth-century boundary wall. This anomaly bounds to the east the area associated with the terraces, so may be associated with that phase of landscaping activity, but its size may suggest an earlier origin. This feature also shows as a slight negative magnetic anomaly, but the amount of magnetic debris in the area adjacent to Blundell's House precludes detailed interpretation of the magnetic data.
- 3.7.5 To the east of this, a much less positive, linear resistivity anomaly (Figure 17 'r') indicates the line of a known wall (seen on the 1859 Ordnance Survey map) aligned with the modern boundary at the eastern end of the stub remnant of the 'curtain' wall.



Figure 10: Ground resistivity data, collected with 0.5m mobile probe spacing. Greyscale image of interpolated data, produced by kriging in Surfer to 0.125m x 0.125m node spacing. Greyscale 55 ohm measured resistance (black) to 400 ohm measured resistance (white). Georeferenced and plotted on base mapping reproduced from Land and Property Services data with the permission of the Controller of Her Majesty's Stationery Office, © Crown copyright and database rights MOU203. (Image prepared by Tim Young, GeoArch Ltd.).



Figure 11: Ground resistivity data, collected with 0.5m mobile probe spacing. Greyscale image of interpolated data, produced by kriging in Surfer to 0.125m x 0.125m node spacing. Greyscale 55 ohm measured resistance (black) to 225 ohm measured resistance (white). Georeferenced and plotted on base mapping reproduced from Land and Property Services data with the permission of the Controller of Her Majesty's Stationery Office, © Crown copyright and database rights MOU203. (Image prepared by Tim Young, GeoArch Ltd.).



Figure 12: Ground resistivity data, collected with 0.5m mobile probe spacing. Greyscale image of interpolated data, filtered using high-pass filter in Geoplot and produced by kriging in Surfer to a 0.125m x 0.125m node spacing. Greyscale -66 ohm (black) to +110 ohm (white). Georeferenced and plotted on base mapping reproduced from Land and Property Services data with the permission of the Controller of Her Majesty's Stationery Office, © Crown copyright and database rights MOU203. (Image prepared by Tim Young, GeoArch Ltd.).



Figure 13: Ground resistivity data, collected with 1.0m mobile probe spacing. Greyscale image of interpolated data, produced by kriging in Surfer to 0.125m x 0.125m node spacing. Greyscale 125 ohm measured resistance (black) to 240 ohm measured resistance (white). Georeferenced and plotted on base mapping reproduced from Land and Property Services data with the permission of the Controller of Her Majesty's Stationery Office, © Crown copyright and database rights MOU203. (Image prepared by Tim Young, GeoArch Ltd.).



Figure 14: Ground resistivity data, collected in the Inner Ward, with 1.0m mobile probe spacing (left) and 0.5m probe spacing (right). The datasets are imaged as shaded relief images. The arrow between each pair of plots shows the direction of incident illumination for that pair. (Image prepared by Tim Young, GeoArch Ltd.).



Figure 15: Magnetic gradiometry data. Raw data after balancing and localised destriping, as bitmap image from Archeosurveyor. Greyscale -20nT (black) to +20nT (white). Not georeferenced. (Image prepared by Tim Young, GeoArch Ltd.).



Figure 16: Magnetic gradiometry data. Greyscale image of interpolated data, produced by kriging in Surfer to 0.125m x 0.125m node spacing. Greyscale -100nT (black) to +100nT (white). Not georeferenced. (Image prepared by Tim Young, GeoArch Ltd.).



Figure 17: Interpretation of geophysical survey. (Image prepared by Tim Young, GeoArch Ltd.).

[Areas of pink tone are indicative of areas of elevated ground resistivity, interpreted as possible elevated bedrock ('b'), possible walls and associated debris ('k' and 'r'), and an area associated with the landscaping in front of Blundell's House ('p') (associated terrace revetments designed to resemble natural outcrops of bedrock are shown as red lines). Areas of yellow tone indicate areas of elevated ground resistivity that are probably associated with masonry structures ('l', 'm' and 'n', and possibly 'q'). Areas of purple tone indicate negative resistivity anomalies, possibly relating to either a structure to support an external set of stairs ('a') or a building platform ('o'). The curvilinear purple line within the outer ward reflects a curvilinear negative resistivity anomaly, possibly a garden feature of intersection of natural features within the rockhead ('i'). The dashed double line in the north of the inner ward indicates the extent of Waterman's Trench 3 (1951) that was visible in both the resistivity and magnetic datasets. Areas of orange tone indicate positive magnetic anomalies, including one possible ('s') and two definite kiln-like features ('e' and 'f' – excavation demonstrated that 'f' was a well-preserved medieval lime kiln) and an area of elevated magnetism corresponding to an apparent hollow in the bedrock on the western side of the outer ward ('g'). The broad green line represents a linear positive magnetic anomaly that possibly corresponds to a hollow or worn path ('h'). The narrow green

line within the outer ward is a narrow, low-amplitude negative magnetic anomaly of uncertain origin].

4 Account of the Excavations (*Philip Macdonald and Liam McQuillan*)

4.1 Introductory Remarks

4.1.1 In total nine trenches were excavated in the 2012 and 2013 excavation seasons at Dundrum Castle. Of these, five were located within the inner ward (Trench Nos.1-4 and 6), two within the outer ward (Trench Nos.5 and 7) and two were located in extra-mural areas (Trench Nos.8 and 9) (Figure 18). The 2012 excavation extended from the 11th June until the 2nd August, whilst the 2013 excavation took place between the 20th May and the 19th July, with additional recording of the lime kiln excavated within Trench 5 taking place on the 30th and 31st of July 2013. It is notable that whilst the 2012 excavations focussed mainly on the inner ward, in 2013 the excavations focussed principally on the outer ward and immediate extra-mural areas of the castle.

4.2 Trench Locations

- 4.2.1 The locations and sizes of the nine trenches excavated in 2012 and 2013 were decided upon in two separate processes. Trench Nos. 1-6 were all opened up during the initial, evaluative *Time Team* phase of the excavations in 2012, which took place from Tuesday the 12th June to Thursday the 14th June (see Paragraph 2.1.2). Although Trench No.5 was extended during the 2012 season after the cameras had departed, excavation of the remaining trenches (Trench Nos.1-4 and 6) in 2012 remained within the physical footprints established during the initial, Time Team phase of the excavation. The general areas proposed for excavation in 2012 were identified following initial analysis of the results of the geophysical surveys conducted at the site in January 2012 by Tim Young of GeoArch Ltd and the Centre for Archaeological Fieldwork (the full analysis of which is reported above, see Chapter 3), a research visit to the site in May 2012 and subsequent discussions between the authors and Colm Donnelly (Queen's University Belfast) and John O'Keeffe, Ken Neill and Paul Logue (all Northern Ireland Environment Agency: Built Heritage). From the outset it was envisaged that, in order to meaningfully address the project aims outlined above (see Paragraph 2.2.2), the focus for excavation would be divided into three areas of the inner ward, the outer ward and the extra-mural area to the west of the outer ward. These areas of investigation were selected to address the specific research aims outlined in Paragraph 2.2.2. The Northern Ireland Environment Agency Inspectorate indicated that during the initial *Time Team* phase of the 2012 excavation season up to a maximum of 100 square metres of previously undisturbed areas of the site could be opened up, with the exact location for the trenches to be agreed on site by the nominal director of the Time Team phase of the excavations Francis Pryor, senior members of the Time Team production team and the senior members of the Northern Ireland Environment Agency: Built Heritage Inspectorate who were present on site during the course of all three days of the *Time Team* phase of excavations. In the event, only 52.75 square metres of previously undisturbed ground was excavated during the Time Team phase of the excavation and of this total only 33.5 square metres was excavated beyond the depth of the eighteenth- to nineteenthcentury cultivation soils.
- 4.2.2 In 2013, one of the trenches excavated the previous year in the inner ward was partially re-opened and extended (i.e. Trench No.4), and the trench excavated the previous year within the outer ward (i.e. Trench No.5) was re-opened and expanded. In addition, a further small trench was excavated within the outer ward (Trench No.7) and two trenches were opened within the extra-mural area of the Castle: the first across part of the rock-cut and earthwork defences to the west of inner ward (Trench No.8), and the second across the artificial terraces immediately to the west of the outer ward (Trench No.9). The size and location of these trenches was agreed with the Inspectorate prior to the excavation by the conventional method of



Figure 18: Trench location plan (after Anon. 1966a, fig.133).

submitting a research design and excavation methodology for approval prior to applying for an excavation licence. In the event, the excavation of the last trench in 2013 (i.e. Trench No.9) was not completed prior to backfilling, however, the excavation of the other trenches (i.e. Trench Nos.4-5 and 7-8) was brought to a satisfactory conclusion prior to the end of the dig. All of the trenches were manually backfilled, except Trench No.5 which, with the agreement of the Northern Ireland Environment Agency's Inspectorate, was made safe by being sealed, but otherwise left open pending a decision on the long-term conservation and public presentation of the interior of the lime kiln exposed within the trench.

4.3 Excavation Methodology

- 4.3.1 Given the site's status as a protected monument in State Care, it was decided that any *in situ* masonry structures encountered during the course of the excavation would not be removed or compromised. The excavation was also conducted with a presumption in favour of the preservation *in situ* of significant archaeological features or horizons uncovered during the course of the investigations. The removal of any significant features or horizons was only undertaken with the approval of a senior member of the Inspectorate. Whilst it was paramount that the excavation was not conducted at the expense of any features or finds that might have reasonably merited preservation *in situ* (or be in anyway prejudicial to the protection of such remains), the importance of allowing a sufficient sample to be studied in order to realise the project's aims and resolve the research questions outlined above (see Paragraph 2.2.2) was always acknowledged.
- 4.3.2 All of the excavation trenches were targeted at addressing the research questions defined for the project (see Paragraph 2.2.2). Again, given the site's status as a protected monument in State Care, the excavation methodology was designed to extract the maximum amount of information relevant to addressing these research priorities, whilst simultaneously reducing the removal of the valuable archaeological deposits preserved at Dundrum Castle to a practical minimum. In practice this will be achieved by keeping trench sizes to a minimum and, where possible, reopening old excavation trenches, rather than excavating previously undisturbed areas. From the outset, the consequent small size of the excavation 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 a number of the trenches (particularly, Trench No. 2) were not recognised during the course of excavation. Similarly, given the narrow width of Trench No.8, which passes through the extra-mural defences, it is unlikely that any evidence for internal structural features, such as timber lacing, that may be present within the counterscarp bank of the outer ditch would be recognised during the course of excavation.
- 4.3.3 As previously noted, due to the time constraints of the three-day television format, the initial *Time Team* phase of the excavation in 2012 was essentially evaluative in character, whilst the subsequent phases of the excavation in 2012 and 2013 were conducted as a research exercise at a slower and more considered pace. This two-phase character of the excavations enabled the worst excesses of the television-led excavation to be mitigated by enabling the complex and subtle stratigraphic sequences encountered during the course of the project to be fully appreciated. It also enabled environmental sampling and recording to be completed to the high standards required of intrusive investigations into statutorily protected monuments, such as Dundrum Castle. During the initial *Time Team* phase of the excavation, a 'mini-digger' mechanical excavator was used for the removal of both superficial deposits (significantly in Trench No.4) and the backfill of previous excavation trenches (Trench No.1). The use of the mechanical excavator was at all times agreed by a senior member of the Inspectorate and was only carried out under archaeological supervision. In order to prevent damage to the grounds of

the site from the caterpillar tracks of the mechanical excavator, a temporary trackway of boards was placed on the ground surface for the 'mini-digger' to be driven on. In order to facilitate reinstatement of the site following completion of the excavation, all 'de-turfing' of the excavation trenches was conducted using hand tools.

- 4.3.4 Previous excavations had demonstrated that the stratigraphic sequences at Dundrum Castle are not overly complex. Consequently, the 'single context planning' method of site recording was not considered appropriate for the two seasons of excavation in 2012 and 2013. Accordingly, 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 8) were also be maintained. The 'bulk finds' registers detailing the animal bone (Appendix 6) and shell (Appendix 7) recovered during the course of the excavation were compiled during the initial post-excavation stages of the project. The 2013 season of excavations were conducted as an extension of the 2012 excavation season, with the sequence of trench numbers, context numbers, sample numbers and small find numbers running on sequentially from those used in 2012.^{20,21}
- 4.3.5 During the course of the excavations, 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, and help inform future conservation work. 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 Castle and the Irish Ordnance Survey Grid using an EDM Total Station. Following the completion of recording, all of the trenches, with the exception of Trench No.5 in 2013 (see Paragraph 4.2.2), were manually backfilled.
- 4.3.6 In the following account of the excavations, the narrative is divided into three sections relating to the investigations within the inner ward (Section 4.4), the outer ward (Section 4.5) and the extra-mural area (Section 4.6). Consequently, the account of the excavations is not structured so as to present the sequence for each trench in numerical order. It is intended that the Harris Matrices for the site (see Appendix Two) are referred to whilst reading the following account of the stratigraphic sequences of the excavation.

²⁰ A gap in the sequence of small find numbers between the two seasons of excavations from 1846 to 2000 exists so that any additional small finds from the 2012 excavations that are identified as result of future analysis of the bulk finds or samples can be awarded appropriate '2012' numbers. In addition, a gap in the sequence of small find numbers used in 2013, from 2730 to 2779 also exists. This latter gap is not the result of design, but is a consequence of poor levels of numeracy amongst the undergraduate students who took part in the 2013 season of excavations.

²¹ The sequences of recording numbers used in 2012 and 2013 are, however, independent of those used in 2009 during the excavation of three trenches within and immediately external to Blundell's House within the lower ward cf. Macdonald 2011a. This was an inevitable consequence of filming the initial stage of the 2012 excavation season for *Time Team*, where the programme makers, not unreasonably, wanted to call the initial trench 'Trench No.1', rather than 'Trench No.4'. Nevertheless the use of two separate sequences of recording numbers will have significant implications for the proposed attempt to integrate all three seasons of excavation, and any future excavations, into a single account for publication as part of the Northern Ireland Archaeological Monograph series (see Paragraph 2.2.1). For a proposal of how this challenge should be met see Paragraph 6.2.7.

4.4 Excavations within the Inner Ward

The Pre-Norman Revetted Stone Structure (Trench Nos.3, 4 and 6)

Trench No.3

- 4.4.1As noted above, one of the principal research aims of the excavation was to establish the character and date of the pre-Norman settlement at Dundrum (see Paragraph 2.2.2). Waterman's excavations in 1950 had uncovered part of an apparently circular dry-stone structure within the inner ward, which had come to be considered to probably be pre-Norman in date. In keeping with the stated excavation methodology of, where possible, re-opening old trenches it was decided during the 2012 excavation season to re-open the two conjoined trenches Waterman had used to investigate the apparently dry-stone structure with a view to establishing its date and what light it could cast upon the pre-Norman occupation of the site. Waterman's trenches had been located against, and adjacent to, the masonry addition to the curtain wall in the eastern part of the inner ward. In 2012 both trenches were partially re-excavated as Trench No.3, although, Waterman's original trenches were not numbered (cf. Waterman 1951, 22-23, fig.1, fig.2.E-E). Within his conjoined trenches Waterman had exposed the east-facing element of a seemingly circular, dry-stone revetment that retained a tip of stone rubble. Waterman stated that he could trace the topographic expression of part of this feature across the inner ward and his published plans indicate that it had a diameter of either 12.0 metres (Waterman 1951, fig.1) or 11.3 metres (Anon. 1966a, fig.133). Initially, Waterman expressed no view of the date or purpose of the revetment, apart from noting that it pre-dated the masonry addition to the curtain wall (1951, 22-23). He subsequently speculated that the revetment may have been intended as a foundation for the late twelfth- to early thirteenth-century, circular tower but that it had never been used because a change of plan had caused the tower to be erected elsewhere within the inner ward (Anon. 1966a, 208). As built, the base of the circular great tower has an external diameter of 14.9 metres (pace Waterman 1951, 15) which intimates that any tower built atop the revetted structure would have been much smaller. Ann Hamlin, in the text of her visitor guide card to the monument, was the first to note that the dry-stone building technique was suggestive of a pre-Norman date (cf. Hamlin 1982) - a view supported by some (Donnelly 1997, 84), although most recent descriptions of the monument fail to refer to the presence of the structure (e.g. Anon. 1983, 99-101; Anon. 2009, 60-61).
- 4.4.2 The partial re-excavation of the conjoined trenches in 2012 as Trench No.3 confirmed the validity of many of Waterman's observations (1951, 22-23, fig.2.E-E). Trench No.3 was rectangular in shape, 4.30 by 3.0 metres in size, with its longest axis aligned northeast-southwest. The backfill (306 and 302) of both the southwestern (307) and northeastern (304) trenches were clearly visible under the thin humic topsoil (301). Waterman's trenches cut through a thin deposit of dark brown, clay loam (308; maximum thickness 0.20 metres) that undoubtedly represented a cultivation soil of post-medieval date. The cultivation soil was the only deposit to be meaningfully excavated within Trench No.3. The remaining deposits were only observed and, where appropriate, sampled in the sections provided by the sides of Waterman's trenches. The truncated surface (313) created by the cultivation sealed a series of levelling deposits of dumped stones and redeposited natural subsoil (309, 310 and 311) the earliest of which (311) ran under the masonry addition to the curtain wall (315), suggesting that it was either deposited to level the interior of the inner ward or to form a level surface upon which the structure associated with the masonry addition (315) was built. The uppermost levelling deposit consisted of a layer of Redeposited natural mineral subsoil derived from weathered and frost-shattered shale bedrock (309), which extended northeastwards from the outer face of the revetted structure (303) for a distance of 0.98 metres and had a maximum thickness of 0.20 metres. It overlay another levelling deposit of greyish brown sandy clay (310) that contained a number

of animal bones, charcoal flecks and small- to medium-sized, angular to subangular stone inclusions. This deposit extended northeastwards for a distance of 1.24 metres from the outer face of the revetment (303) and had a maximum thickness of 0.22 metres. The lowest levelling deposit (311) extended from the outer face of the revetment (303), where it was only 0.03 metres thick, to the northeastern edge of excavation where it physically overlay the surface of the bedrock and ran under the masonry addition to the curtain wall (315) where it had a maximum thickness of 0.70 metres. It consisted of a voided deposit of medium- to large-sized, angular- to subangular-shaped stones in a relatively sterile clay soil matrix. The presence of air voids within the layer indicates that it was rapidly deposited. That it partially physically overlay the surface of the bedrock indicates that before it was deposited a pre-existing soil horizon was removed. This observation suggests that it was a deliberately dumped deposit – probably intended to level the surface of the inner ward. Although no dating evidence was recovered from this sequence of three levelling deposits they are all likely to be medieval in date and probably date to the same episode of landscaping within the inner ward.



Figure 19: Trench No.3 following completion of excavation.



Figure 20: Trench 3 Composite northwest-facing section of Trench No.3.

- 4.4.3 Underlying the earliest of the levelling deposits (311) was a deposit of greyish-brown sandy clay (312) that contained a number of small- to medium-sized , angular to subangular stone inclusions, physically overlay the bedrock and butted up against the outer face of the revetment (303). This deposit extended only 0.80 metres from the revetment and had a maximum thickness of 0.28 metres. Careful inspection of the exposed section suggested that it did not contain any finds, although processing of a sample of the deposit (Sample No.19) revealed that it did contain a small quantity of fragmented animal bone. The sandy clay (312) is provisionally interpreted as a soil that accumulated during a period of non-intensive activity at the site either during a hiatus of settlement activity in the pre-Norman period or during the medieval occupation of the site.
- 4.4.4 The outer-face of the revetment (303) was built directly upon the uneven surface of either the natural mineral subsoil (316) or the bedrock and consisted of several courses made up of angular slabs of local greywacke. Waterman's excavations had resulted in its removal within his southwestern cutting (307), however, the revetment remained intact in the northern part of Trench No.3. Its lowest, faced course consisted of large stones of varying sizes (maximum length 0.60 metres; maximum height 0.27 metres) arranged so that their upper edges formed an even surface upon which to build the remaining courses of the structure. The stone slabs used in the overlying courses were much thinner, their thickness varying between 0.02 and 0.06 metres. Physically retained by the faced courses was a rubble fill (305) which had been carefully keyed into the outer face-work of the structure. Careful inspection of both the faced courses (303) and rubble infill (305) suggested that both had been earth-bonded with a dark brown clay loam. What had not been explicitly recorded by Waterman was that the rubble fill (305) in turn retained a layer of redeposited natural subsoil (317) that within Trench No.3 directly overlay either the truncated surface (314) of a natural mineral subsoil (316) or bedrock. In fairness to Waterman, this observation was not obvious. During the 2012 excavation season it was not recognised until investigations into what appeared to be natural subsoil within the interior of the revetted structure exposed in Trench Nos. 4 and 6 demonstrated that, in places, it overlay a truncated soil horizon and therefore must be redeposited (see Paragraphs 4.4.5 - 4.4.7). Waterman himself had perceptively noted that his interpretation of the character of the revetted structure would remain provisional until its interior had been trenched (Waterman 1951, 23).

Trench Nos. 4 and 6

- 4.4.5 During 2012, the revetted structure was further investigated in two new cuttings (Trench Nos. 4 and 6), both located within the central part of the inner ward. As excavated in 2012, Trench No.4 was rectangular in shape, 7.00 by 2.75 metres in size with its longest axis aligned approximately northeast-southwest. In 2013 a narrow trench, only a metre wide was extended from the southeastern corner of the trench in a southwesterly direction as far as the base of the circular great tower (a distance of between 4.20 and 4.50 metres). Trench No.6 was also rectangular in shape, 3.10 by 2.05 metres in size and aligned with its longest axis northeast-southwest. The two trenches were conjoined the western edge of the structure passing through the eastern edge of Trench No.4, whilst part of the interior of the structure is described in Trench No.6. That part of the stratigraphic sequence of Trench No.4 which relates to the revetted structure is described in this section of the report, whilst the remainder of the trench's stratigraphic sequence is reported upon in the following section (see Paragraphs 4.4.19 4.4.30).
- 4.4.6 Within Trench Four the west-facing part of the revetment wall (406/408) had a similar character to the east-facing part of its circuit that was exposed in Trench No.3 (see Paragraph 4.4.4), except rather than retaining dumps of rubble (305) and redeposited subsoil (317), it only retained a thick layer of redeposited subsoil (409). The revetment was exposed for a



Figure 21: Trench No.6 following the excavation of the *sondage* to the truncated surface (606) of the greyish-brown, clay loam buried soil horizon (607), looking southwest. Stuart Alexander is standing upon the truncated surface (603) of the redeposited subsoil (604) that formed the principal internal deposit within the revetted platform. Trench No.4 is visible in the background.

distance of 3.4 metres, running on a near north-south alignment from the northwestern corner of the trench to a point passing into the northwest-facing edge of excavation approximately 2.2 metres from the trench's northeastern corner. Rather than forming a continuous curve, the exposed section of the revetment wall consisted of two near straight sections that met in an obtuse angle. Only the lowest three or four courses of the external face of the revetment wall survived. These all consisted of blocks or slabs of local greywacke – none more than 0.50 metres wide, although at least one was arranged with its longest axis (0.72 metres) pointing into the body of the wall. Within Trench No.4 it was not possible to ascertain whether the revetment wall was a dry-stone or clay-bonded structure, however, by analogy with the better preserved section of the revetment exposed in Trench No.3 it is reasonable to assume it was originally clay-bonded. The retained layer of redeposited subsoil (409/604) was investigated in two narrow *sondages* within Trench Nos. 4 and 6. Excavation demonstrated that the redeposited subsoil had a maximum thickness of 0.40 metres and overlay the truncated surface (426/606) of a thin, buried soil horizon (421/607; maximum thickness 0.14 metres), which itself overlay either the

shattered surface of the bedrock or a thin natural mineral subsoil (420/457/458). The truncated, buried soil (421/607) consisted of a greyish-brown, clay loam that contained a few fragments of charcoal and burnt bone, including one comparatively large fragment of burnt bone (Small Find No.1668), which is recommended for radiocarbon dating and will provide a terminus post quem for the construction of the revetted structure (see Section 6.7). That the buried soil horizon (421/607) was truncated (426/606) suggests that, prior to its construction, the footprint of the platform was deturfed. Presumably, the removed turves were used as part of the construction of whatever structure was built upon the platform. Excavation revealed that the lowest course of the west-facing revetment wall (406/408) exposed within Trench No.4 was mostly laid directly onto the exposed surface of the bedrock, however, in places where the uneven surface of the bedrock was deepest, it was possible to observe that it was laid on to a foundation deposit of small, shattered stones (423) that filled a foundation trench (422), which cut through a trampled, charcoal-flecked, slightly mottled, orange to greyish-brown, silty clay soil (417/419/455). This, in turn, directly overlay either a thin deposit of natural mineral subsoil (420/457/458) or the shattered surface of the bedrock, and extended throughout the western part of Trench No.4. It is reasonable to assume that this soil is a continuation of the buried soil (421/607) that was preserved beneath the revetted structure, however, the decision to preserve the revetment wall (406/408) in situ meant that it was not possible to demonstrate this by removing part of the surviving walling. The recovery of a number of worked flints (Small Find Nos. 1582-1583, 1631-1633 and 1763) from the silty clay soil (417/419/455) suggests that it might contain the remnants of some form of prehistoric activity on the summit of the hill subsequently occupied by the castle. Apart from stray finds of a small number of worked flints redeposited in later contexts this is the only evidence for prehistoric activity at the site. Butting up against the west-facing side of the revetment wall in Trench No.4, and overlying the silty clay soil (417/419/455) that the revetment wall's foundation (422) was cut through, were a couple of dumped deposits of redeposited subsoil (410/418 and 416), which contained displaced slabs that suggested their deposition coincided with the demolition of the revetted platform (see Paragraph 4.4.30). Although stratigraphically pre-dating the construction of the platform, the underlying soil horizon (Context No.417/419) appeared to have been heavily trampled - presumably during the 'occupation' of the platform. Consequently, finds and dating samples (Small Find Nos.1582-1585, 1630-1635, 1640-1641, 1763, 1794, 2256 and 3480) recovered from this horizon are of limited value for dating purposes, providing only an imprecise terminus post quem for the demolition of the platform and not its construction.

4.4.7 Although only two short sections of the revetted edge of the structure were exposed, the excavations demonstrated that it was not a perfectly circular feature, but rather had a slightly elliptical plan with its shortest axis of 11.2 metres aligned approximately east-west and its longest axis aligned approximately north-west (estimated length 12.0 metres). Rather than being part of a building the revetted structure is interpreted here as representing part of a platform. Any evidence relating to the surface of this platform, such as its use to accommodate a building or other structure, was removed by subsequent activity. Stratigraphically, this truncation was represented by the horizontal discontinuity associated with the post-medieval spade cultivation (313/424/603), however, the construction of the medieval building, represented by the masonry addition to the curtain wall (315) noted above (see Paragraph 4.4.1), would probably have been the episode responsible for the loss of this evidence. The disposition of both the surface of the bedrock and the Anglo-Norman levelling deposits within Trench Nos. 3, 4 and 6 demonstrated that the platform was located upon the summit of the hill. No direct dating evidence for the revetted structure was recovered, although as Ann Hamlin was first to point out (1982; see Paragraph 4.4.1), the earth-bonded quality of its construction suggests it is of pre-Norman date. The truncated, buried soil horizon (421/607) was excavated as a total sample (Sample Nos.46-48) and it is intended to process this material with a view to recovering further material suitable for radiocarbon dating.



Figure 22: Trench Nos. 4 (foreground), 6 and 3 (background), looking northeast from an elevated position. The photograph shows the slightly elliptical plan of the revetted platform whose edge passes through Trench No.3 and the northeastern end of Trench No.4.

Early Anglo-Norman Occupation and Construction of the Great Circular Tower (Trench No.1)

4.4.8 The second trench excavated within the inner ward during the 2012 season of excavations, which consisted of partially reopening and then extending one of the trenches originally dug in 1950, was Trench No.1. Trench No.1 was located against the curtain wall in the southern part of the inner ward and extended approximately northwards towards the great circular tower following the line of Waterman's Trench 2 cf. 1951, 19-20, fig.1. Waterman's Trench 2 had originally extended from the curtain wall to the base of the tower, but it was considered unnecessary to re-excavate the entire length of his original trench. This was because the purpose of re-excavating the trench was to re-evaluate the evidence that Waterman had uncovered in its southern part. Here he had encountered a series of dumped deposits that overlay an early soil horizon. Waterman believed that these deposits probably represented an earth-and-rubble bank that pre-dated the

construction of the curtain wall of the inner ward and he, and subsequent authors, identified them as representing the remains of a ringwork-like defence. Waterman suggested that this feature probably dated to the 'campaigning' phase of the Anglo-Norman conquest of Ulster in the last quarter of the twelfth century (Waterman 1951, 19, 23-24; 1958, 64-65; Anon. 1966a, 207; see also Donnelly 1997, 84; Sweetman 1999, 36-37). He also suggested that the buried soil horizon probably dated to the Early Christian period (layer 10 cf. Waterman 1951, 19, fig.2). Hence, the purpose of re-excavating the southern part of Waterman's trench was to address two of the research aims of the project: that is, to investigate the validity and character of the initial, 'campaigning' phase of Anglo-Norman fortification; and to establish the character and date of the pre-Norman settlement at Dundrum (see Paragraph 2.2.2).²²

- 4.4.9 In the event, excavation in 2012 demonstrated that the layers that made up Waterman's probable earth-and-rubble bank were actually a series of dumped deposits (110/121/122/138, 111/137, and 115/119) used to level the ground surface within the inner ward, which, rather than dating to the 'campaigning phase of the Anglo-Norman conquest of Ulster, post-dated the building of the curtain wall (see Paragraph 4.4.15). Furthermore, the 2012 excavations also demonstrated that the immediately underlying soil horizon (112/139) sealed the construction cut (117/143) for the curtain wall (124) and therefore cannot be considered pre-Norman in date (see Paragraphs 4.4.16 4.4.17). Provisional analysis of the small number of pot sherds recovered from two deposits underlying this soil horizon a layer of possibly redeposited gritty loam (113/140) and a sandy clay loam (131/141) suggests that the upper layer (113/140) may date to the 'campaigning' phase of the Anglo-Norman conquest, whilst the lower deposit (131/141) is probably a remnant of the pre-Norman soil horizon (see Paragraph 4.4.18).
- 4.4.10 Trench No.1 was rectangular in shape. Its total footprint was 4.50 metres approximately east-west along the line of the curtain wall (124), and 4.40 metres approximately north-south along the length of Waterman's Trench 2. In practice, because the trench was stepped, deposits of archaeological significance were only disturbed in a central strip some 2.6 metres wide, which included the 1.35 metre wide trench excavated in 1950 and a 1.25 metre-wide extension to the east of the original trench. Excavation of the humic topsoil and sod (101; maximum thickness 0.12 metres) revealed the edges of Waterman's original trench (104) whose mixed backfill (103) was mechanically excavated. Waterman's trench (104) essentially separated the stratigraphic sequence of Trench No.1 into two separate, but easily comparable, sequences. Deposits and features within each of these two sequences were given separate context numbers, but using Waterman's account to 'bridge' the divide (1951, 19-20) it is possible to relate the two sequences with a high degree of confidence (see Appendix 2 for a context number concordance table and Harris Matrix). Consequently, in the following narrative, the description of the two separate sequences is integrated into a single account.

Eighteenth- to Twentieth-Century Features and Deposits

4.4.11 In the northwestern part of Trench No.1, Waterman's cutting (104) sliced through the eastern edge of a large, near circularshaped pit (109), provisionally dated to between the eighteenth and mid-twentieth century in date. Waterman's account of his excavations makes no reference to this feature. In 2012 the feature was half-sectioned. Excavation revealed that the feature had been disturbed by animal burrowing, but it was possible to demonstrate that it was approximately 1.35 metres

²² Another significant factor in the decision to partially re-excavate and extend Waterman's Trench 2 in 2012 was that the copper alloy roundel of Early Christian date recovered during the 1950 excavations was found within the dumped deposits used to create the 'campaigning' phase earth-and-rubble bank (Waterman 1951, 19, 24-25, pl.2, fig.3.1; Jope 1951). The possibility of recovering a second, high-status example of Early Christian metalwork was considered attractive by the makers of the *Time Team* television programme.

in diameter (north-south; the east-west dimension of the pit was at least 1.20 metres), had a maximum depth of 0.59 metres and had irregular-shaped sides and base. The pit had three fills: a charcoal-rich, mottled, mid-grey to brown sandy loam (149) that filled most of the feature and had a maximum depth of 0.48 metres. This upper fill overlay a charcoal-rich, mottled orange to brown sandy loam with small- to medium-sized angular stone inclusions (108; maximum depth 0.28 metres), which in turn overlay a primary fill of light brown sandy loam with a large number of small, angular-shaped, stone inclusions (150; maximum depth 0.14 metres). The relatively recent date of the pit is indicated by the observation that it was cut into the underlying cultivation soil of eighteenth- to nineteenth-century date (102/135/136) and its fills contained a few fragments of slag (Small Find Nos.1539, 1636 and 1790) and a shard of glass (Small Find No.1636) whose character suggests are not of any great antiquity. The cultivation soil (102/135/136) consisted of a dark-brown silty clay loam, which contained a number of small- to medium-sized, angular to subangular, stone inclusions. On the eastern side of the trench, 0.25 metres from the curtain wall, the cultivation soil overlay a localised, oval-shaped, deposit of charcoal-rich loam (120), 0.22 metres (north-south) by 0.29 metres (east-west) in dimension and 0.03 metres thick, which may represent the inclusion of midden material that had been subject to burning into the cultivation soil. Underlying the cultivation soil (102/135/136) was a truncated surface associated with the cultivation. Although there was no direct evidence to suggest that the soil and associated discontinuity was the product of spade cultivation, the evidence for spade cultivation recovered in the geophysical surveys of the inner ward suggests this was the case (see Paragraph 3.4.2).

Possible Medieval Structure and Levelling Deposit

On the eastern side of Trench No.1 the removal of the cultivation soil exposed an irregular-shaped patch of cream-coloured 4.4.12 lime mortar (105) that extended from the southeastern corner of the trench up to the eastern edge of Dudley Waterman's cutting (104) to cover an area some 2.35 metres (north-south) by at least 1.60 metres (east-west). In places the original, smooth surface (126) of the lime mortar deposit survived (at which point the deposit had a maximum thickness of 0.12 metres), although for most of its extent the original surface had been lost. The deposit of lime mortar was identified by Waterman as 'layer 1' (1951, 20, fig.2.DD). Waterman suggested that its smooth surface was the result of it having been trowelled in antiquity, however, he felt unable to suggest either the original limit or purpose of the deposit (1951, 20). Although more of the layer was exposed in 2012, the poor level of its preservation still prevents any certainty in its interpretation. It is tentatively identified here as probably representing the remains of a floor or possibly a mixing surface, likely of medieval date. Unfortunately, the post-medieval spade cultivation (125/133/134) had removed any traces of structures associated with this apparent floor or surface. Its removal demonstrated that the lime mortar surface had been laid directly upon a rubble-rich deposit of silty clay loam (106/144/145), which extended across the trench and may have represented a levelling deposit. This deposit was relatively thin varying in depth between 0.06 and 0.18 metres on the eastern side of Trench No.1 (106) and 0.03 and 0.12 metres (144/145) on the western side of the trench. It contained a number of fragments of mortar (Small Find Nos. 1058 and 1059) and several pot sherds (Small Find Nos. 1068 and 1124-1136), including several refits provisionally dated to the thirteenth to fourteenth centuries.

Construction of the Circular Great Tower

4.4.13 The possible levelling deposit (106/144/145) directly overlay a horizontal discontinuity (127/146/147) that also extended throughout the trench. Although not identified as significant by Waterman, this surface is identifiable within his section of the original trench, where it forms a line equivalent to the base of his layer 4 (1951, Fig.2.DD). Waterman's section shows that the horizontal discontinuity (127/146/147) is level with the junction between the bottom of the faced, base-

batter of the circular great tower and the start of the foundation footings for the tower. This coincidence suggests that the episode of truncation that created the discontinuity (127/146/147) may represent an attempt to create a level ground surface within the inner ward that is contemporary with the construction of the great tower. As noted above, construction of the tower is conventionally dated to some point shortly before 1211-12 on the assumption that the 'great tower' recorded in the pipe roll for that year is the circular great tower within the inner ward (see Paragraph 2.5.12). On architectural grounds the tower is dated to the late twelfth or early thirteenth century (McNeill 1980, 7; Donnelly 1997, 84-85; McNeill has subsequently revised his dating of the tower, attributing it to Hugh de Lacy during the period AD 1205-1210 cf. 2003, 98). The provisional observation that the levelling deposit (106/144/145) that overlies the horizontal discontinuity can be dated to the thirteenth or fourteenth century by the presence of several refitting pot sherds (see Paragraph 4.4.12) is, at the least, consistent with the suggestion that the discontinuity (127/146/147) is the product of landscaping associated with the construction of the circular great tower.



Figure 23: West-facing section of Trench No.1 following excavation, looking east.

Cut Feature of Uncertain Purpose (Possible Attempt to Slight the Curtain Wall of the Inner Ward)

4.4.14 At the southernmost end of Trench No.1, and cut through one of the levelling deposits (111/137) that Waterman mistook for part of the 'campaigning' phase earth-and-rubble bank (see Paragraph 4.4.15), was a negative feature (118/132) cut against the adjacent curtain wall (124). The feature extended northwards from the curtain wall for a maximum exposed distance of 3.10 metres and had a maximum depth of 0.87 metres. Given that the feature (118/132) was subsequently



Figure 24: West-facing section of Trench No.1.
truncated (127/146), it is reasonable to assume that it was originally more substantial in size. Waterman did not recognise this negative feature during the course of his excavations. Instead he misidentified its surface as the 'toe' or outer edge of his putative earth-and-rubble bank (cf. Waterman 1951, 19). His confusion was understandable because within the footprint of his original trench the edges of the later feature (118/132) and the construction cut (117/143) for the curtain wall did coincide.²³ However, the extension of Waterman's trench dug in 2012 demonstrated that they are separate, and stratigraphically unrelated, features. The space between the edge of the later cut (118/132) and the curtain wall had been backfilled with redeposited, light orange to brown, natural mineral subsoil (107/123), which had subsequently been truncated by the horizontal discontinuity (127/146/147) tentatively associated with the construction of the circular great tower (see Paragraph 4.4.13). The only finds contained within the fill (107/123) of this feature (118/132) were a fragment of lime mortar (Small Find No.1090) and a stone with a few droplets of glassy slag adhering to its surface (Small Find No.1057). The purpose or function of the feature (118/132) is uncertain, however, its position immediately adjacent to the curtain wall suggests that it may represent an attempt to destabilise or slight the curtain wall of the inner ward.

Anglo-Norman Levelling Deposits

4.4.15 Whatever its purpose, the feature (118/132) dug against the curtain wall (124) cut through the stratigraphically earliest (111/137) of the series of deliberately dumped deposits which had previously been misidentified as an earthwork bank dating to the 'campaigning' phase of the Anglo-Norman conquest of Ulster. In sequence of deposition, these levelling deposits consisted of a dump of medium-sized stones in a silty clay loam soil matrix (111/137; maximum thickness 0.52 metres), a deposit of smaller, angular-shaped stones in a sandy loam soil matrix (110/121/122/138; maximum thickness 0.47 metres), and a layer of redeposited natural subsoil (115/119; maximum exposed thickness 0.27 metres). Their physical arrangement indicates that these layers were deposited in a sequence working inwards from the edge of the inner ward, hence the later feature (118/132) only having a direct stratigraphic relationship with the earliest of the levelling deposits (111/137). Study of both Waterman's published section of the original trench and his account of his excavations means that it is possible to confidently equate the three levelling deposits excavated in 2012 with his layers 7, 8 and 9 (1951, 19, fig.2.DD). His published section also shows that a fourth levelling deposit was dumped over the latest deposit excavated in 2012 (i.e. 115/119) and that it extended at least as far as the great circular tower where its surface (apparently an extension of the horizontal discontinuity excavated in 2012 as 127/146/147) was cut through for the footings of the tower (Waterman 1951, fig.2.DD layer '5'). Waterman described this last levelling deposit as consisting of a 'grey loam ... containing occupation material together with an iron horse-shoe of early medieval type' before confirming that it was from the surface of this deposit that the 'foundation trench for the keep ... was excavated' (1951, 20). Although Waterman considered this deposit to be a soil that had accumulated over the back of his earth-and-rubble 'bank' (1951, 19-20) it is re-interpreted here as an integral element of the series of deliberately dumped deposits whose purpose was to transform the naturally sloping summit of the hill in order to create a level ground surface within the inner ward. The relationship observed by Waterman between the foundation cut for the footings of the great tower and the last of these levelling deposits demonstrates that their deposition pre-dates the construction of the great circular tower.

²³ The same misinterpretation was also made during the initial *Time Team* phase of the excavation in 2012, demonstrating the risks inherent in excavating at pace and relying solely upon sections for an appreciation of a site's stratigraphic sequence.

Early Anglo-Norman Occupation

- 4.4.16 The sequence of levelling deposits overlay a dark brown sandy clay loam (112/139) that had a maximum thickness of 0.19 metres and which extended throughout Trench No.1, except in the southern part of the trench where it was truncated by the cut feature possibly associated with an attempt to slight the curtain wall (118/132). The sandy clay loam (112/139) is interpreted as representing an early Anglo-Norman phase of occupation at Dundrum because it demonstrably pre-dates the construction of the great circular tower and contained a small assemblage of pot sherds of medieval date (Small Find Nos.1071-1079, 1498-1499 and 1503-1505).
- The lower part of the foundation cut (117/143) for the curtain wall of the inner ward survives, although the surface from 4.4.17 which the foundation was cut has been removed by the feature (118/132) tentatively identified as being associated with an aborted attempt to slight the curtain wall. As it survives, the foundation cut has near-vertical sides, with a relatively flat base and is 0.35 metres deep being cut down through the uppermost, weathered part of the bedrock to a level suitable for building upon. The gap between the inner face of the curtain wall and the edge of the foundation cut is 0.25 metres. After construction of the wall, the foundation cut was backfilled with a charcoal-flecked deposit of small, angular- to subangularshaped stones in a clay loam soil matrix (116/142). A quantity of animal bone (see Appendix 6) and a fragment of worked antler (Small Find No.1516) was recovered from the backfill of the foundation cut. Although no direct stratigraphic relationship exists between the early Anglo-Norman soil horizon noted above (112/139; see Paragraph 4.4.16) and the foundation (117/143) for the curtain wall (124) it is considered likely that the soil horizon post-dates the construction of the curtain wall. One other negative feature (129), which was demonstrably sealed by the dark brown sandy clay loam (112/139), was located on the western side of the trench where it was exposed in the section formed by Waterman's trench between 0.30 and 1.90 metres from the curtain wall. Unfortunately, the feature did not extend into the 2012 eastward extension of Waterman's trench, resulting in some uncertainty over its character. The upper part of the feature (129) was difficult to define with confidence, but it clearly had gently sloping sides and a rounded base. The upper fill of the feature appeared to be a layer of light brown silty sand (114), although it is possible that this may have been an overlying layer rather than a fill. The lower part of the feature was filled with a deposit of light to mid-grey clay loam (128). If the deposit of light brown silty sand (114) was a fill of the feature then it was 0.69 metres deep, although if its only fill was the light to mid-grey clay loam (128) then it was only 0.49 metres deep. The base of the feature was physically cut some 0.25 metres into the weathered surface of the bedrock. The feature was not excavated, however, small quantities of animal bone were retrieved from the exposed section from both its possible upper (114) and definite lower (128) fills (see Appendix 6). Although his excavation trench cut through this feature, Waterman does not record its presence in the account of his excavations (1951, 19-20). Its purpose was not obvious, although that it did not appear in the eastern edge of Waterman's excavation trench suggests it was localised in extent, like a pit, rather than being a more extensive linear or curvilinear feature. Unfortunately, no stratigraphic relationship between this feature of uncertain purpose (129) and the foundation cut (117/143) for the curtain wall could be established.
- 4.4.18 The negative feature of uncertain purpose (129) cut through two layers. The uppermost of these was a layer of possibly redeposited gritty loam (113/140) which had a maximum depth of 0.34 metres, whilst the lower layer was a mid to grey brown sandy clay loam (131/141) that, in turn, directly overlay the shattered surface of the bedrock. The possibly redeposited gritty loam (113/140) contained a large number of small, angular-shaped stone inclusions and a large amount of animal bone, as well as two number of pot sherds (Small Find Nos.1507 and 1770), a crucible (Small Find No.1772) a possible tuyeré fragment (Small Find No.1517). The reason for suggesting that the gritty loam (113/140) may be

redeposited is that the surface between it and the underlying clay loam (131/140) on the eastern side of the trench was notably steep intimating that the gritty loam (113/140) may be the fill of a cut feature (148). The lower layer of mid to greyish-brown, sandy clay loam (131/141) also contained a large number of small, angular-shaped stone inclusions, as well as occasional larger angular-shaped stones which may have been freshly quarried prior to their deposition. A single pot sherd (Small Find No.1808) and a quantity of animal bone (see Appendix 6) were recovered from the sandy clay loam (131/141). Provisional analysis of the small number of pot sherds recovered from these early deposits suggests that the upper layer may date to the 'campaigning' phase of de Courcy's Ulster enterprise, whilst the lower deposit is probably a pre-Norman soil horizon. The evidence for metalworking recovered from the upper soil horizon is of particular interest given the apparent early Anglo-Norman date of the deposit.

Levelling Deposits within the Inner Ward (Trench No.4)

- 4.4.19 The earliest archaeological horizon excavated within Trench No.4, that relating to the apparently pre-Norman revetted structure, has already been described (see Paragraphs 4.4.5 - 4.4.7). The remainder of the stratigraphic sequence uncovered within the trench, most significantly a series of levelling deposits and truncated occupation horizons of medieval date, is accounted for here. As noted above (see Paragraph 4.4.5), Trench No.4 was largely excavated in 2012 as a rectangularshaped cutting (dimensions 7.00 by 2.75 metres), aligned approximately northeast-southwest, within the centre of the inner ward. The siting of the trench was intended to investigate both the southwestern part of the revetted structure and the area immediately adjacent to an opening that passed through the wall of the great circular tower. In 2013 a narrow trench, only a metre wide was extended from the southeastern corner of the trench in a southwesterly direction as far as the base of the circular great tower (a distance of between 4.20 and 4.50 metres). The purpose of this extension was to relate the levelling deposits uncovered in the main part of the trench in 2012 with the construction of the great tower. It was hoped to ascertain whether the levelling deposits pre-dated the construction of the tower, as was demonstrably the case with the apparently comparable levelling deposits encountered in Trench No.1 (see Paragraph 4.4.15). In the event the sequence of features cut against the base batter and footings of the great tower (i.e. 438, 439, 449 and 446) prevented any direct stratigraphic relationship being discernable. The extension dug in 2013 also enabled a composite, northwest-facing section across much of the inner ward to be produced. Comparison of the conjoined stratigraphic sequences encountered in 2012 and 2013 is complicated by the fact that in 2012, in order to facilitate the three-day Time Team format, a number of superficial deposits were mechanically excavated as a nominally 'single' stratigraphic unit awarded Context No.402. Manual excavation in 2013 demonstrated that this 'single' unit encompassed an eighteenth- to nineteenth-century cultivation soil (430), a levelling deposit (435) and possible dumped deposit of silty clay loam (440) also of eighteenth to nineteenth-century date, as well as a possible late medieval deposit of angular stone in a gritty clay soil matrix (442). It is possible that a number of archaeological features and horizons of late medieval to early modern date were lost during the mechanical excavation in 2012.
- 4.4.20 Underlying the sod and topsoil (401/427; depth 0.05 to 0.15 metres) that extended throughout both the original trench and extension was a shallow feature (433) cut against the base batter of the great tower (461). The feature extended out 0.45 metres from the base batter, was 0.13 metres deep, had a comparatively steep outer edge and a wide, flat base. It was filled with a redeposited line of turves (431) that sealed a thin, primary fill of fine gravel or quarry dust (453; depth 0.01-0.02 metres). The feature is interpreted as being the remains of a managed line of gravel edging around the base of the great tower, which has been deliberately turfed over. This style of managing an ancient monument dates to the second half of the twentieth century. The feature (433) was cut into a dark brown clay loam cultivation soil (430), with a maximum

thickness of 0.29 metres, which was in evidence throughout the extension (and was part of the complex of superficial deposits mechanically excavated as Context No.402 in the main trench). Undulating variations observed in the truncated surface of clay loam (430) suggest that it was the product of spade cultivation – a conclusion consistent with the results of the geophysical survey (see Paragraph 3.4.2). Truncated by the spade cultivation was a layer of rubble in a silty loam soil matrix (434) which had a maximum thickness of 0.10 metres and extended for a distance of 3.85 metres from the base batter of the great tower along the extension excavated in 2013. The deposit contained a small- to medium-sized, angular to subangular stone inclusions, many of which had mortar adhering to them suggesting the deposit was the product of spreading out of a dump of rubble.

Eighteenth- to Nineteenth-Century Maintenance of the Great Tower and Levelling of the Inner Ward

- The deposit of spread out rubble (434) sealed two features (438 and 439) cut against the base batter of the great tower. 4.4.21 Both features had steeply curved sides and gently curved bases. The latest feature (438) extended out 0.46 metres from the base batter, was 0.23 metres deep and was filled with a charcoal-flecked, dark, greyish-brown clay loam fill (437) which contained a number of angular stone inclusions and fragments of mortar, as well as a sherd of coarse pot (Small Find No.2125) and a brick fragment (Small Find No.2124). The second feature (439), which was cut by the first (438), was larger and extended out 0.91 metres from the edge of the base batter and was 0.37 metres deep. This was filled with a single deposit of mortar-flecked, mid-brown, clay loam (436) and contained inclusions of angular stone, including some stones with lime mortar adhering to them, as well as several fragments of mortar. Three sherds of coarseware (Small Find nos. 2136-2138), a sherd of medieval pottery (Small Find No.2139), an iron nail (Small Find No.2115), as well as a small quantity of animal bone (see Appendix 6) were recovered from the fill (436). The second feature (439) truncated a third, smaller feature cut against the footings of the great tower and was cut into a levelling deposit of angular gravel (435). The base of this truncated cut feature (449) had a gently curving side and base, extended a maximum of 0.55 metres from the footings of the great tower and had a maximum surviving depth of 0.21 metres. It was filled with a deposit of large fragments of rubble in a mortar-flecked gritty clay loam soil matrix. Due to its truncation, it was not possible to ascertain which level the feature (449) had been originally cut from. The purpose of the three features (438, 439 and 449) cut against the base batter and footings of the great tower is uncertain, although they are probably related to attempts to maintain the fabric of the tower during the eighteenth and nineteenth centuries. A review of the historical evidence relating to the castle indicates that there were a number of episodes of conservation or restoration work at the monument during this period (see Paragraph 2.5.36).
- 4.4.22 The angular gravel that made up the bulk of the levelling deposit (435) into which the second feature (439) was cut, was set in a soil matrix of dark, greyish-brown silty loam. It extended from the edge of the feature to the northeastern end of the extension to Trench No.4 (at which point it formed part of the complex of deposits collectively excavated as Context No.402 in the main part of the trench). The high quantity of angular stone gravel within the deposit indicates that its formation was as a consequence of a deliberate dump of material, rather than the result of a natural process of soil development. It is provisionally interpreted as an attempt to raise the level of the ground surface. The relatively uniform thickness (0.10 to 0.18 metres) of the deposit suggests that its deposition was not specifically intended to create a flatter ground surface within the inner ward. A significant quantity of animal bone (see Appendix 6) and a single pot sherd (Small Find No.2140) were recovered from the deposit. The angular gravel levelling deposit (435) overlay a silty clay loam (440), which also extended throughout most of the 2013 extension (and was mechanically excavated as Context No.402 in the main part of the trench). The silty clay loam varied in thickness from between 0.06 and 0.10 metres being deeper at the

end of the trench extension closest to the great tower. It contained a quantity of animal bone and a number of discrete fragments of yellow clay, apparently derived from an underlying floor deposit (443), but no artefacts. It is possible that the silty clay loam forms part of a deliberately dumped deposit and the surface revealed by its excavation is interpreted as representing a possible act of truncation associated with either raising or levelling the ground surface within the inner ward during the eighteenth or nineteenth centuries. It certainly truncated a fourth feature (446) cut against the footings of the great tower at the southwestern end of the extension to Trench No.4. The feature, which had a relatively steep edge and a near flat base, extended out a maximum distance of 0.95 metres from the footings and had a maximum depth of 0.35 metres. It was filled with a single deposit of mortar-flecked, mid-brown, gritty clay loam (445) which contained a large quantity of animal bone (see Appendix 6), as well as numerous shells (see Appendix 7) and fragments of mortar (Small Find Nos.3456-3479). Interpretation of the sequence of features (438, 439, 449 and 446) cut against the base batter and footings of the great tower and the associated deposits (435 and 440) from which the features were demonstrably or presumably cut is problematic, however, they are provisionally identified as representing eighteenth- to nineteenth-century episodes of maintenance of the tower and levelling within the inner ward. There is no evidence to suggest that any of these features or deposits are of any great antiquity.

Possible Phases of Late Medieval Occupation

- 4.4.23 The earliest of the features (446) described immediately above, cut through a small spread of charcoal (441) restricted to the northwestern edge of the 2013 extension to Trench No.4. The deposit extended for a distance of approximately 0.50 metres into the trench and had a maximum depth of 0.02 metres. It directly overlay a localised deposit of yellowish-brown sandy clay (443) that is interpreted as representing the remnants of a 'beaten' earth floor. The deposit extended across the entire metre width of the extension to Trench No.4. Its southwestern edge was truncated by one of the features (446) cut against the footings of the great tower, but it extended for a distance of 0.65 metres to the northeast of the feature's edge and had a maximum thickness of 0.04 metres. Whether the overlying deposit of charcoal (441) was derived from a hearth associated with the floor (443) is difficult to assess, as no trace of the original surface of the floor was recognised during the course of the excavation. Underlying the apparent clay floor deposit (443) was a thin layer of angular stones in a dark, greyish-brown, gritty clay soil matrix (442; thickness 0.06 to 0.09 metres) that extended for a distance of 2.40 metres to the northeastern end of the 2013 extension to Trench No.4 (beyond which point it was the earliest deposit mechanically excavated as Context No.402). The deposit contained a small amount of animal bone (see Appendix 6) and a single fragment of ironwork (Small Find No.2173). It is unclear how this deposit formed, although it may represent a dump of material that was laid down to form a base for the overlying 'beaten' earth floor (443). If this is the case then it would suggest that the floor, and by extension the building it furnished, originally extended northeastwards from a point immediately adjacent to the great tower for a distance of at least 4.20 to 4.50 metres, indicating that it was a substantial structure. The 'basal' layer of angular stone was apparently deposited upon an apparent horizontal discontinuity (424) that may represent an act of clearance within the inner ward prior to the construction of the building associated with the surviving remnant of the 'beaten' earth floor (443). Unfortunately, no dating evidence was retrieved to date this phase of occupation, however, it is not unreasonable to suggest that it dates to at least the late medieval period.
- 4.4.24 Within the extension to the trench excavated in 2013 the horizontal discontinuity (424) truncated a cut feature (450) of uncertain purpose that was filled with a charcoal-rich deposit (444). Only the lowest 0.12 metres of the feature survived intact, however, it demonstrably extended across the width of the trench extension and for a distance of 1.25 metres along the length of the trench. The charcoal-rich fill was clearly the product of an episode of burning, however, it is uncertain

whether it represents material that was burnt *in situ* within the truncated feature (450) or was derived from a hearth or kiln located elsewhere. Apart from a small quantity of animal bone (see Appendix 6) and a single piece of ironwork (Small Find No.2190), no finds were recovered from the fill (444) of the feature (450), which is likely to be medieval in date and representative of an earlier phase of activity than the overlying 'beaten' earth floor (443).

Anglo-Norman Levelling of the Inner Ward and the Construction of the Circular Great Tower

- 4.4.25 The truncated feature of uncertain purpose was cut through the latest of a sequence of extensive levelling deposits (403/447) within the inner ward whose deposition is interpreted as dating to the Anglo-Norman period. The latest of these deposits consisted of medium- to large-sized, angular to subangular stones within a matrix consisting of gravel and small angular stone chips, which extended through much of the extension to Trench No.4 and a short distance northeastwards into the original trench. It overlay a another levelling deposit of medium to large angular to sub-angular stones, this time in a grey to dark brown, clay loam soil matrix (407/454). This lower deposit extended from a point 2.35 metres to the northeast of the footings of the great tower for a distance of 5.95 metres to butt up against the west-facing part of the revetment wall (406/408) within the original trench. This extensive levelling deposit had a maximum thickness of 0.18 metres. These two deposits (403/447 and 407/454) are interpreted as representing a substantial episode of levelling and raising of the ground surface within the inner ward and it is tempting to equate them with the comparable sequence of deposits excavated within Trench No.1 (i.e. 110/121/122/138, 111/137, and 115/119) (Paragraph 4.4.15). Within Trench No.1 it was possible to demonstrate that these levelling deposits pre-dated the construction of the circular great tower, indicating that they represented a horizon within the early Anglo-Norman occupation of the site. Certainly, a provisional analysis of the pot sherds (Small Find Nos. 1522, 1536-1537, 1639 and 2211-2212) recovered from the comparable deposits within Trench No.4 (i.e. 403/447 and 407/454) produced no evidence inconsistent with an early Anglo-Norman date. The recovery of articulated animal bone (Small Find No.1518) from the upper levelling deposit (403/447) provides material suitable for radiocarbon dating (see Section 6.7).
- 4.4.26 Unfortunately, no meaningful stratigraphic link between the levelling deposits within Trench No.4 and the construction of the circular great tower could be established. It was not possible to ascertain from what level the footings (460) for the great circular tower were cut, because of the superimposition of the sequence of later features (i.e. 438 439, 449 and 446) cut against both the footings and base batter of the tower. The footings appear to have been created by digging out a foundation trench for the structure, apparently to bedrock when viewed from within the cistern, and then simply filling it with a deposit of stone and lime mortar. The latest deposit through which the foundation for the footings was at a level with the silty clay loam deposit (440) interpreted as probably being associated with either raising or levelling the ground surface within the inner ward during the eighteenth or nineteenth centuries (see Paragraph 4.4.22). This would indicate that the original surface and deposits within the inner ward that were associated with the construction of the great tower have been removed by subsequent acts of truncation.

Dumped Deposits and a Truncated Episode of Occupation

4.4.27 The excavation of the earlier levelling deposit (407/454) exposed the truncated (425) surface of a large hearth (414) located immediately adjacent to the southwestern edge of the original Trench No.4. The hearth was circular (diameter 1.02 metres) and survived to a depth of 0.09 metres. It was filled with a fill of charcoal-rich, reddish-brown, heat-modified, clay loam

(412). The horizontal discontinuity (425) upon which the overlying levelling deposits were dumped, was probably associated with the demolition of whatever building the hearth (414) furnished.

4.4.28 That this act of demolition represented more than the dismantling of a single building is indicated by the fact that the horizontal discontinuity extended throughout the extension and original trench as far as the west-facing revetment wall (406/408) in the northeastern part of Trench No.4. Immediately adjacent to the circular great tower the discontinuity cut a deposit of clay loam (451/452), that in turn sealed a layer of redeposited subsoil (453), which itself overlay a localised, voided, dump of stones in a clay loam soil matrix (456). The layer of mid greyish-brown clay loam (451/452) was the latest deposit through which the foundation for the footings of the great tower (460) was cut (459) (see Paragraph 4.4.26). The clay loam (451/452) probably represents the remains of an early soil horizon at Dundrum. It survived for a maximum distance of 1.40 metres beyond the footings of the great tower and had a maximum depth of 0.17 metres. Finds recovered from the clay loam include a single sherd of coarseware (2240), four fragments of ironwork (Small Find Nos.2233 and 2235-2237), a possible crucible fragment (Small Find No.2234) and two possible, partially mineralised coprolites (Small Find Nos.2238-2239). The underlying layer of redeposited clay subsoil extended for a distance of 3.20 metres along the length of the extension to Trench No.4 and varied in thickness between 0.08 and 0.14 metres. The deposit contained a quantity of animal bone and a sherd of both glazed and coarseware pottery (Small Find Nos.2247 and 2248 respectively). It overlay another deliberately dumped deposit (456), albeit one which was very much localised in its extent, being restricted to an area 0.65 metres out from the footings of the great tower. This layer (456) consisted of large angularshaped stones with air voids between them in a mid-brown clay loam matrix and had clearly been rapidly deposited, although to what purpose is impossible to ascertain.

Slowly Accumulating Soils (A Phase of Abandonment or Non-Intensive Occupation)

4.4.29 Within the main trench, the horizontal discontinuity (425) truncated a series of layers that appeared to represent slowly accumulating soils that reflected either a period of abandonment or non-intensive occupation of the hill top. The latest of these was an irregular patch of dark brown, silty clay loam (411), located adjacent to the southeastern edge of excavation, which was heavily flecked with charcoal and contained a number of small, angular stone inclusions. It had a maximum thickness of 0.08 metres and was no more than 0.50 metres in its maximum dimension. The silty clay loam had accumulated within a hollow within the surface of the underlying deposit of mid brown silty loam (413) that extended through much of the main trench, but not as far as the revetted structure, and had a maximum depth of 0.09 metres. Apart from a small quantity of animal bone and shell, the only find from this deposit was a single sherd of pottery (Small Find No.1567) hence the suggestion that its deposition occurred during either a phase of abandonment or non-intensive occupation of the silty loam (415) that appeared to have accumulated as a silt within a natural hollow within the underlying deposits. The deposit had a maximum thickness of 0.03 metres and was exposed for an area that extended a maximum of 2.50 metres into the trench. No finds were recovered from this localised deposit of silty loam.

Demolition of the Revetted Structure

4.4.30 Butting up against the west-facing side of the revetment wall in Trench No.4, and overlying the silty clay soil (Context No.417/419) that the revetment wall's foundation (Context No.422) was cut through (see Paragraph 4.4.6), were two dumps of redeposited subsoil (410/418 and 416), both of which contained displaced slabs that suggested their deposition coincided

with the demolition or slighting of the revetted platform.²⁴ The uppermost of these levelling deposits (410/418) consisted of redeposited, mid-orange to brown clay subsoil mixed with shattered stone that was possibly waste material from quarrying, as well as occasional stone slabs that appeared to have been displaced from the adjacent revetment. It butted up against the revetment, extended southwestwards for a distance of 4.20 metres, and had a maximum depth of 0.15 metres. The underlying levelling deposit (416) consisted of a dump of large stones, including several slabs that were probably displaced from the revetment, and smaller, weathered or shattered stones in a reddish brown loam soil matrix. Apart from a single sherd of souterrain ware (Small Find No.1538), the only finds recovered from these two levelling deposits were occasional fragments of abraded animal bone whose condition suggested they were residually deposited.

Anglo-Norman Timber Structure (Trench No.2)

- 4.4.31 Trench No.2 was located within the inner ward, immediately adjacent to the passage through the secondary gatehouse. That the gatehouse was built over a reduced length of the curtain wall indicates that it was not the original entrance into the inner ward. The original entry was presumably located in the eastern angle of the inner ward adjacent to the bridge-pit which was cleared out in an unrecorded episode of excavation prior to 1955 (cf. Anon. 1966a, 207, fig.133). On architectural grounds the gatehouse is conventionally dated to the second half of the thirteenth century (Anon. 1966a, figs.133-134; Donnelly 1997, 85), although an earlier date is possible (McNeill 1980, 22; McNeill 1997a, 91-92; see Paragraphs 2.5.16 and 2.8.7). Unfortunately, Waterman's excavations within the gatehouse only uncovered a sequence of disturbed deposits and he found it impossible to corroborate this date on archaeological grounds (cf. Waterman 1951, 20).
- 4.4.32 Trench No.2 was 2.0 metres square and aligned on near north-south and east-west axes. Underlying the topsoil (201), which supported a vegetation of managed grass, was a superficial and localised spread of small- to medium-sized stones within a silty clay loam soil matrix (202) within the central part of the trench. This deposit contained a two pence coin dating to 1981 (Small Find No.1010) indicating that it was modern. Although it is uncertain how this deposit formed, that Trench No.2 was located close to an entrance into the inner ward frequently used by modern visitors to the monument suggests that it may have been laid down to firm up ground that had become disturbed or poached at a point of frequent egress. It overlay a dark-brown clay loam that extended throughout the trench, varied in thickness between 0.05 and 0.18 metres and is identified as representing a soil horizon associated with the spade cultivation witnessed in the geophysical surveys of the inner ward (see Paragraph 3.4.2).
- 4.4.33 The spade cultivation had truncated (216) a localised spread of redeposited mottled clay and charcoal-rich material (204) that overlay a rubble deposit of large angular stones (205/207) which are interpreted as representing a phase of demolition of uncertain, but potentially medieval, date. The mottled clay and charcoal-rich material (204) extended from the centre of the trench to the southern edge of excavation and had a maximum thickness of 0.09 metres. It overlay a rubble deposit of large angular stones contained within a dark brown, silty clay soil matrix (205/207) which extended throughout the trench and had a maximum thickness of 0.26 metres. The majority of the stones which formed the principle component of this deposit had been deliberately laid flat, as if to create a level surface. The deposit (205/207) is considered to probably represent a phase of demolition, possibly of the adjacent gate house, however, no mortar was observed adhering to the stones within it casting some doubt on the validity of this interpretation. Given the small size of Trench No.2, a degree of interpretive uncertainty is inevitable. An iron arrowhead of medieval type (Small Find No.1249), along with a number of

²⁴ That part of the stratigraphic sequence associated with the construction of the revetted structure exposed in Trench No.4 is described in Paragraph4.4.6.

other pieces of metalwork (Small Find Nos.1139-1140, 1149-1152 and 1405), pot sherds (Small Find Nos.1153-1157) and a cobblestone (Small Find Nos. 1158), was recovered from the rubble deposit.



Figure 25: West-facing section of Trench No.2.

4.4.34 Excavation of the rubble deposit (205/207) exposed the dark, greyish-brown clay loam fill (209) of a post pipe (210) that unfortunately, due to the pace of digging during the *Time Team* phase of the 2012 season, was only recognised in section (Figure 25). As exposed in the section the post pipe had a diameter of 0.14 metres. Given the size and position of the underlying post hole (213) and its fill of packing stones (212), the original diameter of the post - and by extension post pipe - is likely to have been closer to 0.20 metres. The post pipe (210) demonstrably cut the surface (214) of a beaten earth floor made up of a 0.10-0.12 metre thick deposit of light grey sandy clay (211) that was restricted to the eastern edge of Trench No.2. It is also reasonable to assume that the post pipe (210) also cut a mixed complex of redeposited material (206) which formed a levelling deposit throughout the remainder of the trench. Unfortunately, again probably due to the pace of excavation and the small size of the trench, the stratigraphic relationship that must have existed between the complex of levelling deposits (206) and the clay floor (211) was not recognised. The clay floor sealed a post hole (diameter approximately 0.6 metres, depth 0.23 metres) whose near coincidence of position indicates that it can confidently be associated with the overlying post pipe (210). A fill of packing stones made up of small slabs of the local greywacke and shale (212) survived within the post hole. The form and slightly off-centre position of the post pipe (210) relative to the underlying post hole (213), suggests that the timber building represented by the surviving floor deposit (211) and post hole (213) was deliberately dismantled following a period of occupation, rather than left to decay in situ. The evidence suggests that the post must have been 'wiggled' back and forth on a near east-west alignment to loosen it, creating the off-centre post-pipe represented in the west-facing section, before it was extracted. The beaten earth floor (211) was laid directly on to the truncated surface (215) of a dark brown clay loam (208) which, in turn, directly overlay the surface of the bedrock. The truncation of this buried soil horizon was presumably a consequence of levelling prior to the construction of the timber structure or building represented by the post hole (213) and its associated floor (211). Only the westernmost part of the structure or building was exposed within the trench and although no direct dating evidence for the building was recovered during the course of the excavation, given the trench's location immediately adjacent to, and on the path of, the passageway of the gatehouse it is reasonable to suggest that the timber building was demolished prior to the construction of the

gatehouse. By extension, if this speculative dating of the building's demolition is accepted, then it is reasonable to suggest that the construction and occupation of the timber building dated to the Anglo-Norman phase of occupation. The underlying, truncated soil horizon (208) only contained animal bone and shell, and is provisionally dated to either the Early Christian period or the early Anglo-Norman occupation of the site.

4.5 Excavations within the Outer Ward

The Lime Kiln and Later Phases of Occupation (Trench No.5)

4.5.1 Trench No.5 was partially excavated in the northwestern quarter of the outer ward in 2012 and then extended and more fully excavated during the 2013 excavation season. It was extended on several occasions during the course of the 2012 and 2013 excavation seasons, but in its final form was a near rectangular trench, 7.6 metres by 8.0 metres in size, with its longest axis aligned approximately east to west. Trench No.5 was located over part of one of two large annular, subrectangular anomalies identified in the 2012 magnetometry survey of the castle in an area of well-preserved spadecultivation ridges located on a steep slope (see Paragraph 3.6.1, Figure 17 'f'). Excavation in 2012 quickly revealed that this anomaly was caused by the well-preserved remains of a partially demolished, slightly elliptical-shaped lime kiln, however, the full scale of the kiln's preservation and the realisation that it was built into a hitherto unrecognised quarry, whose presence was not indicated in the geophysical surveys, was not appreciated until 2013. The 2012 excavation consisted of cutting a stepped trench through the sequence of fills that filled the upper part of the kiln's bowl to a depth of 2.4 metres. Excavation in 2013 was largely concerned with emptying the fills of the bowl, which survived to a depth of approximately 5.0 metres, and recording a series of occupational levels that post-dated the demolition of the kiln. In the following account the results of the two seasons of excavation are integrated into a single narrative which supersedes that contained within the summary on the 2012 excavations prepared for the annual Excavations Bulletin (Macdonald and McQuillan forthcoming).

Eighteenth- and/or Nineteenth-Century Spade Cultivation

4.5.2 The thin topsoil of dark brown, humic, silty clay loam (501) supported a sod of well-managed grass (531) and extended throughout the trench. It overlay two horizons of spade cultivation provisionally dated to the eighteenth or nineteenth centuries. The uppermost episode of spade cultivation was topographically reflected by the presence of spade cultivation ridges that extended across the whole of the area of the trench. The spade-cultivation ridges were directed downslope on an approximately northwest-southeast alignment and had an average spacing of 2.7 metres (see Paragraph 3.4.1). The upper cultivation soil was a greyish-brown to dark-brown clay loam (502/505/508/532/534/535) whose depth varied between 0.08 and 0.35 metres and which overlay a truncated surface (515/517) that had been created through the act of cultivation. As predicted in the analysis of the results of both the magnetometry and resistivity surveys the upper cultivation soil was both thinner and damper in the furrows (see Paragraph 3.4.1). The underlying lower cultivation soil of dark, greyish-brown clay loam (504A/506/516/537A) was restricted in extent to the southeastern half of Trench No.5 and again varied markedly in depth between 0.04 and 0.37 metres. It is possible that originally the episode of spade cultivation associated with the lower cultivation soil (504A/506/516/537A) extended throughout the footprint of the trench, but that evidence for it in the northwestern half of the trench was truncated by the subsequent episode of spade cultivation (515/517). The surface of the natural subsoil is much higher in the northwestern part of the trench, which extends beyond the quarry edge, providing a practical limit to the depth of cultivation approximately 0.70 metres below the modern ground

surface. Whether the upper cultivation soil in the southeastern part of the trench represents earth deliberately dumped within the outer ward or is derived from hillwash that had accumulated over the earlier cultivation soil during a prolonged hiatus in cultivation within the outer ward is uncertain.

Seventeenth-Century or Later Medieval Occupation

- 4.5.3 Within the southeastern half of the trench, the truncated surface associated with the earlier episode of spade cultivation (539) cut through four hearth features (562, 564, 540 and 541) that were either cut into a mottled, orangey brown and midbrown gravelly loam (546/547) or a localised deposit of greyish-brown clay loam (541). The localised deposit of clay loam (541) in turn overlay the truncated surface (582) of a fifth truncated hearth (570) indicating that the hearths represented at least two distinct episodes of occupation which are provisionally dated to either the late medieval period or the seventeenth century. The two hearths (562 and 564) that were cut into the mottled, orangey brown and mid-brown gravelly loam (546/547) were located immediately outside of the circumference of the lime kiln in the southern corner of Trench No.5. Only the bases of the two hearths survived intact and both were sub-rectangular in plan. The smaller hearth (564) was 0.26 by 0.16 metres in dimension, 0.02 metres deep and filled with a charcoal-flecked clay loam (563), whilst the larger hearth (562) was 0.34 by 0.24 metres in dimension, 0.04 metres deep and also filled with a charcoal-flecked clay loam (561). There was a difference of 0.10 metres between the height of the base of both hearths (564 is at 48.46 metres OD; 562 is at 48.36 metres OD), whilst the centre of the two hearths were only 0.95 metres apart. These observations suggest that, whilst they may represent the bases of successive bonfires or hearths within the same building, they are unlikely to represent either the truncated remains of a single large hearth or the hearths of separate but contemporary structures.
- 4.5.4 The other three truncated hearths (540, 541 and 570) were all located in the eastern corner of Trench No.5. The upper two hearths (540 and 541) were both cut into a localised deposit of greyish-brown clay loam (545) that probably represents a layer of hillwash or a levelling deposit. This localised clay loam extended for a distance of 2.76 metres along the southeastern edge of excavation, 1.65 metres along the northeastern edge, and had a maximum depth of 0.29 metres at the southern corner of the trench. The two hearths were irregular in plan; the larger hearth (541) having a maximum diameter of 0.74 metres, a minimum diameter of 0.56 metres and being 0.14 metres deep, whilst the smaller hearth (540) was 0.28 by 0.20 metres in dimension and 0.05 metres deep. The larger hearth (541) was filled with a charcoal-flecked and heatmodified orangey yellow silty clay (543; maximum depth 0.06 metres), that overlay a charcoal-rich, mid- to dark-brown, clay loam (544; maximum depth 0.06 metres), which in turn overlay the primary fill of a charcoal-rich, light- to mid-brown, gritty loam (548; maximum depth 0.10 metres). The smaller hearth (540) was filled with a single deposit of charocalflecked and heat-modified orangey yellow silty clay (542; maximum depth 0.05 metres). There was a difference of 0.11 metres between the height of the base of both hearths (540 is at 49.39 metres OD; 541 is at 49.28 metres OD), whilst their centres were 2.18 metres apart. These observations suggest that it is unlikely that the two hearths represent the bases of successive hearths within the same building, the truncated remains of a single large hearth or the hearths of separate but contemporary structures. It is more plausible to suggest that they represent the bases of two successive bonfires or the remains of hearths associated with two non-contemporaneous structures. Underlying the localised deposit of greyishbrown clay loam (545) and extending beyond both the southeast and northeast edges of excavation immediately adjacent to the eastern corner of Trench No.5 was the fifth truncated hearth (570). The horizontal discontinuity (582) that caused the fifth hearth to be truncated is of uncertain origin. The exposed portion of this hearth suggested that it had a subrectangular shape and was at least 0.58 by 0.60 metres in size and had a maximum excavated depth of 0.08 metres. It was filled with a single deposit of charcoal-flecked, dark brown, sandy clay loam with inclusions of burnt clay (569).

4.5.5 Unfortunately the earliest episode of spade cultivation had removed (539) any evidence for the structures that these hearths may have been associated with, although that no evidence for post holes or construction slots survived cut into either the mottled, gravelly loam (546/547) or the localised deposit of clay loam (541) suggests that the hearths were probably not associated with substantial buildings. Consequently, it is reasonable to assume that the hearths are either the remains of camp fires associated with soldiers camped out within the outer ward or hearths associated with slight buildings such as the 'Irish houses' recorded in the now lost 'docket in the Record Office, Dublin' as being located in the outer ward during the summer of 1601 (Phillips 1883, 15, 19; see Paragraph 2.5.29). Stratigraphically the episode, or episodes, of occupation represented by the truncated hearths pre-dates the eighteenth- to nineteenth-century spade cultivation (see Paragraph 4.5.2) and post-dates the infilling of the medieval lime kiln (see Paragraphs 4.5.7 - 4.5.12) suggesting that the hearths represent either a late medieval or seventeenth-century phase of occupation. Although stratigraphically it is possible to demonstrate that the surviving truncated hearths must represent at least two distinct episodes of occupation (see Paragraph 4.5.3), unfortunately no diagnostic dating evidence was recovered from the various fills of the hearths, although coarseware pot sherds (Small Find Nos.2568 and 2902) were recovered from two of the fills (544 and 569 respectively). All of the hearth fills, however, were excavated as total samples (Sample Nos.83-86, 114-115 and 123) and the recommended processing of these samples will hopefully provide samples suitable for radiocarbon dating.

Possible Phase of Abandonment

4.5.6 The fifth truncated hearth (570) was cut into a mottled, orangey brown and mid-brown gravelly loam (546/547) which extended through the southeastern half of the trench, had a maximum depth of 0.21 metres and possibly represented a hillwash that accumulated during either a phase of abandonment or non-intensive activity within the outer ward. It is also conceivable that it may be a levelling deposit associated with the filling of the quarry within the outer ward. A comparable deposit of dark, greyish-brown clay loam (538) was present in the northwestern part of the trench and again probably represents either a hillwash that accumulated during a phase of non-intensive activity or a levelling deposit. Unfortunately, no direct stratigraphic relationship existed between these two deposits because it had been truncated (539) by the earliest episode of spade cultivation. The excavation of these two deposits exposed both the demolished surface of the lime kiln's superstructure (584) and a localised deposit of voided medium-sized, angular to subangular stones (583) in the eastern corner of the trench that apparently represents a deliberate dump of material thought to be contemporary with the partial demolition and filling in of the lime kiln. As the focus of the excavation of Trench No.5 was predominantly on clearing out the fills associated with the bowl of the lime kiln (see Paragraphs 4.5.7 - 4.5.12), the dumped deposit of voided stones (583) was only partially excavated. Enough of the deposit was removed, however, to demonstrate that it had a maximum depth of 0.24 metres, was probably, but not certainly, equivalent to a similar layer (721) within Trench No.7 (see Paragraph 4.5.23) and that it sealed an unexcavated deposit of mid- to dark-brown silty clay (572) that probably represents a hillwash deposit that extended to the southeast of the lime kiln.

The Demolition and Infilling of the Lime Kiln

4.5.7 Excavation demonstrated that the superstructure of the lime kiln had been deliberately reduced in height by having its upper part knocked into the kiln's bowl. This act of demolition appears to have formed part of a wider project to fill in the quarry within which the kiln was built, however, that the excavation did not extend beyond the area immediately adjacent to the edge of the kiln makes this supposition difficult to prove. As the lime kiln, and by extension the associated quarry, had a

maximum surviving depth of approximately 5.0 metres, this was a substantial act of landscaping which may also have involved the deposition of the stratigraphically later deposit of mottled, orangey brown and mid-brown gravelly loam (546/547; see Paragraph 5.4.6). That no topographic expression of either the lime kiln or the quarry survives within the outer ward demonstrates how successful this episode of landscaping was. What prompted this need to transform the topography and character of the southeastern corner of the outer ward is not clear. Initially, during the course of the excavation, it was thought that the infilling of the lime kiln and the landscaping might have been associated with the construction of the outer ward itself, however, the presence of a gun loop in the adjacent, eastern section of the curtain wall at a significant depth below the present ground surface indicates that the outer ward must have been built prior to the raising of the ground surface in the southeastern corner of the outer ward and, by association, the infilling of the quarry. Although this observation does not demonstrate that the opening of the quarry and subsequent construction of the lime kiln necessarily post-date the construction of the outer ward, it does suggest that both features were open at some point during the life of the outer ward. What prompted the need to subsequently fill the quarry and kiln in, and in the process render the adjacent gun loop inaccessible is not obvious, but if the stratigraphically later hearths excavated in Trench No.5 are an indicator of the presence of domestic structures (see Paragraphs 4.5.3 to 4.5.5), it may have been the need to create more living space within the outer ward. This important episode of landscaping within the outer ward is considered further below (see Paragraphs 4.5.12 and 4.5.17).

4.5.8 The partially demolished surface of the wall of the bowl of the lime kiln was awarded the context number 584. Within the bowl of the lime kiln this discontinuity sealed a complex sequence of deposits - which appear to have been deliberately deposited in three, albeit potentially prolonged, episodes (the later episode of deposition being represented by context numbers 507, 512, 513 and 553; the middle episode represented by context numbers 557, 558, 559, 565, 566 and 560; and the earliest episode represented by context numbers 571, 573, 579, 575, 576, 577 and 578) that were respectively separated by an apparent episode of truncation (585) and a short hiatus (represented by context numbers 568, 567 and 574). The uppermost fill was a dark greyish-brown, clay loam (504B/537B), which had a maximum depth of 0.12 metres and appeared to have accumulated into the bowl of the kiln from the northwest, possibly as a deposit of hillwash rather than a deliberate dump appears to post-date the second episode of deposition. It overlay a sequence of three deposits, belonging to the second phase of deposition, which were first excavated in 2012. The uppermost of these was a dumped deposit, some 1.30 metres deep, of loose and voided, small- to medium-sized, angular to subangular stones (507). It overlay a redeposited layer of heat-modified, reddish brown silty clay (512) that was only present around the edges of the kiln where it varied in depth between 0.20 and 0.30 metres. The reddish colour and heat-modified clay elements of this, and a number of lower fills of the kiln, was not a result of in situ burning. Instead, it was derived from the heat-modified clay bonding of the kiln's superstructure. As the excavation progressed it became clear that when the superstructure of the kiln was exposed to rain that its clay bonding was highly susceptible to being washed out of the superstructure.²⁵ This resulted in a number of the fills of the kiln having a distinctive reddish colour and a distribution that only extended to the areas immediately adjacent to the wall of the kiln. It is suggested that between the deposition of the overlying dump of voided stone (507) and the underlying deposit of grey-brown sandy clay (513), the infilling of the kiln had been interrupted by a least one episode of rain which had resulted in the washing out of the heat-modified clay bonding of the kiln's wall and the creation of the redeposited layer of heat-modified, reddish brown silty clay (512) around the inner edge of the kiln's bowl. The upper surface of underlying deposit of grey-brown sandy clay (513) was fairly level, however, its excavation revealed that

²⁵ Exposure to the extreme temperatures associated with the firing of the lime kiln had rendered the clay bonding used in its superstructure extremely friable and prone to erosion. During the course of the excavation the remaining clay bonding of the superstructure of the kiln was protected from the rain by draping a series of plastic tarpaulins around the edge of the kiln's bowl.

the underlying fill of reddish-brown sandy clay (553) was heaped up to the northeastern side of the kiln where its surface was 0.47 metres higher than its surface elsewhere suggesting that this deposit was deliberately dumped into the bowl of the kiln from the northeastern side of the structure. This was a pattern of deposition that was frequently repeated throughout the underlying fills of the kiln associated with the middle phase of infilling (i.e. 558, 559, 565, 566 and 560) suggesting that during both the later and middle phases of deposition into the kiln the same working practices were routinely followed.²⁶ In addition to containing a large number of small- to medium-sized, angular to subangular stone inclusions, the sandy clay deposit (553) also contained several large, fire-reddened stone blocks that were presumably derived from the superstructure of the kiln and traces of a reddish-brown sandy clay soil matrix containing elements of the heat-modified clay bonding of the kiln's superstructure. The presence of a number of bones within the deposit that were arranged vertically between the stones indicates that this was a rapidly deposited fill.

4.5.9 Underlying the sandy clay deposit (553) was a near horizontal surface (585) that is tentatively identified as representing an episode of truncation that marked a break between the last and middle episodes of infilling of the bowl of the kiln. The stratigraphically latest deposit within this apparent middle episode of deposition was a dumped deposit of brown clay loam (557) with numerous small, angular, stone inclusions and a number of medium-sized, angular to subangular stones several of which were arranged at a near vertical angle indicating that the fill was rapidly deposited. There was no evidence to suggest that the brown clay loam deposit (557) had been preferentially deposited from any particular direction. In turn it overlay a deposit made up of separate dumps of cockle, mussel and limpet shells within a medium-brown, clay loam soil matrix (558). Excavation revealed that these dumps 'dived' down from the northeast to the southwest at an angle of approximately 45° repeating the pattern of deposition noted above for the overlying fill of reddish-brown sandy clay (553) (see Paragraph 4.5.8). The steep angle of the tip lines indicates, again, that the fill was a deliberate dump of material – the shells presumably being the waste product of some economic activity being undertaken at the Castle. This shell-rich deposit also contained a large quantity of animal bone, pot sherds and numerous small, angular to subangular stone inclusions. It sealed a similar deposit of cockle, mussel and winkle shells arranged within discrete, steep, tip lines within a medium greyish brown sandy clay soil matrix (559) which was localised to the southern part of the bowl of the lime kiln. This localised deposit of shells also contained a number of small- to medium-sized, angular- to subangular-shaped stone inclusions including several larger stones that were deposited near vertically on their longest axis indicating that it also represented a rapid fill. The localised shell deposit (559) sealed another deposit of shells (565), this time localised to the northeastern part of the lime kiln's bowl immediately adjacent to the kiln wall. Although excavated as a separate context because the shells were contained within a reddish-brown sandy clay soil matrix, it is likely that this 'lower' shell deposit (565) is essentially the same as the overlying deposit (559). A number of individual tip lines of shells crossed the interface between the two deposits and the only meaningful difference between the two deposits was the reddish hue of the 'lower' deposit. This change in colour probably reflects the inclusion of heat-modified clay derived from the walls of the kiln. It is unclear whether this was washed down into the kiln after these fills were deposited and simply percolated down into the 'lower' fill (i.e. 565) or was physically dislodged from the sides of the kiln as the shell-rich deposits were being thrown into the kiln. The 'lower' shell-rich fill (565) sealed a deposit of medium-reddish brown sandy clay (566) containing a large number of small, angular stone inclusions and a small number of medium-sized, angular- to subangular-shaped stones including several arranged vertically indicating that it was a rapidly formed, dumped deposit. This deposit was restricted to the northwestern side of the kiln and also contained several discrete lenses of ash, numerous sherds of pottery and a

 $^{^{26}}$ It is unfortunate that the alignment of the running section used to record the fills of the lime kiln was orientated northwest-southeast and consequently does not reflect the pattern of filling of the kiln from the northeast. Pressures of time prevented the bowl of the lime kiln being excavated in quarters – a strategy that would have provided a representative northeast-southwest aligned section.



Figure 26: Plan of Trench No.5.



Figure 27: Composite, southwest-facing section through lime kiln.

couple of fragments of ironwork, as well as a large quantity of animal bone and shell. As with several of the overlying deposits the discrete lenses of ash and shell within it indicated that it had been deposited from the northeastern side of the kiln.²⁷

- 4.5.10 Removal of the medium-reddish brown sandy clay (566) exposed on the eastern side of the kiln localised deposits of tumbled stone in a reddish-brown sandy clay soil matrix (560) and a fill of reddish-brown sandy clay (574), whilst on the northwestern side of the bowl of the kiln it exposed a similar localised deposit of reddish-brown sandy clay (568) that overlay a fill of reddish brown sandy clay (567). On the eastern side of the kiln the deposit of reddish-brown sandy clay soil containing tumbled stone (560) also included a number of heat-modified stones, presumably derived from the demolished upper sections of the wall of the kiln. This is interpreted as representing the initial dump of material associated with the second episode of deposition within the kiln. It was a relatively loose, voided deposit, indicative of it being rapidly dumped in. The underlying fill of reddish-brown sandy clay (574) was restricted to the area immediately adjacent to the kiln wall on the northeastern side of the kiln and did not extend as far as the running section. Given the restricted distribution of this deposit immediately adjacent to the wall of the kiln and its reddish colour it was interpreted as representing the redeposited remains of the heat-modified clay bonding washed out from the kiln's superstructure. Its deposition is considered to represent a hiatus between the earliest and second episodes of filling in of the bowl of the kiln when the walls were exposed. That this hiatus may represent more than a brief halt in work during the course of a single period of inclement weather is suggested by the surface of the underlying deposit of charcoal-rich, greyish brown clay (571) being nearly horizontal across the width of the kiln. The character of both this and the underlying deposits (i.e. 571, 573, 579, 575, 576, 577 and 578) are markedly different to that of the overlying deposits, which mostly consisted of material demonstrably dumped from the northeastern side of the kiln. The underlying deposits, which are considered to represent an earlier episode of deposition, show no evidence for having been consistently dumped from a single point upon the kiln's perimeter as was the case with the second and third episodes of deposition (see Paragraphs 4.5.8 and 4.5.9). Instead they mostly consist of either a series of fills with near horizontal surfaces (i.e. 571, 575, 577 and 578) or dumps of stones derived from the kiln's superstructure and localised to the edges of the bowl (i.e. 573 and 576) (see Paragraph 4.5.11). On the northwestern side of the kiln the localised deposits of reddish-brown sandy clay (568) and reddish brown sandy clay (567) are also considered to be associated with the hiatus of uncertain duration that separated the two principle episodes of deliberate deposition within the bowl of the kiln. Again, the distinctive colour of the reddish-brown sandy clay (568) was derived from the heat-modified clay bonding washed out from the kiln's superstructure. The underlying deposit of reddish brown sandy clay (567) also contained frequent inclusions of small particles of the heat-modified clay presumably derived from the clay bonding of the wall, as well as a number of small- to medium-sized, angular- to subangular-shaped stones. That some of these stones were deposited with their longest axes in steep alignments suggests that this latter fill may have been rapidly deposited. If these deposits (568, 567 and 574) are correctly identified as representing a hiatus in the backfilling of the kiln, it is notable that no natural deposits of silt or soils derived from the breakdown and decay of vegetation were present either stratigraphically below or above them. This would suggest that, although the earliest and middle episodes of deposition have a different character, there was not an extensive break between them.
- 4.5 11 Underlying the deposits (568, 567 and 574) interpreted as representing a hiatus of uncertain duration in the filling in of the bowl of the lime kiln was a deposit of charcoal-rich, greyish-brown clay (571) that contained frequent charcoal inclusions, but in marked contrast to the overlying deposits, few small angular stones. It sealed a localised deposit of heat-modified

²⁷ It is noteworthy that although shells are an excellent source of calcareous material from which lime can be produced, these shell-rich deposits all form part of the backfill of the kiln and post-date the period when it was in use.

clay and large, burnt stones derived from the collapse or deliberate slighting of part of the kiln's superstructure that were contained within a light orangey brown silty clay loam soil matrix (573). This deposit was restricted in extent to the area immediately adjacent to the kiln wall on the eastern side of the bowl. Underlying it was another localised deposit, this time a charcoal-rich layer of greyish-brown silty clay (579) which was restricted in its extent to the southern part of the interior of the bowl and was not represented in the running section. Underlying it was a more extensive layer of greyish-brown clay loam (575) that contained a number of discrete lenses of winkle shells and a range of stone inclusions including a small number of large stones (maximum dimensions 0.80 metres) whose unburnt surfaces indicates were not derived from the wall of the kiln. Excavation of the greyish-brown clay loam (575) exposed within the eastern half of the kiln, immediately adjacent to the wall of the bowl, a deposit of large burnt stones (576) derived from either the collapse or, more likely, deliberate demolition of the upper parts of the kiln's superstructure. These burnt stones were contained within a reddish-brown clay soil matrix that also contained a number of small- to medium-sized, angular- to subangular-shaped stone inclusions, as well as occasional fragments of shell and charcoal. The presence of several air voids between the stones within this localised deposit indicate that it formed rapidly. In turn it sealed the two primary fills of the bowl of the lime kiln, a charcoal-rich deposit of angular stones in a light to mid-brown clay (577) and an underlying shell-rich deposit of light to mid-brown gritty clay (578). The latter deposit (578) contained a large amount of animal bone and artefacts, such as pottery sherds, suggesting that it may represent the deliberate dumping of midden material within the bowl of the lime kiln. It certainly does not represent a natural silt that had formed within the lime kiln and that it directly overlay a 'floor' made up of the creamy white, lime residue from the firing of the kiln (580) indicates that backfilling of the structure begun relatively shortly after it had been fired for the last time and before a deposit of silt or a natural soil could form within it.

4.5.12 Finds recovered from the fills of the kiln included a vast quantity of pottery, animal bone and shell, along with numerous other finds including metalwork and worked bone and antler (see Appendices Five, Six and Seven). Although none of this material has yet been dated, a single coin find (Small Find No.2870) recovered from one of the fills (557) from the suggested second episode of deposition within the kiln has been provisionally identified as a Long Cross Penny of Henry III and was likely to have been deposited in the second half of the thirteenth century, and most probably in the third quarter of the century (R.Heslip pers.comm.). The coin is heavily corroded and this date must be considered provisional until it has been subjected to investigative conservation and cleaning. Assuming that the provisional date of the coin is valid then the assemblage of finds recovered from the kiln provides a valuable 'snapshot' into the economic life of the castle during the Anglo-Norman period. The third quarter of the thirteenth century spans the period when the Castle was held directly by the Crown and administered by the king's seneschals, granted, as part of the Lordship of Ireland, to Prince Edward and also granted to Walter de Burgh as part of the Earldom of Ulster (see Paragraph 2.5.17). If the suggestion that the lack of a soil horizon separating the 'floor' of the kiln (580) and the sequence of deliberately dumped deposits which filled the kiln's bowl indicates that the use of the lime kiln and its infilling (see Paragraph 4.5.11) is accepted, then this also provides a date for the use, if not construction, of the lime kiln and a concomitant episode of building at Dundrum. It may be that this episode of work is connected with that recorded in the Irish pipe roll for the year 1260-61 (Orpen 1920a, 279; McNeill 1980, 22-23; see Paragraph 2.5.17). The difficulty of applying this argument is demonstrated, however, by the reasonable supposition that the episode of landscaping within the outer ward that led to the backfilling of the lime kiln and quarry also resulted in the burial of the adjacent gun loop in the adjacent, eastern section of the curtain wall (see Paragraph 4.5.7). In England 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). It is not possible, however, to confidently identify Irish examples of this date and 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). Consequently, the burial of a gun loop in the curtain wall of the outer ward is difficult to date before the closing decades of the fifteenth century.

The Character of the Lime Kiln

- 4.5.13 Details of the character and construction of the lime kiln were ascertained from the excavation of a metre-wide sondage on the northwestern (uphill) side of the kiln in 2013. Following the removal of the deposit of dark, greyish-brown clay loam (538; maximum excavated depth 0.36 metres) that is interpreted as either being a hillwash that accumulated during a phase of non-intensive activity or a levelling deposit (see Paragraph 4.5.6), a negative feature (554) cut against the back of the lime kiln was exposed. The feature extended across the width of the sondage, and extended beyond the northwestern edge of Trench No.5. Within the confines of the sondage it had a length of at least 1.75 metres and had a maximum depth of 0.35 metres. Due to being only partially exposed, the purpose of the negative feature is uncertain. It may, however, have been associated with either the robbing of stone from the kiln's superstructure or the demolition of the kiln. It was largely filled with a deposit of dark greyish-brown clay loam with a large number of small, angular stone inclusions (549). The feature had two primary fills - localised and thin deposits of degraded charcoal in clay loam soil matrices (551 and 552; maximum thicknesses of 0.04 and 0.02 metres respectively). Whether these primary fills represent the remains of in situ burning or fills of material washed into the feature is unclear. Their excavation revealed the frost-shattered surface of the bedrock and, immediately adjacent to the rear of the kiln, the top of a near-vertical rock-cut edge (556) which is interpreted as being the back edge of a medieval quarry. The lime kiln had been constructed into the back of this quarry no doubt the quarry edge provided a convenient height from which to load the kiln from above. The superstructure of the kiln consisted of an internal face made up of clay-bonded blocks of local greywacke stone (511) backed with a clay-bonded infill of smaller stones (503) immediately behind the faced course. Between this clay-bonded infill of smaller stones (503) and the edge of the quarry (556) was a deposit of orangey brown sandy clay (555). The upper 0.10 metres of this deposit was excavated and a number of animal bones were recovered from it which should provide a radiocarbon date for the construction of the kiln (see Section 6.7). In 2012 a small sondage was also cut into the back of the kiln on its uphill side but a couple of metres to the southwest. A series of dumps of redeposited subsoil (509, 510 and 514) were found to have been laid against the back of the kiln. Although the constraints of time meant that it was only possible to partially excavate these deposits, it is considered likely that they formed part of a ramp that was built up against the back of the kiln to provide access to the top of the kiln in order to load it.
- 4.5.14 Removal of the fills deposited within the kiln exposed a 'floor' of creamy white, lime (580) with occasional small stone inclusions and charcoal flecks and which presumably represents the residue from the firing of the kiln. The surface of the 'floor' extended from the edge of the kiln across the base of the bowl and was slightly dished being 0.15 to 0.20 metres lower in the centre of the bowl than it is at the sides. The 'floor' was not excavated, however, in the southwestern part of the kiln it was absent revealing an underlying deposit of charcoal containing isolated lenses of heat-modified clay (581). Again this deposit was not excavated, however, it was sampled with a view to isolating material suitable for radiocarbon dating (Sample No. 145).

4.5.15 Unlike the late eighteenth- and nineteenth-century lime kilns that can be found throughout the Ulster countryside which were used to produce lime for agricultural improvement (Harvey 1980, 67-69; Bell and Watson 1986, 35-36; Rynne 2006, 157-160), medieval lime kilns were rarely intended to be permanent structures. Normally, they were only temporary



Figure 28: The single draw-hole within internal, faced wall of the lime kiln (511) showing fill of angular stones within clay soil matrix (577) and surface of 'lime floor' (580), looking east.



Figure 29: The lime kiln (503/511), following excavation of its primary fill of shell-rich, light- to mid-brown, gritty clay (578) exposing creamy white, lime residue from firing of lime kiln forming 'floor' within the kiln (580) and part of underlying deposit of charcoal and heat-modified clay (581), looking southwest. The distinct 'upper' and 'lower' styles of construction are visible in the fabric of the lime kiln.



Figure 30: Apparent tool marks within the fabric of the internal, faced wall of the lime kiln (511).

structures built to meet the needs of a specific job of construction and then left to collapse (Williams 1989, 7). The use of clay-bonding indicates that the excavated lime kiln at Dundrum Castle was not intended to be a permanent structure and that lime mortar was either not available or considered too precious a commodity to be used in its construction. Its remarkable survival is undoubtedly due to both it, and the quarry it was built into, being backfilled shortly after it went out of use. The excavation of the interior of the lime kiln revealed that the bowl had an irregular elliptical plan and tapered

towards its base. The maximum surviving height of the interior of the lime kiln, as measured between the truncated surface of the kiln's wall (584) and the surface of its 'floor' (580) was 5.01 metres. At the surviving 'top' of the kiln it measured 4.24 by 3.50 metres in dimension, at its base it was 3.67 by 2.76 metres in size. The interior of the bowl of the kiln was lined with clay-bonded blocks of roughly squared and triangular greywacke, laid in irregular but discernible courses and bonded together with clay. Exposure to the extreme temperatures associated with the use of the kiln had burnt and in some cases cracked the stone blocks, and modified the clay bonding into a red-brick coloured friable texture. Inspection of the interior wall of the kiln revealed evidence of distinct 'upper' and 'lower' styles of construction in its fabric (Figure 29). It is uncertain whether this variation is significant or represents either two distinct episodes of construction or an episode of significant rebuilding of the upper part of the kiln. The upper section of the kiln consists of large triangular-shaped blocks arranged with a flat base and with smaller stones sandwiched between them. The triangular-shaped blocks are massive with typical dimensions of 0.75 metres height and a width at their base of 0.55 metres. Where part of the fabric of the kiln wall had collapsed it is possible to see that the blocks had a depth of at least 0.17 metres. The lower part of the kiln's superstructure consists of regular courses of near rectangular- and trapezoidal-shaped blocks of greywacke, occasionally inter-mixed with sections made up of smaller stones. Typical dimensions of these 'lower' blocks are that they are 0.28 metres in height and have a width of 0.72 metres. It is notable that in the upper section the large triangular blocks are arranged so that their longest axis is vertical, whilst in the lower section the longest axis of the blocks is aligned horizontally. The transition between the type styles of construction does not occur at a uniform level, but coils around the bowl of the kiln at a height of between 2.25 and 2.70 metres from the base of the structure from a point on the northern side of the kiln.

4.5.16 In three places between the southwestern and northwestern parts of the kiln's circuit it is possible to identify tool marks presumably associated with the original extraction or quarrying of the blocks (Figure 30). These tool marks consist of facets of inverted triangular form with a central vertical edge and occur in clusters of four to five marks. Typically, they are 45mm in depth, 35mm in width and 4mm deep. The majority of the stones used in the kiln wall, however, show no evidence of tool marks. Although the stones used in the wall of the kiln all are burnt to a reddish colour only a small number of the stones, all located towards the top of the kiln, show evidence of heat-cracking. The reason for this is presumably because the stones towards the top of the kiln were more regularly exposed to sudden changes in temperature and moisture - perhaps because they were more often exposed to the elements during firings of the kiln and would be rapidly cooled if it rained during the course of a firing of the kiln.

The Outer Ward (Trench No.7)

4.5.17 One of the research aims of the project is to establish the date of the outer ward (see Paragraph 2.2.2), which is commonly assumed, rather than demonstrated, to be of late medieval date (e.g. Anon. 2009, 61). Although Waterman excavated a number of small trenches within the outer ward during 1960 (see Paragraph 2.7.6; Figure 18), its precise date remains unknown. Waterman did not publish his excavations and, with the exception of a number of finds and a single plan held by the Northern Ireland Environment Agency, his archive no longer survives.²⁸ Waterman had initially suggested that the outer ward was 'considerably later' in date than the inner ward because he believed that the curtain of the inner ward was in a ruinous condition at the time the wall of the outer ward was constructed (1951, 15). This argument was based upon

²⁸ A sustained search undertaken by the authors through the archives of both the Northern Ireland Environment Agency: Built Heritage (the successor body to the Archaeological Survey based within the Ministry of Finance which employed Waterman as an archaeological officer) and Queen's University Belfast (with whom the staff of the Archaeological Survey worked in close association with during the 1960s) has failed to uncover any further elements of Waterman's 1960 Dundrum Castle archive.

the mistaken belief that the thinner curtain of the outer 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 referred to the eastern part of the inner ward's curtain wall as being the 'N.W.' part of the wall. Waterman subsequently recognised that the apparently superimposed length of the outer 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 inner ward's curtain wall when the outer ward was built. Waterman's phased plan of Dundrum Castle, prepared in 1955, but not fully published until eleven years later in the Archaeological Survey of County Down, indicates that, following the rejection of his initial interpretation, on uncertain grounds he dated the curtain wall of the outer ward to the thirteenth century (Anon. 1966a, fig.133). The accompanying written description of the monument indicates, however, that subsequent to preparing the plan 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 outer ward's curtain wall in 1960. Apparently unaware of the final revision in Waterman's dating, and the consequent 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 outer ward²⁹ indicated that the outer ward post-dated the Anglo-Norman period (1997a, 194). 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). The contradictory evidence outlined above for the provisional numismatic date for the infilling of the lime kiln and its associated quarry, and the burial of the gun loop within the adjacent section of the wall of the outer ward (see Paragraph 4.5.12) does not meaningfully advance the resolution of a date for the construction of the outer ward.

4.5.18 Unfortunately, despite the plausibility of McNeill's speculations and the provisional analysis of the excavation results of Trench No.5, the precise date of the outer ward remains unknown. In order to address this lacuna in the appreciation of the structural sequence of the Castle, in 2013 the largest of Waterman's 1960 trenches, which was dug against the curtain wall of the outer ward, was reopened as Trench No.7 and then extended a metre southwards in order to attempt to recover stratigraphic and dating evidence for the construction of the outer ward. Although they were not conjoined, Trench Nos.5 and 7 were located immediately adjacent to each other and it proved possible to equate some deposits within both trenches with a reasonable degree of confidence.

²⁹ It is not obvious that the simple gate into the outer ward is an original feature. The earliest depiction of the gate in its current form is discussed above (see Paragraphs 2.6.4 - 2.6.5) and dates to 1791. An examination of the surviving fabric of the gate by Waterman before modern conservation work was undertaken suggested to him that it had been heavily restored (Anon. 1966a, 210). Inspection reveals that a stub of masonry projects westwards from the curtain wall immediately to the south of the gate. The significance of this stub of walling is uncertain. It may be that in its current form the gate is not only restored, but may even be a secondary feature of eighteenth-century date and that the position of an earlier, and presumably original, gate is represented by the projecting stub of walling located immediately adjacent to the current gate on its southern side. This observation does not, however, greatly diminish the credibility of McNeill's point that the absence of projecting towers suggests the outer ward post-dates the Anglo-Norman period (1997a, 194). An alternative explanation is that the stub of walling is all that remains of a projecting tower that once flanked the gateway on its southern side. If this was the case, then McNeill's argument would be significantly undermined.

Superficial Deposits and Features

4.5.19 Trench No.7 was rectangular in shape (dimensions 4.00 metres by 3.70 metres) with its longest axis aligned approximately east-west, perpendicular to the line of the curtain wall of the outer ward which the trench extended up to. The dark brown, humic, silty clay loam topsoil (701) varied in depth between 0.03 and 0.15 metres, supported a vegetation cover of managed grass and extended throughout the trench. Its excavation exposed a superficial organic-rich deposit of silty clay loam (705) that had formed against the curtain wall following the backfilling of Waterman's excavation trench in 1960. The deposit only extended out from the curtain wall for a distance between 0.35 and 0.40 metres and is interpreted as representing a more humic element of the topsoil that was created by the decay of leaves that had accumulated against the base of the curtain wall. Removal of these superficial deposits (701 and 705) exposed the backfill (708) of Waterman's 1960 excavation trench (709). Recognising the edge (709) between Waterman's backfill (708) and the undisturbed cultivation soils (702 and 706) in the southern part of the trench was difficult as Waterman's trench had essentially been solely dug through, and therefore backfilled with, cultivation soil. Consequently, the backfill (708) was largely excavated as either Context Nos. 702 or 706. Removal of the backfill demonstrated that Waterman's trench was 2.8 metres (north-south) by 2.8 metres (east-west) in size meaning that only the southern and western edges of Trench No.7 were cut through undisturbed deposits. For the majority of the footprint of Waterman's trench the surface of the bedrock lay close to the modern ground surface (between 0.15 and 0.60 metres) and, as noted above, beneath the turf-line, the only deposits Waterman would have excavated through was the cultivation soil. Excavation of the more extensive footprint of Trench No.7 demonstrated, that immediately beyond the southern edge of Waterman's 1960 trench, the surface of the bedrock dived down significantly (in the southern part of Trench No.7 the surface of the bedrock was encountered at a depth of 1.20 metres below the modern ground surface). Within this deeper 'pocket' of deposits a number of layers and features were preserved below the level of truncation associated with spade cultivation.

Eighteenth- and/or Nineteenth-Century Spade Cultivation

The cultivation soil within the undisturbed part of Trench No.7 was excavated as a localised, upper deposit of comparatively 4.5.20 stone-free dark brown loam (702) and a lower deposit of medium-brown silty clay loam with an uneven distribution of small- to medium-sized, angular to subangular stone inclusions (706). The spade cultivation was topographically reflected by the presence of spade cultivation ridges that extended across the whole of the area of the trench and formed part of the same system that extended across the adjacent area excavated as Trench No.5. As previously noted, the cultivation ridges were directed downslope on an approximately northwest-southeast alignment and had an average spacing of 2.7 metres (see Paragraph 3.4.1). It is not considered likely that these two separate layers of cultivation soil represent two distinct phases of cultivation, as was apparently the case with the sequence recorded in Trench No.5 (see Paragraph 4.5.2). Rather it is suggested that the upper deposit within Trench No.7 (702; maximum depth 0.15 metres) represents the soil washed into the furrow from the adjacent ridges during the last season of cultivation. Combined the two deposits of cultivation soil have a maximum depth of 0.55 metres in the southwestern corner of the trench and a minimum depth of 0.25 metres in the southeastern corner of Trench No.7. The episode of spade cultivation represented by the cultivation soils (702 and 706) in Trench No.7 is presumed to date to the eighteenth or nineteenth centuries; unfortunately, that the cultivation soils were excavated with the same context numbers as Waterman's backfill (708) means that it is not possible to rely on artefact dating to confirm this date range.



Figure 31: North-facing section of Trench No.7.



Figure 32: East-facing section of Trench No.7.

Seventeenth-Century or Later Medieval Occupation

4.5.21 Underlying the truncated surface (714) associated with the spade cultivation were two hearths (720 and 718) and a localised deposit of sandy clay loam (707), which was restricted to the eastern part of the trench and butted up against the curtain wall. The features and the localised deposit either cut through or overlay a deposit of silty clay loam (710). The hearths were both located within the southern section of the trench, one (720) extending through the western edge of excavation and the other (718) located 1.5 metres to the east. The exposed part of the western-most hearth (720) suggested that its

truncated base was irregular in shape (exposed dimensions 0.55 by 0.18 metres; maximum surviving depth 0.12 metres) and was filled with a charcoal-rich and heat-modified silt (713). The other truncated hearth (718) was near-circular in plan (diameter 0.20 - 0.22 metres; maximum surviving depth 0.04 metres) and also filled with a charcoal-rich and heat-modified silt (712). It is reasonable to broadly equate the occupational activity associated with these truncated hearths to the same period of occupation ascribed to the comparable features excavated within Trench No.5 (i.e. 540, 541, 562, 564 and 570; see Paragraphs 4.5.3 - 4.5.5). Although no artefactual evidence was recovered from their fills, small fragments of animal bone were recovered from both features (see Appendix Six) and they were also excavated as total samples (Sample Nos.94 and 100) with a view to retrieving material suitable for radiocarbon dating. There was no difference in the height of the base of both hearths (both were at 49.46 metres OD), whilst their centres were 1.50 metres apart. These observations suggest that it is unlikely that the two hearths represent the hearths of separate but contemporary structures. It is possible, however, that they could represent either the bases of two successive bonfires, the truncated remains of a single large fire pit, the truncated remains of a single large hearth or the remains of hearths associated with two non-contemporaneous structures. Unfortunately the spade cultivation would have removed (714) any evidence for structures associated with these hearths apart from substantial post holes or construction slots, of which no evidence survived within the underlying silty clay loam (710). As with the comparable features excavated in Trench No.5, this means that it is most likely that the hearths were either the remains of camp fires or hearths associated with slight buildings such as 'Irish houses' (see Paragraph 4.5.5).

4.5.22 The localised deposit of medium, greyish-brown sandy clay loam with a number of small- to medium-sized, angular- to subangular-shaped stone inclusions (707) is assumed to date to the same broad late medieval to seventeenth-century *floruit* as the hearths - as it contained no obviously modern finds. Four sherds of coarseware were recovered from the deposit, including two provisionally identified as examples of medieval Ulster coarseware (Small Find Nos.2660-2661). The deposit was restricted to an area 1.25 metres wide, immediately adjacent to the curtain wall and had a maximum depth of 0.29 metres. How the layer came to be deposited was not obvious.

Medieval Deposits and the Curtain Wall of the Outer Ward

4.5.23 Underlying the sandy clay loam and extending throughout most of the trench was a layer of dark, greyish-brown silty clay loam (710) which contained a variety of small to large, angular to subangular stone inclusions and had a maximum depth of 0.55 metres. This layer is interpreted as representing a late medieval soil horizon - it also yielded a small number of sherds provisionally identified as medieval Ulster coarseware (Small Find Nos.2693-2697). Excavation further demonstrated that it contained two discrete lenses of charcoal and heat-modified clay (715 and 716), which probably represent the redeposited remains of disturbed hearths. As with the overlying layer of sandy clay loam (707), it is not obvious how this deposit formed. Its removal exposed at the western end of the trench a voided deposit of small- to medium-sized, angular to subangular stones in a loose silty clay loam soil matrix (721) that directly overlay the bedrock (704). The presence of air voids between the stones suggest that the deposit formed rapidly, possibly as a deliberate dump of stones intended to fill a natural 'pocket' within the surface of the bedrock. It is considered likely that the voided stone deposit is part of the same layer as that uncovered in the adjacent part of Trench No.5 (i.e. 583; see Paragraph 4.5.6). Also filling an apparently natural 'pocket' within the bedrock, and butted up against the inner face of the base of the curtain wall (722) was a layer of degraded lime mortar and shell in a silty clay loam soil matrix (717). This deposit extended for a distance of 1.72 metres from the curtain wall and had a maximum depth of 0.51 metres immediately against it. It is provisionally interpreted as representing a soil horizon that was disturbed and contaminated with mortar during the original

construction of the curtain wall. A large number of pot sherds were recovered from this deposit (Small Find Nos. 2826, 2839-2860 and 2868).

4.5.24 Following the removal of the silty clay loam containing the degraded lime mortar inclusions (717), the inner face of the curtain wall (722) was fully exposed. Examination revealed that the wall (722) was built directly on to the surface of the bedrock - there was no evidence of a foundation cut or any other associated context which could be used to date its construction; the earliest deposit that has a stratigraphic relationship with the wall is the degraded mortar deposit that butts up against it (717). Where variations in the surface of the bedrock occurred the builders of the wall compensated for this by laying a thick pad of lime mortar to even the surface that the first course of the wall was built upon. Study of its fabric revealed that the wall consisted of three distinct phases of construction. The lowest section, which is assumed to be medieval in date extended for a maximum height of 0.99 metres in the southeastern corner of the trench to a point just below the modern ground surface. This part of the wall was predominantly constructed from large blocks of local greywacke. Above the lowest section of its fabric, the wall was of a distinctly different character being made from a diverse range of smaller stones. At a height of approximately 0.20 metres above the modern ground surface a line of dark mortar (created by adding coal dust to the mix) marked the separation between the pre-existing wall face work and that reconstructed during the mid-twentieth century under the supervision of Dudley Waterman. The plan produced by Phillips c.1883 (see Paragraphs 2.5.35 and 2.7.1), the newspaper accounts of restoration work (Paragraph 2.5.36) and Waterman's own analysis (Paragraph 4.5.17) all suggest that the middle section of wall fabric dates to the nineteenth century. A sample of presumably medieval mortar was taken from the mortar pad at the base of what is presumed to be the medieval section of the wall's fabric (Sample No.128).

4.6 Excavations within the Extra-Mural Areas to the West of the Inner and Outer Wards

The Rock-Cut and Earthwork Defences (Trench No.8)

4.6.1 As described above, one of the principal results of the 2012 excavations was the realisation that a feature excavated by Waterman in the inner ward was not, as previously had been assumed, the remains of a 'campaigning' phase Anglo-Norman earthwork (see Paragraph 4.4.15). In two trenches located to the south of the circular great tower, Waterman had identified a series of dumped deposits which he suggested probably represented an earth-and-rubble bank that pre-dated the construction of the curtain wall and that he, and subsequent authors, identified as representing the remains of a ringworklike defence likely dating to the 'campaigning' phase of the Anglo-Norman conquest of Ulster led by John de Courcy in the last quarter of the twelfth century (Waterman 1951, 19, 23-24; 1958, 64-65; Anon. 1966a, 207; see also Sweetman 1999, 36-37). The 2012 excavations demonstrated that these deposits (Context Nos.110/121/122/138, 111/137, and 115/119) were actually a series of dumps used to raise and level the ground surface within the inner ward, and that they post-dated the building of the curtain wall, but pre-dated the construction of the large circular tower (see Paragraph 4.4.15). This revision of the site sequence does not necessarily invalidate the idea that there was an Anglo-Norman 'campaigning' phase fortification at Dundrum. Although there is no direct historical evidence that indicates that the site was occupied by the Anglo-Normans in the early years of de Courcy's conquest of Ulster, it is likely that they would have recognised both its strategic importance and prominent coastal location. This combined with the fact that it seems to have been a significant, pre-existing centre makes it almost inconceivable that they would not have occupied the site an early stage (see Paragraph 2.5.10). At the very least, the Anglo-Normans would have needed some form of temporary defensive structure at the site whilst they built the curtain wall of the inner ward. Whether this was a purpose built ringwork or a refurbishment of the pre-existing hill fort defences whose existence is implied by the place-name evidence (see Paragraph 2.5.1) is uncertain.

- 4.6.2 The opportunity to resolve the question of the character of the pre-masonry castle defensive phase at Dundrum was identified by Stewart Ainsworth during the *Time Team* phase of the 2012 excavations. Ainsworth identified a short section of the defensive ditch around the inner ward which had not been disturbed by later quarrying. This section of the defences consisted of two separate, but adjacent, ditch cuttings, an outer shallower ditch separated by a short upstanding ridge of rock from a wider, apparently rock-cut, inner ditch. Ainsworth suggested that the inner ditch was likely to be later and probably associated with the construction of the curtain wall of the inner ward; whether the outer ditch dated to an earlier Anglo-Norman 'campaigning' phase or the pre-Norman hillfort was a question he was, sensibly, not willing to speculate upon. In 2013 a single cutting across these two adjacent ditch elements was excavated as Trench Eight.
- 4.6.3 Trench No.8 was located immediately to the west of the inner ward and extended, on a northeast-southwest axis perpendicular to the line of the defences, from the exposed face of the inner edge of the rock-cut inner ditch to the crest of the counterscarp bank that formed the outer edge of the outer ditch (Figure 18). The trench was 1.0 metres wide and 13.6 metres in length. The precise line of the trench was chosen to avoid upstanding trees and, as much as possible, areas of modern disturbance. Unfortunately, it was not possible to completely eliminate areas of disturbance within the footprint of the trench and on the inner edge of the outer ditch, between 3.30 metres and 4.15 metres from the southwestern end of the trench was a large desiccated root ball in a reddish brown loam soil matrix (809) whose shallow, curving surface (834) cut through the sod and topsoil (801) and physically extended for a depth of 0.14 metres to the surface of the bedrock.
- 4.6.4 The topsoil (801) of dark brown, humic, silty clay loam supported a thin growth of grass, nettles and brambles and extended throughout the length of the trench, with the exception of the outer edge of the inner ditch where the rock-cut surface of the ditch (823) was partially exposed. For most of the length of the trench the topsoil was a relatively thin deposit of 0.05 to 0.10 metres depth, however, in the central area between the inner and outer ditch it extended to a depth of 0.17 metres. Excavation of the topsoil effectively split Trench No.8 into two separate stratigraphic units as its removal fully exposed the rock-cut surface (823) of the outer edge of the inner ditch.

The Inner Ditch

- 4.6.5 Excavation demonstrated that the rock-cut inner ditch (823) was 6.5 metres wide and at its base contained a maximum depth of 0.77 metres of fill deposits. It should be noted, however, that the ditch was only partially silted-up and a greater depth of rock would have had to have been quarried in order to create the feature in the first place. The ditch has a steep outer edge a wide, relatively flat base and a very steep inner edge. Its base lies a maximum of 1.45 metres below the surface of the central area of ground between the two ditches and several metres below the base of the curtain wall of the inner ward. Given the ditch's close proximity to the curtain wall it is a reasonable supposition that its creation represented as much an act of quarrying intended to provide stone for building the wall as it represented the creation of a defensive barrier in its own right.
- 4.6.6 Underlying the topsoil (801) were two localised superficial deposits of modern date. The first, a loose layer of dark reddishbrown, humic clay loam (803) extended from the inner edge of the inner ditch for a distance of 2.20 metres, had a maximum depth of 0.28 metres and probably represents a layer of hillwash. The recovery of five sherds of modern glass (Small Find

Nos. 2141-2146) from the deposit indicates that whilst stratigraphically being a fill of the ditch, it is of relatively recent date. The second, a layer of dark reddish-brown, humic sandy clay (802) extended for a distance of 1.90 metres from the outer edge of the inner ditch and had a maximum depth of 0.14 metres. This latter deposit probably represents the base of the topsoil and contained finds of modern glass (Small Find Nos. 2134-2135, 3483).

4.6.7 Underlying these superficial deposits (803 and 802) was a sequence of ditch fills that consisted alternately of layers of slowly accumulating silts (i.e. 807, 811, 813 and 815/816) and loose tumble or slumped deposits that had apparently been formed rapidly (i.e. 804, 812, 810 and 814). Stratigraphically, the latest of these ditch fills underlay the probable hillwash deposit (803) on the inner edge of the inner ditch and consisted of a layer of dark reddish-brown sandy clay loam (807) which contained an abundant amount of small angular to subangular stones that were possibly derived from frost-shattering of the exposed bedrock face of the ditch. A number of obviously intrusive large tree roots were present within this fill, which extended for a distance of 2.36 metres from the inner edge of the ditch and had a maximum depth of 0.55 metres. Apart from two fragments of animal bone, no finds were recovered from the dark reddish-brown sandy clay loam (807). In turn, this deposit (807) sealed a layer of stone tumble, including a number of fragments with lime mortar adhering to them, in a silty clay loam soil matrix (804) which extended across the entire width of the ditch and had a maximum depth of 0.22 metres. This uppermost layer of tumble (804) sealed a localised deposit of mid-greyish brown sandy clay loam containing a large number of small, angular to sub-angular stone inclusions (811) that extended for a distance of 1.80 metres from the inner edge of the inner ditch and had a maximum depth of 0.20 metres. A single sherd of pottery (Small Find No. 2203), provisionally dated to the seventeenth century, was recovered from this layer, suggesting that the overlying deposit of tumble (804) represents a seventeenth-century or later episode of collapse or deliberate slighting of the adjacent curtain wall of the inner ward. Unfortunately, the remainder of the inner ditch fills did not contain any chronologically diagnostic finds, although some animal bone, that may potentially be suitable for radiocarbon dating, was recovered from the primary fill (815/816) of the ditch. The mid-greyish brown sandy clay loam (811) sealed a substantial layer of stone tumble in a sandy clay loam soil matrix (812), which was apparently derived from the inner edge of the ditch, had a maximum depth of 0.30 metres, and in turn sealed a localised deposit of charcoal-flecked, dark greyish brown clay loam (813). This latter deposit covered a small deposit of sandy clay loam containing weathered stone inclusions (810) that had a maximum depth of 0.28 metres and appeared to represent a slump of material derived from the outer edge of the inner ditch. Underlying this apparent slump deposit (810) was a final layer of stone tumble (814), this time contained within a greyish-brown clay loam soil matrix, which extended across the entire ditch and had a maximum depth of 0.16 metres. In turn, it sealed the primary fill of the inner ditch (815/816) - a mid-brown, gritty loam with abundant small, angular stone inclusions that were the product of frost-action on exposed bedrock. This primary fill had in places a maximum depth of 0.31 metres, but was mostly less than 0.20 metres in depth. Its excavation exposed the rock-cut surface of the inner ditch (817) which sealed in places small, in situ pockets of natural mineral subsoil (817).

The Outer Ditch and Counterscarp Bank

4.6.8 Excavation of Trench No.8 demonstrated that the outer ditch was not rock-cut. Its inner edge was formed by the natural sloping surface of the bedrock, its base was cut (825) into the natural subsoil (828) and its outer edge (836) was formed by a counterscarp bank that had been thrown up over a truncated surface that represented a continuation of the base of the ditch (825). The reason why the counterscarp bank was thrown up on a truncated surface was presumably so that the removed turves could be used to stabilise the integrity of the bank. The ditch, which had a width of 3.9 metres and a maximum depth of 0.64 metres of fill, had a comparatively shallow inner edge which merged into a nearly flat base, and a

steep outer edge - the upper part of which had collapsed in at least one episode of substantial slumping (837) giving the upper part of this edge a comparatively shallow profile.

- 4.6.9 Underlying the topsoil (801), upon the inner edge of the outer ditch, was a desiccated root ball in a dark brown, sandy loam soil matrix (818) whose uneven surface (835) extended to the surface of the bedrock. This root ball, which extended southwestwards for a distance of 0.84 metres from the inner edge of the ditch and had a maximum depth of 0.28 metres, probably represents the modern disturbance caused by the deliberate removal or death of a tree. Its excavation revealed the uppermost fill of the ditch, which extended across the entire cutting and consisted of a deposit of small angular stones in a silty loam soil matrix (819/822) with a maximum depth of 0.22 metres. The deposit appeared to represent material that had slumped from the counterscarp bank and contained no finds. Underlying it was a localised, friable deposit of orangey brown sandy loam, heavily disturbed by roots and restricted in its extent to the inner edge of the ditch and with a maximum depth of 0.08 metres. Removal of this deposit revealed both two localised deposits of clay loam (824) and sandy loam (826) that filled a natural void within the exposed surface of the bedrock on the inner edge of the outer ditch, as well as a more widespread fill of voided angular stones (mostly measuring 0.10 to 0.15 metres in maximum dimension) in an orangey brown loam soil matrix (821) that had a maximum thickness of 0.24 metres. The voided character of this latter deposit (i.e. 821) indicates that it formed rapidly and it is interpreted as representing material that has slumped from the counterscarp bank. Underlying it was another deposit that had apparently slumped from the counterscarp bank. It consisted of large angular stones in a friable, greyish-brown, loam soil matrix (827) and had a maximum depth of 0.22 metres. It sealed the primary fill of the outer ditch which was a loose, mid-brown loam containing a large number of small, frostshattered stone chippings (829) that was located against the ditch's outer edge (836). This suggested that it too was derived from material that had slumped from the original edge of the counterscarp bank. Unfortunately, no finds, chronologically diagnostic or otherwise, were recovered from the sequence of fills within the outer ditch.
- 4.6.10 Only the inner face of the counterscarp bank was excavated - partly due to health and safety concerns and partly due to a concern that reinstatement would be problematic if its outer face was removed. No evidence for internal timber structures, a revetted face of turves or a palisade on the crest of the bank was uncovered. Given both the narrow width of the trench (see Paragraph 4.3.2) and the indication that much of the inner face of the counterscarp bank had slumped (837), however, this absence of evidence should not be considered demonstrable proof that these features did not exist. The excavated portion of the bank was made up of a succession of layers of redeposited stones of various sizes, whose surfaces approximated to the natural slope of the hill in alignment. The uppermost layer consisted of small, frost-shattered stones in a sandy loam soil matrix (806) and had a maximum excavated depth of 0.16 metres. It overlay a dump of small, frostshattered stones and occasional larger, angular stones in a reddish-brown loam (832). In turn, this deposit sealed a massive, loose dump of large angular stones in a loam soil matrix (830) which had a maximum exposed thickness of 0.79 metres. This layer overlay a localised dump of small angular stones (831) which had a maximum depth of 0.04 metres and was only present towards the edge of the bank. The basal deposit of the counterscarp bank consisted of a dump of small, frostshattered stones with occasional larger angular stones (833). This basal deposit had a maximum excavated thickness of 0.40 metres and directly overlay the truncated surface (825) of the natural mineral subsoil. Although no artefacts were recovered from the deposits which made up the counterscarp bank, fragments of animal bone were recovered from two of its layers (830 and 833). It is hoped that these bone fragments will form samples suitable for radiocarbon dating which will provide a terminus post quem for the construction of the outer ditch and its associated counterscarp bank.



Figure 33: Southeast-facing section of Trench No.8.



Figure 34: Trench No.8 with inner ditch (foreground), outer ditch (middle ground) and counterscarp bank (background), looking southwest.

4.6.11 It is regrettable that excavation showed no surviving stratigraphic relationship that could confirm the relative dates of the two ditches. It is reasonable to speculate, however, that the outer ditch predates the inner, rock-cut ditch as it is not obvious why if a more substantial rock-cut ditch already existed, it would be considered appropriate to subsequently cut an outlying, shallower ditch. Elsewhere where the circuit of the ditch is not disturbed by later quarrying, such as to the north of the inner ward, only a single, rock-cut ditch is present suggesting that at this point in its circuit the later rock-cut ditch was directly superimposed upon the line of the earlier ditch, which does not seem to have been rock cut. If the rock-cut ditch served to provide building stone for the curtain wall of the inner ward, which must have been the first masonry element of the Anglo-Norman Castle, then this suggests that the outer ditch either belongs to the 'campaigning' face of de Courcy's conquest of Ulster or pre-dates the Anglo-Norman period. If the line of the outer ditch follows the contour of the hill then it would circumscribe an area far in excess of that required for a temporary, Anglo-Norman ring-work type of defence.

This suggests that the short, surviving section of the outer ditch represents the only survival of the initial defences around the site, that is the bank of the pre-Norman *Dún Droma*.

The Post-Medieval Garden Terraces (Trench No.9)

- 4.6.12 The 2012 resistivity survey produced a rectilinear complex of anomalies in the area immediately to the west of the outer ward (see Paragraph 3.7.2 and Figure 17 'k'). These anomalies coincide with the marked variations in the terrace-like topography of this part of the site which was incorrectly considered, until the results of the 2012 geophysical survey were processed, to be a reflection of natural variations in the underlying geology. The complex of anomalies was provisionally interpreted as representing a line of stone walls which correspond closely with the line of boundaries depicted on the revised edition Ordnance Survey 6" map of 1859 (Figure 1). Perhaps significantly, the southernmost anomaly and break of slope aligns with the surviving stub of the curtain wall of the outer ward. Initial interpretation of this complex of anomalies was difficult, although the geophysical survey indicated that they were artificial in origin. Although it was considered possible that the terrace was constructed to provide level kitchen gardens for the adjacent properties represented on the 1859 Ordnance Survey map, it was concluded that the construction of a massive, partially rock-cut platform would be a disproportionately large-scale undertaking to provide level kitchen gardens for tenants of the Downshire Estate. Therefore it was believed that the anomalies probably represented part of a late eighteenth-century landscaping terrace comparable with those previously recognised immediately to the south of Blundell's House (Macdonald 2011a; 2011b), although the possibility that they were either earlier garden features or part of a building platform for an earlier, possibly medieval, structure was not dismissed. In order to confirm the character and date of this feature, and evaluate the archaeological and palaeoenvironmental potential of any buried soil horizon surviving within the 'zone of preservation' under the 'positive' element of the terrace, Trench No.9 was excavated across the feature in 2013. Although, in the event, excavation of Trench No.9 was not completed during the 2013 excavation season, it is considered likely that the extra-mural terraces date to the seventeenth century.
- 4.6.13 Trench No.9 was laid out on an approximately northwest southeast alignment. The trench was 15.6 metres long and 1.5 metres wide. The northwestern part of the trench started adjacent to the path to the modern toilet block and extended for a distance of approximately 6.8 metres to the top of the break of slope that defined the terrace. This part of the trench crossed what was anticipated as being a 'zone of archaeological preservation' in which the pre-terrace land surface would be preserved under the 'positive' element of the terrace that was thrown up and retained by the terrace wall. The break of slope extended for a horizontal distance of approximately 4.5 metres and formed a change in level of 1.75 metres. It was represented by a near-uniform, grassed slope of approximately 22° to the horizontal. The southeastern part of the trench extended for a distance of approximately 4.3 metres from the base of the terrace slope across an area that was believed to form a 'zone of archaeological destruction' formed by quarrying material used to create the adjacent 'positive' element of the terrace.³⁰
- 4.6.14 Excavation commenced with the manual removal of the modern sod (901) and topsoil of humic clay loam with frequent small stone inclusions (902/903) which extended throughout the trench. The topsoil supported a managed and regularly mown vegetation of grass and flowers. These superficial deposits varied slightly in depth having a maximum thickness of 0.12 metres beyond the southeastern base of the terrace slope, a maximum thickness of 0.10 metres across the steep terrace slope itself and a maximum thickness of 0.16 metres above the break in slope at the northwestern end of the trench.

³⁰ For a full explanation of the zones of archaeological preservation and destruction formed by the construction of a terrace see Evans 1978, 121-122, fig.50.

- 4.6.15 Removal of the topsoil exposed a number of deposits (904 and 905) and a feature (911) provisionally associated with the nineteenth-century reuse of the terraces when they formed the gardens of the cottages represented on the 1859 edition of the Ordnance Survey 6" map (Figure 1). The stratigraphically most recent deposit was a layer of voided stones in a silty clay loam soil matrix (904). The deposit was essentially defined by its stone inclusions, rather than the soil matrix that partly contained them, and contained a variety of sizes of local stone - including several which still had traces of lime mortar adhering to them. It extended from a point midway down the steep terrace slope and butted against the surviving base of a wall located towards the base of the slope (906; see Paragraph 4.6.16) and had a maximum depth of 0.39 metres. The presence of a large number of air voids within the deposit indicated that it formed rapidly either as the result of deliberate dumping or due to the collapse and tumbling of a stone-built structure, such as a garden wall, that formerly stood at the top of the terrace slope. The tumbled or dumped deposit (904) sealed an extensive deposit of silty clay loam with a common amount of medium-sized, angular to subangular stone inclusions (905) that extended from a point approximately 1.65 metres from the northwestern end of the trench to the point midway down the terrace slope at which the later tumble (904) began. This underlying deposit may represent a garden soil associated with one of the properties represented on the 1859 Ordnance Survey 6" map. A copper alloy fitting of nineteenth-century date (Small Find No.3207) was recovered from the layer of silty clay loam with stone inclusions (905) providing a terminus post quem for both the possible garden soil (905) and the overlying tumbled or dumped deposit (904). The feature (911) was situated in the northwestern, 'upper' part of the trench, 1.35 metres from the northwestern end of the trench. It consisted of an apparently truncated, irregularshaped, depression (dimensions 0.58 x 0.52 metres, maximum depth 0.20 metres) that was filled by a friable, mid-greyish brown, silty clay loam (910) that contained a number of fragments of bone and shell, as well as occasional charcoal flecks. Whilst being definitely artificial it is uncertain what the purpose of the feature was; it is tentatively identified here as a possible planting hole. Despite their close proximity, no stratigraphic relationship between the feature (911) and the layer of silty clay loam with stone inclusions (905) existed.
- 4.6.16 The excavation of the tumbled or dumped deposit (904) and the possible garden soil (905) exposed a number of deposits (913 and 917) and two possible features (906 and 908) that, along with two deposits (907 and 915) exposed by the excavation of the topsoil (902/903), are of uncertain date. It is possible that they are nineteenth-century in date, however, they may be significantly earlier and associated with the original function of the terraces. This uncertainty over their date is largely a consequence of the lack of diagnostic finds that they contained. Extending from the southeastern end of Trench No.9 for a distance of 4.40 metres where it butted against the surviving base of a wall located adjacent to the foot of the terrace slope (906) was a thin deposit of dark brown, silty clay loam (907) that contained numerous small- to mediumsized, angular to subangular stone inclusions and varied in depth from 0.02 to 0.12 metres. The silty clay loam (907) contained several fragments of brick (Small Find Nos. 2218-225 and 2227), a fragment of green bottle glass (Small Find No.2228), a couple of fragments of ironwork (Small Find Nos. 2230-2231), a piece of clinker (Small Find No.2226) and a single sherd of stoneware pottery (Small Find No.2229). It probably represents a garden soil and physically overlay the truncated surface of the natural clay subsoil (909). The wall (906) it butted against consisted of a single course of stones that appeared to have formed the base of a freestanding or revetment wall located adjacent to the base of the terrace slope. Although its position at the foot of the steep slope would suggest that it was a revetment wall that retained the adjacent terrace, it appeared to be faced on both of its sides, hence the possibility that it was freestanding. It was made up of a single course of local, medium-sized angular stones, varied in width from 0.36 to 0.44 metres. Although, in line with the excavation policy (see Paragraph 4.3.1) the wall was not excavated, it appeared to lie directly upon the truncated surface of the natural clay subsoil (909). Immediately to the southeast of the base of the wall (906) was a concentration of local,

small- to medium-sized, angular to subangular stones (908), which was apparently lying upon or impressed into the truncated surface of the natural subsoil. This concentration of stones had a trapezoidal shape (exposed dimensions 1.16 x 1.82 metres) and appeared to contain two distinct, faced edges aligned approximately north-south and east-west that met to form a right-angled corner, as well as a possible third faced edge aligned northwest-southeast at a right-angle to the line of the wall (906). Again, this apparent feature was not excavated, but inspection suggested that it either lay upon or was impressed into the truncated surface of the natural clay subsoil (909). Unfortunately, not enough of the feature was exposed to identify it with certainty as being artificial, as opposed to the fortuitous product of variations of stone inclusions within the subsoil. Assuming that it is artificial then it probably represents the base of a structure associated with the lower terrace.

- 4.6.17 Underlying the possible garden soil of nineteenth-century date (905) at the top of the steep terrace slope was a localised deposit of mottled silty clay (913) with an abundant number of small shale inclusions and a maximum depth of 0.20 metres. It extended for a distance of 0.60 metres from the southwestern edge of excavation and for a distance of 0.89 metres along the main axis of the trench. How this deposit formed is uncertain, although given its position at the top of the terrace slope it is possible that it formed the base of a feature associated with the change in slope. It overlay a more extensive deposit of silty clay (917) that also contained an abundant number of small, frost-shattered, shale inclusions and the occasional medium-sized, flat fragment of stone. This latter deposit of silty clay (917) was present from between 1.51 metres and 6.65 metres from the northwestern end of Trench No.9 and had a maximum depth of 0.17 metres. The last of the deposits of uncertain date was a localised deposit of medium-sized, angular- to subangular-shaped stones in a clay loam soil matrix (915) located at the northwestern end of the trench. This extended for a maximum exposed distance of 1.26 metres, had a maximum depth of 0.14 metres and may represent a deliberate dumped deposit.
- 4.6.18 Excavation of the deposits of uncertain date exposed a sequence of layers associated with the construction of the terrace (i.e. 914/916, 912 and 918A). These deposits were all located to the northwest (uphill) of the top of the break in slope and represent material that was deliberately dumped to create the southeastern edge of the upper terrace. The uppermost of these deposits consisted of small- to medium-sized (maximum dimension 0.41 metres), angular to subangular stones in a mottled clay soil matrix (914/916). There were occasional air voids between the stone inclusions indicating that the layer was rapidly formed and it is interpreted as a deliberate dump used to create the terrace. The deposit extended from the northwestern edge of the excavation for a distance of 1.90 metres and had a maximum depth of 0.45 metres. Directly underlying it was a second dumped deposit also consisting of voided stones of small- to medium-sized (maximum dimension 0.25 metres), angular to subangular stones in a clay soil matrix. This second deposit (912) extended from points between 0.76 metres and 8.90 metres from the northwestern end of Trench No.9 and had a maximum depth of 0.46 metres. The second dumped deposit was the earliest layer that was excavated within Trench No.9 due to a lack of time. Its removal exposed a layer of redeposited clay subsoil (918A), which in turn overlay the surface of the undisturbed natural subsoil (918B). Unfortunately, without having the opportunity to excavate the deposits it was not possible to identify with confidence the edge between the undisturbed (918B) and redeposited subsoil (918A). What was clear, however, was that these two deposits were not separated by a buried soil horizon suggesting that the topsoil was removed from the natural slope prior to constructing the terraces. Presumably, the displaced topsoil was then redeposited upon the surface of the newly created terraces. Unfortunately, no diagnostic artefacts were recovered from the dumped deposits associated with the construction phase of the terraces, however, fragments of animal bone were recovered from both the uppermost dumped deposit (914/916 - Small Find No.3106) and the exposed surface of the redeposited natural subsoil (918A - Small Find No.3208) and it is recommended that these are submitted for radiocarbon dating (see Section 6.7).


Figure 35: Northeast-facing section of Trench No.9.

4.6.19 In advance of this radiocarbon dating, it is not possible to offer any definite dating evidence for the construction of the terraces. Prior to the excavation of the terraces and their survey by volunteers of the Ulster Archaeological Society during the summer of 2013 it was considered likely that they were of late eighteenth-century date and comparable with the terraces of this date previously excavated to the south of Blundell's House (see Paragraph 4.6.12). On reflection, however, the form of the terraces is far more regular and uniform than those identified to the south of Blundell's House suggesting that they belong to an earlier and more formal period of landscaping and gardening. The most likely period for such work being undertaken is the 1630s when the Blundell family added the architecturally pretentious east wing - with its two triangular tympana or pediments that presumably housed armorial panels or relief sculptures, to the structure known as Blundell's House (Macdonald 2011b, 56). It seems likely that such construction work, which effectively doubled the floor plan of their residence, would have been accompanied by work to produce a comparably high-status garden. That the break in slope that separates the two terraces coincides with the break in the curtain wall of the outer ward suggests that the creation of the garden terraces may have been part of a wider project to transform Dundrum Castle from a medieval military site to a seventeenth-century country residence suitable for a gentleman landowner. It is possible that the curtain wall was used as a quarry for rubble and building stone to create the south-facing garden terraces. If correctly interpreted, then the removal of the curtain wall during the 1630s may reflect the (as it turned out misplaced) confidence of the Blundells, and the wider Protestant land-owning community that they were members of, in their position within the upper echelons of Irish society. Presumably, this newly found confidence, along with the project to create formal gardens to accompany the newly extended Blundell's House, was abandoned, never to be returned to, following the 1641 rebellion.

5 Discussion

5.1 Introductory Comments

5.1.1 In advance of either a further season of excavation at Dundrum Castle (Section 6.2) or completion of the proposed programmes of radiocarbon dating and post-excavation analyses (Sections 6.7 and 6.8), three discursive themes are presented. First, an evaluation of how well the fieldwork conducted at Dundrum Castle in 2012 and 2013 has meet the defined aims of the project is addressed (Section 5.2). Then two potential interpretive themes that have both emerged from and reflect the consideration of the historical, architectural and archaeological evidence reported on above are identified. The first of these is a consideration of how the site of Dundrum Castle has, from the Early Christian period to the present day, represented a forum for continually changing, material expressions of power, status and property ownership in Ulster (Section 5.3), whilst the second is that an appreciation of the medieval function of the castle can be better understood by placing it within the wider economic and landscape context provided by a reconstruction of its associated manorial estate (Section 5.4). It is proposed that these two interpretive themes form the core of the discursive element of the proposed monograph on Dundrum Castle.

5.2 Evaluation of the Aims of the Geophysical Survey and Fieldwork

- 5.2.1 The principal aim of the fieldwork reported upon here was to refine and expand the known archaeological sequence of Dundrum Castle with a view to improving both the presentation of the monument to the public and informing the future management strategy for the site (Paragraph 2.2.2). By any standard of assessment, the results of the geophysical survey and excavations conducted in 2012 and 2013 have successfully fulfilled this objective. In order to realise the principle aim of the project, six research themes or priorities were identified (Paragraph 2.2.2). How the results of the fieldwork and supporting research reported upon here have addressed these six themes is considered in detail below.
- 5.2.2 The first research objective was to establish the character and date of the pre-Norman settlement at the site. The 2012 and 2013 excavations have cast much light on this initial phase of occupation, which has been complimented by a critical assessment of the historical and literary evidence relating to the pre-Norman occupation of the hill (Paragraphs 2.4.1 and 2.5.1 - 2.5.5). Although definitive dating evidence will be dependent upon funding and implementing the proposed radiocarbon dating programme (Section 6.7), the character of the presumed pre-Norman revetted structure within the inner ward has been determined. It is now possible to confidently state that the structure first partially uncovered by Dudley Waterman in 1950 was a slightly elliptical (diameter approximately 11.2 to 12.0 metres), clay-bonded platform that stood upon the original summit of the hill. Although excavation in 2012 demonstrated that the upper part of the platform had been truncated, removing any evidence for the character of the activity that took place upon the platform, it is reasonable to assume that a single building, or collection of small structures, was erected upon it. If, as seems reasonable to assume, the outer element of the defensive ditches that were excavated in Trench No.8 both dates to the pre-Norman 'hillfort of the ridge' and was continued around the summit of the hill on the same contour, then the building platform, and whatever structure was built upon it, would have formed prominent features in their own right - visible above the enclosing earthwork defences of the site. The area enclosed by the ditch would be comparatively large in comparison to contemporary Early Christian settlements - being some 70 metres in diameter. Although it was unusual, the Irish did build forts significantly stronger than raths prior to the Anglo-Norman period (McNeill 1980, 115). Two potential analogues for the pre-Norman enclosure at Dundrum are the high-status sites such as the Mound of Down, Co. Down (Anon. 1966a, 203, no.408.2,

fig.130, pl.25; Macdonald 2013) and the hillfort at Clogher, Co. Tyrone (Warner 2000; see also Warner 2009). Although these sites are both significantly larger than the suggested size of the pre-Norman site at Dundrum, the quality of the Early Christian metalwork recovered during Waterman's excavations in 1950 indicates that it too was a high status settlement. Both the Mound of Down and Clogher hillfort have royal associations which begs the question whether the pre-Norman fort at Dundrum also represents a royal centre of Leth Cathail.

- 5.2.3 The second research priority was to investigate the validity and character of the hypothesised, initial, 'campaigning' phase of Anglo-Norman fortification. The methodology of re-excavating Waterman's old trenches and then extending sideways to assess the accuracy of his observations has successfully demonstrated that the apparent earthwork bank excavated by Waterman (1951, 19-20, fig.2.DD; 1958) was actually a series of truncated levelling deposits that post-dated the construction of the curtain wall of the inner ward and not part of a ringwork-like defence dating to the 'campaigning' phase of de Courcy's conquest of Ulster (*pace* Waterman 1958, 64-65; Sweetman 1999, 36-37) (see Paragraph 4.4.15). Given the strategic position of the castle guarding the southern approaches by land into Lecale, it is probable that de Courcy would have moved to occupy the site shortly after his initial invasion of Dál Fiatach in 1177. Rather than construction a ringwork-like defence around the summit of the hill, it is considered more probable that his Anglo-Norman forces would have simply reused the existing defences of the Early Christian 'hillfort of the ridge' before moving quickly to build the curtain wall of the inner ward within the circuit of the pre-existing defences (Paragraph 2.5.10).
- 5.2.4 The third research objective was to determine the date of the great circular tower and the place of its construction within the developmental sequence of the inner ward. Excavations during 2012 and 2013 confirmed the accuracy of Waterman's observation that the great tower post-dated the construction of the curtain wall of the inner ward of Dundrum Castle. Furthermore, the excavation results, combined with a provisional architectural analysis of the surviving fabric of the castle (see Paragraphs 2.8.3 2.8.4), also suggested that prior to the construction of the great tower, the original hall built by de Courcy was demolished and the ground surface within the inner ward was raised and levelled. It is tempting to suggest that these works were carried out immediately prior to construction of the great tower beginning. Until analysis of the ceramic assemblage recovered during the course of the excavations is completed it will not be possible to either confirm or refine the *terminus ante quem* for the beginning of this episode of construction suggested by the 1211-12 pipe roll (Paragraph 2.5.12).
- 5.2.5 The fourth research question it was hoped would be successfully addressed by the excavations was the date of the outer ward. The outer is commonly assumed to be of late medieval date (e.g. Anon. 1966a, 211; McNeill 1980, 36, fn.14; McNeill 1997a, 194; Anon. 2009, 61), but is essentially archaeologically undated. McNeill has suggested that the simple form of the gate into the outer ward and the absence of projecting towers within the curtain wall suggests that the outer ward is late medieval in date, however, there are problems with this argument which mean that, whilst it is plausible, it cannot be accepted unreservedly (see Paragraph 4.5.17, fn.28). Historically, the earliest source to confirm the presence of the outer ward is the now presumed destroyed 'docket in the Record Office, Dublin' quoted by Phillips (1883, 15, 19) and dating to the early seventeenth century (see Paragraph 2.5.29). Unfortunately, excavation of Trench No.7 in 2013, which extended up to the inner face of the eastern part of the curtain wall of the outer ward, failed to uncover any dating evidence for the construction of the curtain wall. Excavation revealed that the wall was built directly on to the surface of the bedrock and that there was no evidence for either a foundation cut or an associated context that could provide a date for its construction (Paragraph 4.5.24). During the initial stages of the excavation of the adjacent Trench No.5 it was assumed that the infilling of the lime kiln and the quarry it was built into might have been associated with the construction of the

outer ward, however, the presence of a gun loop in the adjacent, eastern section of the curtain wall at a significant depth below the present ground surface suggests that the outer ward was constructed prior to the raising of the ground surface in the southeastern corner of the outer ward by infilling the quarry (Paragraph 4.5.7). Archaeological dating of the curtain wall of the outer ward will remain a problematic objective unless a section of the curtain wall that was built within a foundation cut through a sequence of surviving deposits can be identified.

- 5.2.6 The fifth research objective was to investigate the nature of the 'kiln' anomalies in the outer ward first identified during the 2012 geophysical survey (Paragraph 3.6.1; Figure 17 'e'). The southernmost of these anomalies was investigated within Trench No.5 and excavation demonstrated that the anomaly was caused by a remarkably well-preserved lime kiln (Paragraphs 4.5.1 4.5.16), provisionally dated to the second half of the thirteenth century on the basis of the identification of an uncleaned and heavily corroded coin as a Long Cross Penny of Henry III (R.Heslip pers.comm.; see Paragraph 4.5.12). It is reasonable to assume that the unexcavated, northern 'kiln' anomaly also reflect the presence of a medieval lime kiln.
- 5.2.7 The final research theme of the project was a commitment to assess the character of the near-rectangular artificial terrace located to the west of the outer ward. This part of the site had been largely ignored by Waterman, who had not even delimited the breaks in slope associated with the terrace in his plan of the site (Anon. 1966a, fig.133). Prior to undertaking the geophysical surveys at Dundrum Castle in January 2012 it was assumed, by the author at least, that the terrace, and the steep slopes which define its northern and southern edges, was a product of the near vertically dipping beds of the underlying geology that had given the topography of the site a stepped appearance (Macdonald 2011a, 5). The results of the resistivity survey demonstrated, however, that the terrace was artificial. Positive resistance anomalies bounding the northern, eastern and southern edges of the terrace suggested the presence of stone walls (Figure 17 'k'). Cartographic analysis demonstrated that the position of these anomalies corresponded with the line of garden boundaries represented on the revised 6" Ordnance Survey map of 1859 (Paragraph 3.7.2). A single excavation trench was cut across the terrace during 2013 and although the excavation was not completed, enough of the feature was investigated to confirm that it was an artificial terrace. The remains of a wall were uncovered at the base of the break in slope that marked the southern edge of the terrace. A date for the terrace was not established during the course of the excavations, although radiocarbon dating samples that will provide a *terminus post quem* for the construction of the terrace were retrieved (see Section 6.7). Although the terrace edges were used to form the boundaries of the gardens of the cottages represented on the 1859 Ordnance survey 6" map, it is considered likely that the terrace itself dates to a more formal phase of gardening and landscaping at the site. Provisionally, the terrace is therefore dated to the 1630s and its creation is attributed to the Blundell family. That the southern edge of the terrace coincides with the break in the curtain wall of the outer ward suggests that the construction of the terrace was possibly part of a wider project to transform Dundrum Castle into a seventeenth-century residence suitable for a gentleman landowner (Paragraph 4.6.19). The terrace was surveyed by volunteers from the Ulster Archaeological Society during the summer of 2013; unfortunately, it has not been possible to incorporate the results of their work into the present report. It is recommended that the excavation of Trench No.9 is completed in a future season of excavation (see Paragraph 6.2.2).

5.3 Dundrum Castle as an Expression of Power, Status and Property Ownership

5.3.1 In addition to the evaluation of the project aims (Section 5.2), the opportunity has been taken to identify and briefly explore two of the interpretive strands that will inform the narrative of the proposed monograph on Dundrum Castle. These ideas

build upon research first undertaken in connection with the 2009 excavations at Blundell's House (Macdonald 2011a; 2011b). The first of these strands is the idea that the site of Dundrum Castle has formed a canvas for the continually changing, material expressions of power, status and ownership of property of those who have occupied, held or owned the castle. In recent years castle studies has developed to encompass a consideration of the full range of political, military, social and economic roles that castles performed during the medieval period. For example, although large-scale, mortared, masonry buildings were not unknown in the pre-Norman world of Gaelic Ulster, their distribution was exclusively restricted to ecclesiastical centres. Consequently, as well as forming a substantial defensive barrier, the construction of the curtain wall of the inner ward by John de Courcy would have visually represented not just military strength, but also a social prestige whose symbolic value was magnified by its architectural novelty for large elements of the surrounding population.

5.3.2 The socio-political aspects of the late medieval Gaelic occupation of Dundrum Castle is also of interest. During this period the circular great tower of the inner ward apparently formed the principle residence of the Magennises.³¹ 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, if his dating is accepted (see Paragraphs 4.5.17, fn.28 and 5.2.5), 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 has some validity. 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 towerhouse 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 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 by visitors and the general populace as being a structure that was more significant than a conventional towerhouse. Although the admittedly limited historical sources do 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.

³¹ 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 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, suggests 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).

5.3.3 The use of Dundrum Castle to express ideas of power and status that reflect possession or ownership of property is not restricted to the medieval period alone. Although its original character is difficult to reconstruct with certainty, the pre-Norman 'hillfort of the ridge' would have represented a visually unusual structure within the Early Christian-period landscape. The size of the enclosure is atypically large and is best paralleled by royal sites, whilst whatever structure was built upon the revetted platform built upon the summit of the hill would, if the slopes of the hill were cleared of trees, have been visible from much of the surrounding landscape. Furthermore, the endeavour to transform the medieval castle during the 1630s into a country residence with a new house whose east wing was embellished with armorial panels or relief sculptures set within triangular tympana and surrounding formal gardens, surely reflects the confidence in their position within society of the new landowners, the Blundells, and an aspiration to express their status as gentlemen landowners through architecture and gardening. That this confidence appears to have extended to the dismantling of the curtain wall of the lower ward may seem foolhardy from a modern perspective given the events of the 1640s, but would not have appeared so misplaced in the years before the 1641 rebellion. The recognition that during the late eighteenth century, after the property was inherited by the Hill family, that the Second Marquess of Downshire was keen to engage in landscaping of the area immediately surrounding the castle and also creating an accessible, 'picturesque' ruin out of the standing remains represents another material expression of status and power. Such naturalistic landscaping activities would have been intended to be perceived as a bold statement of not only the present prosperity of the new landowner, but also their future intentions (Banks 1991, 82). Arguably, the naturalistic landscaping also represented a reaction to the substantial programme of agricultural improvements introduce to the Dundrum Estates by the Hill family whose imposition upon the landscape would have been perceived as being at odds with the natural beauty of the idealised notion of an open, unenclosed countryside (cf. Lamb and Bowe 1995, 30-31; see also Macdonald 2011a, 83-85). Even in its current incarnation as a monument in state care, the presentation of the castle can be read as a consciously constructed, material expression of the power and authority of post-War government in Northern Ireland. The neatly kept lawns, tidying up of fallen stone, clearance of vegetation and other debris and the apparent presentation of the ruins 'as they were found' reflects what Simon Thurley has defined as the classic Office of Works aesthetic for presenting historic ruins to the public. This style of presentation was consciously developed in Britain by staff of the Office of Works from 1913 onwards (Thurley 2013, 140-144).³² At Dundrum the work to transform the ruins for presentation to the public was undertaken by a team of labourers working under Waterman's supervision during the 1950s after the monument had been placed into State Care by the Eighth Marquess of Downshire. This style of monument presentation still dominates the sites in the care of not only the Northern Ireland Environment Agency, but also Cadw, Historic Scotland and English Heritage. As a consequence, it is not obvious, even to heritage professionals, that this aesthetic, motivated as its development was to create physically and intellectually accessible monuments for the public to appreciate and enjoy, symbolically represents an expression of the role of the state as a landowner of ancient monuments, as much as it represents a break from the ivy-clad ruins admired by Victorian visitors to the site.

5.4 Dundrum Castle: the Manorial Context

5.4.1 As well as considering how the monument and its immediate setting can be interpreted as a continually changing, material expression of power, status and property ownership, the second interpretive strand which it is intended to develop in the publication of the project results is the role of the castle within its wider economic, settlement and landscape context. In order to achieve this it is proposed to reconstruct as a landscape survey the manorial estate that the castle was associated

³² The importance of the availability of comparatively cheap, petrol-driven lawn mowers to the development of this aesthetic for presenting monuments to the public cannot be over emphasised (Thurley 2013, 144).

with in order to assess the role of the castle within the exploitation of that estate. The importance of the economic basis for understanding the Anglo-Norman settlement of Ulster cannot be overestimated. The opportunity to generate wealth by exporting grain and other surplus agricultural produce appears to have been a major motivation to both de Courcy, and the other Anglo-Normans who followed him, in invading Ulster. The Anglo-Normans attempted to realise this opportunity by establishing a manorial system of agricultural production in the areas they conquered and settled.

- 5.4.2 As previously noted, the earliest reference which indicates that the castle at Dundrum was associated with a manorial estate is the 1211-12 pipe roll (see Paragraph 2.5.12). In addition to recording spending on the military and domestic elements of the castle, the relevant entry within the pipe roll also records expenditure upon a new granary, a new stable, supplies for a smithy, a new grange or barn (grangia), fulling mills, a salt-pan and wages for a chaplain (implying the presence of a chapel) (Paragraph 2.5.13). The location of the granary, stable and smithy remain unknown - these features may have been located within the inner ward of the castle or they could have been associated with a farm centre located elsewhere within the associated manorial estate. The reference to the new grange or barn certainly implies the presence of a separate farm centre. There is no evidence for a chapel within the walls of the castle and the salt pan was almost certainly located on the shore of Inner Dundrum Bay. In addition to the attested fulling mills, it is reasonable to assume that the manorial estate would also have had a mill for processing grain. These mills would have most likely been located adjacent to the Moneycarragh River, which runs to the west of the Castle and into Inner Dundrum Bay, although the possibility that they were tidal mills sited on the edge of Inner Dundrum Bay cannot be dismissed. The expenditure recorded within the pipe roll on a new grange or barn suggests that under Roger Pipard, acting as the seneschal of Ulster, the working arrangements of the manor attached to Dundrum Castle were, at the very least, altered if not totally reorganised. If use of the word grangia signifies an outlying farm, rather than a barn (see Paragraph 2.5.13, fn.14), then this reorganisation could have been significant in scale. This raises the possibility that prior to coming under royal control in 1210, the manorial estate was managed directly from the castle itself. It may be that the amendments to the layout of the castle that are conventionally attributed to Hugh de Lacy, such as the demolition of de Courcy's hall, the levelling of the ground surface within the inner ward, and the construction of the great tower and a new hall (see Paragraph 2.8.4), indicate that this process was initiated, if not completed, during his initial tenure as Earl of Ulster (1205-1210).
- 5.4.3 There is little further documentary evidence relating specifically to the manorial estate associated with Dundrum Castle during the Anglo-Norman period, although the *Inquisition Post Mortem* prepared following the murder of William de Burgh in 1333 records that the holdings of the manor associated with the castle consisted of some 18 carucates (Orpen 1914, 54, 61) suggesting that the manorial estate of Dundrum consisted of at least 874 hectares (i.e. approximately 2160 acres) see Paragraph 2.5.18. The *Inquisition Post Mortem* also records that the outlying possessions of the manor consisted of 18 carucates (approximately 2160 acres / 875 hectares), but again due to the practice of only counting cultivatable land within the assessment, this area could have been much larger. At some point during the second half of the fourteenth century, as part of the decline of Anglo-Norman settlement within Ulster, Dundrum Castle and its associated manorial estate passed into the hands of the Magennis family, although the English Crown always maintained a claim on the property (see Paragraph 2.5.20). No documentary evidence survives for much of this late medieval 'Gaelic' phase of the manorial estate's history. It is likely that despite the change in its possession, the boundaries of the manorial estate itself would have survived intact, although the agricultural character of the estate undoubtedly shifted with an increasing emphasis on the raising of cattle, probably at the expense of activities such as the production of woollen cloth indicated by the presence of fulling mills during the preceding Anglo-Norman period.

- 5.4.4 Although the historical evidence is ambiguous, it seems probable that the Earls of Kildare - the FitzGeralds - had established a legal claim on Dundrum Castle and its associated estate during the early decades of the sixteenth century - possibly following the 1517 hosting into Lecale led by the Ninth Earl (see Paragraphs 2.5.20 and 2.5.22). Despite their claim to the castle and its associated estate, it is doubtful whether the FitzGeralds ever succeeded in extracting anything, other than perhaps a nominal rent, from the incumbent Magennis family. The Kildare Rental preserved within the Harleian Collection in the British Library does not contain any reference to Dundrum. Between the collapse of the Kildare Ascendancy in the rebellion of 1534-36 and the restoration of Dundrum Castle to the Eleventh Earl of Kildare in 1555, the castle and its associated manor would have been a Royal possession. The extant historical sources indicate that, during this period, the Crown authorities had no more success in extracting rent from the Magennises than the FitzGeralds had. The surviving returns of account repeatedly record that Arthur Magennis managed to avoid paying any rent and was several years in arrears (Quinn 1933-34, 65-67; see also Paragraph 2.5.22). During this period, a special commission establish in 1540 to report upon royal possessions provides us with an important description of both the castle and its associated manor. The commissioners wrote of the castle 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' (Quinn 1932-34, 76). As well as confirming the difficulties in extracting rents from the branch of the Magennises that held the castle, the commissioners' report indicates that the manorial estate associated with the castle consisted of six townlands and was approximately 1000 acres in size.33
- 5.4.5 Following the conclusion of the Nine Years' War (1594-1603), Dundrum Castle and its associated estate was acquired by Edward Cromwell, Governor of Lecale.³⁴ Cromwell's son, Thomas, Viscount Lecale, subsequently sold the estate to a member of the Blundell family, apparently at some point prior to August 1629, when one William Blundell was granted a licence to hold a weekly market in Dundrum (Morrin 1863, 452) (see Paragraphs 2.5.30 2.5.31). After the wars of the 1640s, the Dundrum Estate remained in the ownership of the Baronets Blundell of Edenderry. The Blundells were absentee landlords and the estate was poorly managed by a succession of agents and receivers of rent (Espie *undated*) before it passed into the hands of the Hill family between 1787 and 1799 as it was inherited piecemeal by Mary Hill (née Sandys) (1764-1836) wife of Arthur Hill, the second Marquess of Downshire (1753-1801) (Paragraph 2.5.34). During this period the Dundrum Estate was enlarged by the purchase of 2000 acres at Ballykinlar in 1793 and it is possible that other, smaller, unrecorded additions to the original Dundrum Estate were also made in the late eighteenth and early nineteenth centuries as it was incorporated into the Downshire Estates.
- 5.4.6 The potential of the study of the collection of documents relating to the management of the Downshire Estates (Public Record Office Northern Ireland Ref. Nos. D607 and D671) to cast light upon the medieval history of the manorial estate has already been noted (Paragraph 2.5.38). For example, an estate map dated to *c*.1880 (Public Record Office Northern Ireland Ref. D671/M5/22C/1) indicates that the Dundrum Estate consisted of the six townlands of Aghlisnafin,

³³ The sum of a thousand acres is a suspiciously too-rounded figure to be accepted as anything other than a rough estimate. That it is roughly half the size of the figure of 2160 acres suggested by the reference to 18 carucates in the 1333 *Inquisition Post Mortem* (Paragraphs 2.5.18 and 5.4.3) is not a significant inconsistency, given the inaccuracies inherent within medieval record keeping and the probability that the 1540 commissioners never visited Dundrum but were reliant upon hearsay.

³⁴ In the *Preliminary Survey of the Ancient Monuments of Northern Ireland*, Lawlor states that the grant to Cromwell consisted of the 'castle and seven townlands pertaining thereto' (1940, 127) adding one more townland to the six noted in 1540. Lawlor's authority for indicating that the manorial estate consisted of seven townlands is unknown.

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 1933-34, 76; see Paragraph 2.5.23). That the medieval manorial estate may have been larger, however, is suggested by an earlier map depicting the estate of Mary Hill 'Situate in Dundrum' that dates to 1821 (Public Record Office Northern Ireland Ref. D671/M5/12/1), which in addition to the townlands of Aghlisnafin, Ballybannon, Ballylough, Dundrum, Magherasaul and Moneylane, also includes the conjoining modern townlands of Murlough Lower and Waterask (Figure 36). Unfortunately, it has only been possible to undertake a brief study of the Downshire Estate Papers whilst preparing this report, however, it is anticipated that a more detailed analysis of this resource will resolve the issue of the extent of the medieval manorial estate (see Paragraph 6.4.2).



Figure 36: Plan showing the location of the townlands of Aghlisnafin, Ballybannon, Ballylough, Dundrum, Magherasaul and Moneylane, which formed the manorial estate associated with Dundrum Castle. Sites recorded in the sites and monuments record are superimposed. The conjoining modern townlands of Murlough Lower and Waterask, which may also have formed part of the manorial estate are also shown.

- 5.4.7 In advance of undertaking research upon the Downshire Estate Papers, the six townlands of Aghlisnafin, Ballybannon, Ballylough, Dundrum, Magherasaul and Moneylane provide a target area in which to locate the missing documented elements of the medieval manor. Although it has not been possible to undertake such a survey during the drafting of this report, a few comments upon the possible site of the chapel associated with the castle and manorial estate are offered to demonstrate the potential of the approach (see Paragraph 6.3.1).
- 5.4.8 Provisionally, it is suggested that rather than build a new chapel, de Courcy and his successors made use of a pre-existing church located at Kilmegan, in the townland of Moneylane - the apparent site of an Early Christian ecclesiastical centre (Sites and Monuments Record No. DOW 043:021) located only two kilometres from the castle. The place-name 'Kilmegan' suggests the site could have pre-Norman origins – the element *cill* (derived from the Latin *cella*, commonly anglicised 'kil(l)' and denoting a 'church, monastery and/or graveyard' often being associated with early church sites (Flanagan 1981-82, 71-72; Flanagan 1984, 31-34). The discovery of a souterrain during the construction of a car park immediately to the north of the modern church in 1982 is also suggestive of an early date for the site.³⁵ Historically the earliest reference to the name Kilmegan is seventeenth century, however, there are reasonable grounds for suggesting that the church is earlier in date. Reeves argued that Kilmegan was a dependent chapel attached to the medieval plebania of Kilkeel despite being located outside the physical boundary of the parish of Kilkeel (Reeves 1847, 27 n b, 207-09). Reeves, not implausibly, based this identification not on direct evidence, but on the basis that Kilmegan is not noticed in the valuation of the dioceses of Down, Connor and Dromore for the papal taxation c.1306 (Reeves 1847, 116; for a discussion of the quasi-independent status of the parish of Kilkeel during the medieval period see Rankin 2006; Macdonald and McIlreavy 2007, 115-116). Both the 1821 estate map and the first edition Ordnance Survey 6" map (1834) show a neardirect route (the Moneylane Road), crossing the Moneycarragh River at an apparent ford, between Dundrum and the Kilmegan Parish Church. Although quarrying and the residential expansion of Dundrum has partly obscured this route, both the road and the church are clearly visible from the top of the circular great tower. The continued use of existing chapels and churches, rather than the construction of new churches in more convenient locations is not an unusual occurrence in the Anglo-Norman settlement of Ulster.

³⁵ The souterrain was investigated upon its discovery by Nick Brannon and found to consist of a surviving passage approximately 7.5 metres in length and aligned northwest-southeast. Excavation indicated that the surviving element of the souterrain once extended for a distance of approximately ten metres to the northwest. The souterrain was closed and sealed prior to completing the construction of the car park.

6 Recommendations for Additional Work

6.1 Introductory Comments

- 6.1.1 As previously noted, it is intended to publish both the geophysical surveys (see Chapter 3) and the 2012 and 2013 seasons of excavation (Chapter 4), along with the work conducted within the outer ward at Blundell's House in 2009 (Macdonald 2011a), in a single volume that will form part of the Northern Ireland Archaeological Monograph series (see Paragraph 2.2.1). That monograph will form an integrated study of the available archaeological, architectural and historical evidence relating to Dundrum Castle. It will interpretively situate the castle in its economic context by including a landscape survey of the manorial estate associated with the castle, as well as comprehensive specialist studies of the animal bone and pottery assemblages. In order to fully realise the potential of integrating the archaeological, architectural and historical strands of evidence, it is proposed to undertake a final season of excavations at Dundrum Castle (see Section 6.2). The survey of the manorial estate will also require additional fieldwork (see Section 6.3). If this proposal to undertake additional fieldwork is supported then it is suggested that undertaking full, specialist analyses of the artefact assemblages recovered in 2012 and 2013 is postponed until the excavations at Dundrum Castle have been completed. This will enable the specialists to study their respective assemblages in their entirety, rather than in a piecemeal fashion. Not only will this approach be more efficient and cost effective, it will also mitigate the risk of assemblages of the same artefact type being reported upon by two different specialists and thereby requiring substantial editing to produce a single account suitable for publication.
- 6.1.2 A flow chart summarising the proposed programme of further work required to bring the work at Dundrum Castle to publication has been prepared (Figure 37). The flow chart illustrates how the proposed work programme is divided into successive stages that are defined by the activities or tasks that need to be, or ideally should be, completed before other activities can be meaningfully begun. For example, identification of the coins recovered during the excavation is contingent upon the coins first being cleaned by a conservator; a refined chronological sequence for the excavations can only be prepared after the programme of radiocarbon dating has been completed and the chronologically diagnostic find assemblages of pottery, clay pipes and coins have been analysed; or the architectural survey of the surviving fabric of the castle should be informed by completed studies of the early pictorial representations of the castle and the monument's historical background. The recommended programme of further work prioritises undertaking a further season of excavation at Dundrum Castle (or conversely deciding that a further excavation is not desirable), the commencement of a programme of radiocarbon dating and the undertaking of additional historical and pictorial research. In addition, it is recommended that specialist analysis of the chronologically diagnostic find types is undertaken before the remainder of the finds recovered during the excavations are studied. This will enable a refined dating sequence for the excavated trenches to be produced that will inform the work of the specialists studying the remainder of the artefact assemblages.
- 6.1.3 Detailed proposals for all of the recommended additional work required to bring the excavations at Dundrum Castle to publication are outlined below. Particular weight has been given to those tasks identified as priorities for completing the project (see Paragraph 6.1.2). It has not been considered appropriate to produce detailed estimates for conducting specialist analyses of the various artefact assemblages until a decision has been made on whether there is to be a further season of excavations at the site.



Dundrum Castle, County Down 2012 and 2013 (Licence Nos.AE/12/71 and AE/13/101)

6.2 Additional Season of Excavation

6.2.1 A final season of excavation at Dundrum Castle is proposed. It is suggested that these excavations consist of the re-opening and completion of the trench dug across the extra-mural, post-medieval garden terraces (see Paragraph 6.2.2), the re-excavation and extension of one of the trenches adjacent to the gatehouse excavated by Dudley Waterman in 1950 (see Paragraphs 6.2.3-6.2.4), and the opening up of an area within the northern corner of the outer ward to assess the evidence for the historically attested 'lesser tower' (see Paragraphs 6.2.5-6.2.7). It is recommended that the successful directorial and institutional partnership established during the 2012 and 2013 seasons of excavation is continued and that the final season of excavations are jointly directed by Philip Macdonald (Queen's University Belfast) and Liam McQuillan (Northern Ireland Environment Agency).

Completion of Excavation of the Post-Medieval Garden Terraces (Trench No.9)

6.2.2 The excavation of Trench No.9, which was cut across the post-medieval garden terraces located immediately to the west of the outer ward, was not completed during the 2013 excavation season (see Paragraphs 4.6.12-4.6.19). Although definitive evidence for the date of these terraces was not recovered during the course of the excavation, and suitable samples for radiocarbon dating have yet to be submitted (see Section 6.7), these terraces are provisionally dated to the 1630s and are considered likely to be associated with the unfinished transformation, under the ownership of the Blundell family, of the castle into a comparatively modest residence with formal gardens suitable for a gentleman landowner (see Paragraph 4.6.19). As such, the garden terraces form an example of the continually changing, material expressions of power, status and ownership of Dundrum Castle which has been identified as one of the interpretive strands that will be considered within the discursive chapters of the final monograph. Completion of the excavation of Trench No.9 is therefore desirable, if not essential. It is proposed to re-open up the entire length of the trench and then remove the unexcavated layer of redeposited clay subsoil (918A) that formed the initial construction deposit for the garden terraces. Its excavation is anticipated to reveal the truncated surface of the pre-terracing slope. It is considered unlikely that a buried soil horizon will have survived intact beneath the 'positive' element of the terrace. The turf and topsoil would have been removed prior to creating the terrace in order to be redeposited upon its surface. Nonetheless, the area beneath the 'positive' element of the terrace will form a zone of archaeological preservation and the removal of the redeposited subsoil (918A) will not only enable a full and representative section drawing of the terrace to be prepared, but will also provide an opportunity to assess the archaeological potential of the extra-mural area immediately adjacent to the outer ward. In keeping with the policy of preserving in situ significant archaeological features (see Paragraph 4.3.1), it is not proposed to remove either the wall (906) or the adjacent trapezoidal-shaped concentration of stones which may be artificial (908) (see Paragraph 4.6.16) unless excavation of the redeposited subsoil (918A) demonstrates that they are nineteenth century in date. There is, however, a case for expanding the trench around the possible feature (908) in order to expose enough of the deposit to judge whether it is artificial.

Re-excavation and Extension of one of Waterman's Gatehouse Trenches

6.2.3 In addition to completing the excavation of Trench No.9, it is recommended that the unresolved question of the character of the gatehouse into the inner ward is addressed by re-excavating parts of one of Waterman's 1950 trenches and extending it a distance of 1.0 metres to the west. As previously noted, the apparent asymmetrical form of the gatehouse cannot be accepted unreservedly (*pace* Waterman 1951, 20) (see Paragraph 2.8.6). The *c*.1800 Downshire Estate map (Public Record

Office of Northern Ireland Ref. No. D671.M.5.8.1) depicts the gatehouse with two projecting drum-like towers (Figure 8) and Phillips' 1883 plan of the Castle represents the remnant stubs of the 'missing' tower (Figure 6). This cartographic evidence casts doubt on the validity of Waterman's interpretation of his excavation results that the asymmetrical plan of the gatehouse is genuine (1951, 20). Re-excavation and then extension of the near north-south aligned, 4.5 metre long element of the trench that Waterman dug immediately outside the gatehouse will test the validity of his assertion that there was no evidence for the 'missing' tower. It will also provide an opportunity to record the west- and east-facing sections of Waterman's trench.³⁶ Furthermore, re-excavation of that part of Waterman's trench which was dug against the base batter of the surviving apsidal tower will provide both useful comparative evidence and the opportunity to retrieve mortar samples without compromising any previously undisturbed archaeological deposits (see Figure 38 for the location of the gatehouse will involve compromising only 4.5 square metres of previously undisturbed archaeological deposits. Any archaeological significant masonry features exposed within this area will be preserved *in situ*.



Figure 38: Location of the proposed trenches within the vicinity of the secondary gatehouse (after Waterman 1951, fig.1).

6.2.4 The architecturally dating of the gatehouse and the implications for interpreting the development of the castle if a double projecting tower plan for the gatehouse is accepted as genuine are discussed in detail elsewhere (see Paragraphs 2.8.7 - 2.8.8).

Excavation of Northern Corner of Outer Ward

³⁶ Waterman did not publish any sections of the trenches he dug within and immediately outside the gatehouse, nor do any sections from the gatehouse survive amongst the field drawings from the excavation which are held by the Northern Ireland Environment Agency.

6.2.5 A second question that the proposed further season of excavation at Dundrum Castle will address is the location of the 'lesser tower' recorded in the 1211-12 pipe roll (see Paragraphs 2.5.12 - 2.5.13 and 2.8.9). One potential clue to its location is the presence of a probable latrine chute (Figure 9) in the northeastern part of the outer ward's curtain wall immediately adjacent to the gap in the curtain wall of the inner ward, which Waterman interpreted as representing the original entrance to the castle (Anon. 1966a, 207, 210). The presence of the latrine chute suggests that there was once a building within what is now the northeastern part of the outer ward. It can speculatively be suggested that this structure may have been the lesser tower attested in the pipe roll. Given its location, this structure may have also formed part of the original entrance into the castle. If these inferences are accepted, then it is reasonable to suggest that either the base of the northeast wall of this structure subsequently became incorporated into the northern section of the curtain wall of the outer ward or the structure furnished with the latrine chute was built at the same time as the curtain wall of the outer ward. Study of the surviving, pre-modern, fabric of the curtain wall surrounding the probable latrine chute does not reveal any obvious evidence for two distinct episodes of construction (Paragraph 2.8.9).



Figure 39: Location of the proposed trench within the northern corner of the outer ward (after Anon. 1966a, fig.133).

6.2.6 It is proposed to excavate an area 10.0 metres square within the northern corner of the outer ward in order to assess whether any evidence survives within the northern corner of the outer ward of the structure furnished with the probable latrine chute (Figure 39). In addition to recovering any evidence for a 'structure', the trench should also expose a section of the original defensive ditch of the castle hypothesised as extending around the southern edge of the inner ward (see Paragraph 2.8.8). The footprint of the proposed excavation trench is bisected by the modern pathway which provides visitor access to the inner ward. To maintain this access, and also provide the public with the opportunity to safely walk through an

archaeological excavation, it is proposed that the part of the trench through which the path passes is not excavated. The total area of previously undisturbed archaeological deposits that would be compromised by the proposed trench is difficult to estimate because some of this area must have been excavated or cleared under Waterman's supervision in the 1950s - for example, the so-called bridge-pit illustrated on Waterman's plan of the monument, and still open today, must have been cleared prior to 1955 (Anon. 1966a, fig.133). At a maximum, however, an area of 90 square metres of hitherto undisturbed deposits would be excavated. Outcrops of bedrock within the area of the proposed trench suggest that a significant depth of stratigraphy will not be encountered. The established policy of not removing any archaeological significant masonry features uncovered during the course of the excavations at Dundrum Castle will be maintained (see Paragraph 4.3.1). The removal of any other significant archaeological features or horizons within the proposed area of excavation will only be undertaken with the approval of a senior member of the Inspectorate.

6.2.7 If the recent excavations at Dundrum Castle, including those undertaken at Blundell's House in 2009 (Macdonald 2011a; 2011b), are to be published in a single monograph (see Paragraph 2.2.1) then this poses a problem with the nomenclature used for site recording. Unfortunately, the single sequence of recording numbers used in both the 2012 and 2013 seasons of excavation are independent of those used during 2009 to record the three trenches excavated within and immediately external to Blundell's House. This overlap in trench, context, sample and find numbers occurred partly because the aspiration to publish all of the excavations in a single volume was not formulated until after the completion of the 2012 excavation season. It is also partly an understandable consequence of the makers of the *Time Team*, who filmed the initial stage of the 2012 excavations, not wanting to call their initial trench 'Trench No.4', instead of 'Trench No.1'. To avoid creating any confusion when the sites are eventually published, it is suggested that the trenches excavated in 2009 are renumbered sequentially, following the completion of the final season of excavation at Dundrum Castle, and that the context, small find and sample numbers used in 2009 are retrospectively prefixed with the letter B (for Blundell's House).

6.3 Proposed Landscape Survey of the Manorial Estate Associated with Dundrum Castle

6.3.1 In order to establish the role of the castle within its wider economic and landscape context, it is proposed to reconstruct, in the form of a landscape survey, the manorial estate associated with Dundrum Castle (see Paragraph 5.4.1). It is proposed to undertake this survey by first researching through the Downshire Estate Papers (Public Record Office of Northern Ireland Refs. D607 and D671) to establish the extent of the Dundrum Estate when it was inherited by the Hill family towards the end of the eighteenth century (see Paragraph 6.4.2). It has been demonstrated elsewhere, that there are good grounds for assuming that this block of land will also represent the medieval extent of the manorial estate associated with Dundrum Castle (see Paragraphs 2.5.38 and 5.4.6). Following this a 'desk-based' study of the delimited area will be undertaken with a view to identifying potential sites incorporating analyses of the Downshire Estate Papers, aerial photographs, available LiDAR data and the sites and monuments record for Northern Ireland. Thirdly a 'walk over' survey of the delimited area will be conducted with a view to identifying and recording potential elements of the medieval manorial estate. All potential sites that are identified will be recorded both textually and photographically – the resultant records will be incorporated into the sites and monuments record, as well as prepared for publication in summary form within the proposed Dundrum Castle monograph. Finally, it is anticipated that plans of publishable quality a small number of sites will be surveyed - again for inclusion in both the sites and monuments record and the proposed report on the excavations at Dundrum Castle.

6.4 Additional Historical Research

- 6.4.1 Whilst the historical background to Dundrum Castle, first drafted for the data structure report prepared on the 2009 excavations at Blundell's House (Macdonald 2011a, 6-15) and then revised and expanded for the current report (see Paragraphs 2.5.1-2.5.38), is detailed, additional research is desirable. To realise the full potential of the available medieval and early modern sources for casting further light upon the history of the monument, 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 copies of 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 2.5.32). Further study of the original document (National Archives, London Ref. SP63/260), a copy of which is held on microfilm by the Public Record Office of Northern Ireland (Ref. No.MIC223/113), should provide significant details of the layout of the castle during the seventeenth century.
- 6.4.2 A second source of historical evidence, whose full potential has not been realised during the compilation of this report, is the Downshire Papers, which are 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 the castle during the period of ownership of the Dundrum Estate by both the Blundell and Hill families and is therefore a necessary preliminary to undertaking the architectural survey of the surviving fabric of the castle (see Section 6.6). In addition, as demonstrated by the use of nineteenth-century estate maps to reconstruct the extent of the late medieval manorial estate (see Paragraph 5.4.6), study of the Downshire Papers will enable aspects of the medieval manorial estate associated with Dundrum Castle to be reconstructed. W.A. Maguire has already demonstrated the historical value of the Downshire Papers (i.e. Maguire 1972; 1974), although his research has far from exhausted the research potential of the archive. It is recommended that additional research by Philip Macdonald is undertaken on the Downshire Papers. The introductory guide to the Downshire Papers (Anon. 2007) will enable this additional research to be undertaken in an efficient, targeted fashion.
- 6.4.3 The historiographical research into the study of Dundrum Castle is not complete, although the provisional results have been meaningfully integrated into the current version of the historical narrative of the site. In particular, the sources relating to the castle used by Harris when compiling *The Ancient and Present State of the County of Down* (1744) have not been identified and analysed. For his source material relating to the castle, Harris appears to have relied on papers compiled by Claudius Gilbert (1669/70-1743) that now form part of the collections of the library of Trinity College Dublin (Paragraph 2.5.7). Gilbert appears to have collected his source material on County Down during the early years of the eighteenth-century with a view to completing his own county-based survey. These papers are essential sources for assessing both the origin of the spurious Templar association with the castle (Paragraph 2.5.7), the date and circumstances that the Blundell family acquired the castle and its associated manorial estate (Paragraph 2.5.31) and the veracity of the local tradition that the castle was slighted by Parliamentarian forces in 1652 (Paragraph 2.5.33). Again, it is recommended that archival research on the Gilbert Papers held by Trinity College Dublin is undertaken by Philip Macdonald.

6.5 Pictorial, Photographic and Cartographic Evidence

6.5.1 As demonstrated by the consideration of two eighteenth-century representations of Dundrum Castle (see Section 2.6), the study of early pictorial images of the monument has the potential to greatly enhance both the historical and architectural study of the castle. It is recommended that a comprehensive catalogue of all early images (artistic, photographic and

cartographic) of the castle is compiled in advance of completing the architectural survey of the standing remains of the monument (see Section 6.6). Collections that will be consulted include those of the Public Record Office of Northern Ireland, the National Museums Northern Ireland, The National Library of Ireland, the National Museum of Ireland and the National Gallery of Ireland. Elmes' *Catalogue of Irish Topographical Prints and Original Drawings* (1975) will act as a useful starting point for compiling the catalogue of early artistic representations of Dundrum Castle. Photographic collections and sources that will be consulted include: the Belfast Naturalist Field Club Photographic Album, the Green Collection, the Hogg Collection and the Welch Collection (all curated by the National Museums Northern Ireland) and the Lawrence Collection (National Photographic Archive).

6.6 Architectural Survey

6.6.1 A revised and fully illustrated description of the monument will form an essential component of the proposed monograph on the recent excavations at Dundrum Castle. Despite the quality of his writing style and the soundness of many of his conclusions, the account of the monument prepared by Dudley Waterman (Anon. 1966a, 207-211) can no longer be considered definitive (see Paragraph 2.8.1). It is recommended that a full architectural account of the monument, which incorporates and compliments that recently prepared for Blundell's House (Macdonald 2011a, 25-43), is prepared for inclusion within the forthcoming monograph. It is envisaged that the architectural survey will be jointly authored by Philip Macdonald (Queen's University Belfast) and Liam McQuillan (Northern Ireland Environment Agency). The proposed written description of the monument will need to be illustrated by a comprehensive set of illustrations and it is recommended that the castle is the subject of a programme of laser scanning to aid their development. Whether this scanning is carried out by the survey team of the Northern Ireland Environment Agency's Historic Environment Division or is undertaken by contractors associated with Queen's University Belfast is to be decided by the Inspectorate. It is envisaged that the architectural survey of the monument will be informed by the proposed analyses of both the Downshire Estate papers (Paragraph 6.4.2) and the early representations of the monument (Paragraph 6.5.1), as well as the documented conservation history for the site.

6.7 Proposed Programme of AMS Radiocarbon Dating

- 6.7.1 It is proposed to submit 19 samples all short-lived, single entities (i.e. charcoal twigs, charred seeds and grains, and animal bones) recovered during the course of the 2012 and 2013 excavations from 18 separate contexts for radiocarbon dating (Table 1). The samples have been selected from various contexts in order to confirm the interpretation and date of: the apparently pre-Norman phases of activity at the site (i.e. 113/140, 421, 830 and 833); the construction of the curtain wall of the inner ward (i.e. 116); the earliest phases of Anglo-Norman occupation (i.e. 113/140 and 454); the levelling of the ground surface within the inner ward and the apparently associated construction of the circular great tower (i.e. 121/122/138 and 403); the construction of various internal buildings within the inner ward (i.e. 211 and 311); the construction of the secondary gatehouse into the inner ward (i.e. 209); the construction (i.e. 503 and 555) and infilling (i.e. 576 and 577) of the lime kiln within the outer ward; and the construction of the extra-mural terraces located to the west of the outer ward (i.e. 914/916 and 918).
- 6.7.2 To minimise the risk of residually deposited material being used to provide dates, either articulated bone (i.e. 113/140, 403, 576 and 577) or, where possible, bone in good condition (i.e. 121/122/138, 503 and 555) will be submitted. In order to submit animal bone for AMS radiocarbon dating it will be necessary to first identify the proposed samples. These

identifications will enable the dated samples to be incorporated into a report on the animal bone recovered from the 2012, 2013 and any future excavations at Dundrum in due course. Emily Murray (Centre for Archaeological Fieldwork) has kindly offered to undertake this work. Similarly, in order to submit plant-macrofossils for AMS radiocarbon dating it will be necessary to identify the proposed dating samples. Rachel Patterson (Queen's University Belfast) has kindly supplied a costing for the identification of samples suitable for radiocarbon dating. These identifications will enable the dated samples to be incorporated into an archaeobotanical report on all of the plant macrofossils recovered from the excavations at Dundrum in due course. Rachel was recommended for conducting this research by Dr Gill Plunkett and has previously prepared an archaeobotanical report for the Centre for Archaeological Fieldwork's 2006 excavations at Macosquin (McSparron and Patterson 2009).

Context Number	Context Description	No. of Proposed	Sample Material	Purpose
Tunioer		Dates		
116	Clay loam fill of construction cut	1	Short-lived plant	Provide a terminus post quem for the
	(C117) for the curtain wall of the		macrofossil	construction of the curtain wall of the inner
	inner ward. Provisionally interpreted			ward.
	as dating to the last decades of the			
	twelfth century.			
113/140	Layer of possibly redeposited gritty	1	Articulated animal	Provide an accurate date for an early layer
	loam that forms one of the earliest		bone	within the Trench One sequence which may
	contexts in the Trench One sequence.			either date to the pre-Norman occupation of the
				site or the initial Anglo-Norman phase of
				occupation. The date will also provide a
				terminus post quem for two features (C117/143
		-		and C129).
121/122/138	A levelling deposit - apparently part	1	Animal bone	Provide a <i>terminus post quem</i> within the Trench
	of the remodelling of the inner ward			One stratigraphic sequence and, specifically, for
	as a prelude to the construction of the			the levelling of the ground surface within the
	circular great tower. Provisionally			inner ward, and by extension the construction of
	interpreted as dating to the early			the circular great tower.
200	Thirteenth century.	1		
209	Fill of post pipe associated with the	1	Short-lived plant	Provide a date for the demolition of the structure
	demolition of a structure located		macrofossil	built immediately adjacent to the secondary
	immediately adjacent to the			entrance into the inner ward. By extension, this
	secondary entrance into the inner			the secondary getcheves
211	Padaposited clay floor of structure	1	Short lived plant	Provide a data for the construction of the
211	located immediately adjacent to the	1	macrofossil	structure built immediately adjacent to the
	secondary entrance into the inner		macronossii	secondary entrance into the inner ward
	ward			secondary entrance into the inner ward.
311	Levelling deposit of voided stones in	1	Short-lived plant	Provide a date for the deposition of the levelling
	a clay loam soil matrix, which		macrofossil	deposit and a <i>terminus post quem</i> for the
	supports addition to the curtain wall			construction of the structure represented by the
	of the inner ward on the eastern part			masonry addition (C315) to the curtain wall.
	of its circuit.			

403	Dump of large angular stones in a clay loam soil matrix. A levelling deposit - apparently part of the remodelling of the inner ward as a prelude to the construction of the circular great tower. Provisionally interpreted as dating to the early thirteenth century.	1	Articulated animal bone (Small Find No.1518)	Provide an accurate <i>terminus post quem</i> within the Trench Four stratigraphic sequence and, specifically, for the levelling of the ground surface within the inner ward, and by extension the construction of the circular great tower.
421	Clay loam (truncated base of buried soil horizon sealed by revetted structure).	2	Large fragment of burnt bone (Small Find No.1668) and several smaller burnt bone fragments	Provide a <i>terminus post quem</i> for the construction of the revetted structure provisionally identified as a pre-Norman platform.
448	Clay loam fill of a negative feature (C449) cut against the footings of the circular great tower.	1	Charcoal twig	Provide an accurate <i>terminus post quem</i> within the Trench four stratigraphic sequence and specifically for the cutting of a negative feature against the footing of the great circular tower.
454	Clay loam layer (same as C407)	1	Burnt bone (Small Find No.2232)	Provide a <i>terminus post quem</i> within the Trench Four stratigraphic sequence and specifically for a soil horizon provisionally identified as dating to the earliest phase of Anglo-Norman occupation of the site.
555	Sandy clay infill between the face of the quarry and the back of the lime kiln. A deposit relating to the construction of lime kiln.	1	Animal bone	Provide <i>terminus post quem</i> for the construction of the lime kiln.
503	Clay-bonded stone-rich infill behind the internal, faced wall of the kiln. Essentially part of the kiln's superstructure. A deposit relating to the construction of lime kiln.	1	Animal bone	Provide <i>terminus post quem</i> for the construction of the lime kiln.
576	The third lowest (of 19) fill of the lime kiln. A deposit relating to the deliberate infilling of the kiln.	1	Articulated animal bone	Provide <i>terminus post quem</i> for the deliberate infilling of the lime kiln.
577	The second lowest (of 19) fill of the lime kiln. A deposit relating to the deliberate infilling of the kiln.	1	Articulated animal bone	Provide <i>terminus post quem</i> for the deliberate infilling of the lime kiln.
830	Voided dump of quarried stone in a loamy soil matrix used in the construction of the counterscarp bank of the outer ditch. Provisionally interpreted as a pre-Norman defence.	1	Animal bone fragment	Provide a <i>terminus post quem</i> for the construction of what is apparently the initial defences around the site (the pre-Norman Dún Droma).

833	Dump of weathered stone used in the	1	Animal bone	Provide a terminus post quem for the
	construction of the counterscarp bank		fragments	construction of what is apparently the initial
	of the outer ditch. Provisionally			defences around the site (the pre-Norman Dún
	interpreted as a pre-Norman defence.			Droma).
914/916	Dump of redeposited, weathered	1	Animal bone (Small	Provide a terminus post quem for the
	subsoil and stones used to construct		Find No.3106)	construction of the extra-mural terraces located
	extra-mural terrace provisionally			to the west of the outer ward.
	identified as a garden feature of			
	seventeenth-century date.			
918A	Dump of redeposited subsoil used to	1	Animal bone (Small	Provide a terminus post quem for the
	construct extra-mural terrace		Find No.3208)	construction of the extra-mural terraces located
	provisionally identified as a garden			to the west of the outer ward.
	feature of seventeenth-century date.			

Table 1: Details of the Proposed AMS Radiocarbon Dates for Dundrum Castle.

6.8 Specialist Analysis of Material Recovered during the 2012 and 2013 Excavation Seasons

6.8.1 Assuming that the recommended additional season of excavation is not supported, then the following recommendations concerning the specialist analysis of artefacts and other material recovered during the 2012 and 2013 excavation seasons are made in order to bring the work completed to date at Dundrum Castle to publication. It is suggested that the specialist analyses are conducted in two phases. Initially, the chronologically diagnostic artefact types of pottery, clay pipes and coins are studied (Paragraphs 6.8.2 - 8.8.6 and 6.8.8) and the results of their analysis are used to compile a refined chronological sequence for the Dundrum excavations which then informs the work of the specialist studying the remaining assemblages (see Paragraphs 6.8.9 - 6.8.19). This approach will necessitate the investigative conservation and cleaning of the coins (Paragraph 6.8.7) to also be prioritised in order to facilitate the identification of the coins. It will be cost effective to undertake the investigative conservation of the metalwork assemblage at the same time. With the exception of the analysis of the pottery, the proposed specialist studies are all relatively straight forward. In the case of the pottery it is recommended that the assemblage is studied as part of a wider programme of establishing a reliable, medieval ceramic reference collection in Northern Ireland by simultaneously looking at a number of assemblages from Anglo-Norman settlements. If an additional season of excavations is to take place then it is suggested that specialist analysis of this material is postponed until the excavations at Dundrum Castle have been completed (see Paragraph 6.1.1).

The Pottery Assemblage

6.8.2 In recent years the Northern Ireland Environment Agency (formerly the Environment and Heritage Service) has commissioned a number of excavations and watching briefs directed by staff currently employed within the Centre for Archaeological Fieldwork at the sites of Anglo-Norman castles and settlements at which some significant assemblages of medieval pottery have been recovered. These excavations include: Greencastle, Co. Down (AE/01/13 - Ó Baoill 2003), Carrickfergus West Street (AE/08/219 - Ó Baoill 2012) and Market Place (AE/10/142; and AE/11/172) and Carrickfergus Castle (AE08/210 - Welsh 2011; AE/10/63; AE/10/202; AE/11/74; and AE/14/04). As with the large assemblage of pottery recovered during the 2012 and 2013 excavations at Dundrum Castle, only provisional cataloguing and analysis of these

assemblages has been undertaken to date. Although in recent years there has been significant research into local medieval potting traditions (e.g. Ivens 2001; McMullen 2001; McSparron 2011), a limited number of specialists and the absence of a reference collection in Northern Ireland to aid in the identification of imported pottery types currently prevents the full potential of study of the pottery assemblages from Anglo-Norman sites being realised. This represents a major impediment to the meaningful publication and wider dissemination of the results of several major excavations funded by the Northern Ireland Environment Agency.

- 6.8.3 Our appreciation of the economy of the Anglo-Norman Earldom of Ulster has not been meaningfully advanced since McNeill's seminal study of the subject (1980, 39-61). This is regrettable because the attempt to establish a manorial system of agricultural production and the exporting of grain and other agricultural produce are two key factors that formed the foundation for the Anglo-Norman settlement of Ulster. Although often overlooked in narratives of the Anglo-Norman settlement in favour of political events, the economic basis of the Earldom of Ulster is critical for explaining change during the medieval period. For example, the Black Death of 1348-1349, which resulted in a massive reduction of the population of Europe and a concomitant reduction in the demand for agricultural produce, rather than the murder of Richard de Burgh, the last resident Earl of Ulster, is arguably the main reason for the decline of Anglo-Norman Ulster during the fourteenth century. Unfortunately, historical records do not provide us with a detailed appreciation of the markets to which the agricultural surplus was exported. As imperfect as it is as a proxy for the trade in grain and other agricultural products, the correct identification of the full range of imported pottery within the assemblages recovered from Anglo-Norman Earldom of Ulster contributed to, hence the importance of addressing the current lacuna in our appreciation of imported medieval ceramics in Northern Ireland.
- 6.8.4 It is recommended that a formal catalogue and report on the imported pottery recovered from not just the 2012 and 2013 excavations at Dundrum, but also the other excavations of Anglo-Norman sites in east Ulster noted above (see Paragraph 6.8.2) is undertaken by Sarah Gormley (Queen's University Belfast) under the supervision of Mark Gardiner (also Queen's University Belfast). This study will be undertaken with the aim of using the assemblages from all of the studied sites to form the basis of a publically accessible reference collection of imported pottery types in Northern Ireland. In order to complete this, it will be necessary to travel to London to study material held in reference collections at the British Museum and Museum of London. It will also be necessary to commission a medieval pot specialist to travel to Belfast in order to confirm problematic pot identifications. If this recommendation is accepted in principle, then it is envisaged that a separate detailed and costed proposal will be prepared by the Centre for Archaeological Fieldwork.
- 6.8.5 In terms of the pottery assemblage derived from the Dundrum Castle excavations during 2012 and 2013, a total of 827 pot sherds were recovered, including 386 from the fills associated with the lime kiln excavated in Trench No.5 (see Paragraphs 4.5.7-4.5.12). Provisional identifications indicate that the assemblage includes: cordoned souterrain ware, local medieval coarsewares, imported medieval pottery, and a wide range of post-medieval and modern types. It is recommended that a formal catalogue and report on this assemblage is prepared for publication by Sarah Gormley (medieval and later pottery) and Cormac McSparron (souterrain ware and local medieval coarsewares) (Queen's University of Belfast) and integrated with that already prepared for the 66 sherds recovered during the 2009 excavations at Blundell's House (Brannon 2011).

Clay Pipes

6.8.6 A total assemblage of two clay pipe bowls and 24 clay pipe stem fragments were recovered from the 2012 and 2013 excavations. An additional two clay pipe bowls and three clay pipe stems were recovered during the excavations within Blundell's House in 2009 (Macdonald 2011a, 56). It is recommended that a formal catalogue and report suitable for publication on these assemblages is prepared for publication. At present, no specialist has been identified to undertake this work.

Investigative Conservation

6.8.7 It will be necessary to undertake X-radiographic examination of both part of the numismatic assemblage (Paragraph 6.8.8) and the metalwork (Paragraph 6.8.9) prior to the preparation of formal catalogues and reports on these finds. It is recommended that this work is undertaken by Philip Parkes, Cardiff Conservation Services, Cardiff University. It is proposed that an initial set of digital images are prepared for appraisal. Following evaluation a small number of detailed conventional X-ray plates and a limited amount of investigative cleaning will be required.

Numismatics

6.8.8 A total of 18 coins (of which 14 were modern) were recovered during the course of the 2012 and 2013 excavations. These included a coin (Small Find No. 2870) provisionally identified as a Long Cross Penny of Henry III (R.Heslip pers.comm.) from one of the fills (557) of the medieval lime kiln, which is critical for the dating of the kiln (see Paragraphs 4.5.12 and 4.5.17). X-radiography and investigative cleaning of this coin, along with the three others which are not obviously modern (i.e. Small Find Nos. 1200, 1270 and 1272), is recommended as a priority (see Paragraph 6.8.9). Following investigative conservation it is recommended that a formal catalogue and report on the coins is prepared by Robert Heslip (Belfast City Council). It is suggested that a draft catalogue on the modern coins, incorporating the previously catalogued coin find from the Blundell's House excavations (Macdonald 2011a, 119) is initially prepared by Philip Macdonald (Queen's University of Belfast) for revision by Robert Heslip.

The Metalwork

6.8.9 The metalwork assemblage consists of 138 pieces of ironwork, 66 pieces of copper alloy (of which 48 are modern brass bullet casings)³⁷ and 23 lead, or lead alloy artefacts (of which nine are examples of shot). It is recommended that a formal catalogue and report on the metalwork, incorporating the additional assemblage of six copper alloy artefacts (of which three are modern brass bullet casings) and 38 fragments of ironwork recovered during the 2009 excavations at Blundell's House, should be prepared for publication by Philip Macdonald (Queen's University of Belfast). It will be necessary to undertake X-radiography and investigative cleaning of the metalwork assemblage prior to preparing a formal catalogue and report on the metalwork (see Paragraph 6.8.9). It is proposed that analysis of the metalwork is not undertaken until a

³⁷ Several local informants independently suggested that the presence of a large number of bullet casings at the site related to the practice of members of the Ulster Special Constabulary (commonly called the 'B-Specials') firing rounds either into the air or at a burning tar barrel set on the highest point of the circular great tower adjacent to the flag pole during the annual 12th July celebrations. This practice reportedly continued throughout the 1950s and into the 1960s, long after the monument had passed into state care. The Ulster Special Constabulary was disbanded in 1970.

refined chronological sequence for the site has been established following the completion of the AMS radiocarbon dating programme and analysis of the pottery, clay pipe and coin assemblages.

The Brick Assemblage

6.8.10 A total of 138 brick fragments were recovered during the course of the 2012 and 2013 excavations. This is a surprisingly large number considering that, apart from the two triangular panels, set above the first and attic floor windows on the external face of the southern gable of the east wing of Blundell's House (Macdonald 2011a, 39), there is no evidence to suggest that brick has been used in the surviving fabric of Dundrum Castle. Provisional analysis suggests that the brock was predominantly recovered from superficial deposits, which suggests that the majority of brick fragments were introduced to the site in the relatively recent past (possibly as part of midden material used to fertilise the spade cultivation ridges), rather than being derived from the demolished elements of the castle. It is recommended that a formal catalogue and report suitable for publication on this assemblage, along with the assemblage of at least five bricks that was recovered during the 2009 excavations at Blundell's House, is prepared for publication. It is proposed that analysis of the brick is not undertaken until a refined chronological sequence for the site has been established following the completion of the AMS radiocarbon dating programme and analysis of the pottery, clay pipe and coin assemblages. At present, no specialist has been identified to undertake this work.

Slag and other Metalworking and Industrial Residues

6.8.11 It is recommended that an evaluative report on the potential for analytical study of the slag and other metalworking residues is prepared by Tim Young, Geoarch Consultancy. The evaluative report will form the basis for a future decision on whether funding should be made available for specialist analysis of the slag. Tim Young has experience of preparing reports on slag from a large number of sites, including Irish medieval sites. It is proposed that evaluation of the slag and other metalworking and industrial residues is not undertaken until a refined chronological sequence for the site has been established following the completion of the AMS radiocarbon dating programme and analysis of the pottery, clay pipe and coin assemblages.

Worked Flint

6.8.12 A small assemblage of 18 worked flints was recovered during the course of the 2012 and 2013 excavations. No worked flint was recovered during the 2009 excavations at Blundell's House. The worked flint is the only material signature of the character of prehistoric activity on the hill occupied by Dundrum Castle, although a number of significant prehistoric sites are known to exist in the nearby coastal sand dune complex (Collins 1952; Collins 1959; Anon. 1966a, 96-97, no.351, fig.66, pl.11). Consequently, it is recommended that a formal catalogue and short report suitable for publication on the worked flint should be prepared for publication by Brian Sloan (Queen's University of Belfast).

Worked Stone (excluding worked flint)

6.8.13 A total of nine worked stone artefacts were recovered during the course of the 2012 and 2013 excavations. Excluding the roofing 'slates' which have already been fully reported upon (Macdonald 2011a, 65-81, 120-151), the only worked stone artefact from the 2009 excavations at Blundell's House was a possible slate pencil (Small Find No. B1014). It is

recommended that a formal catalogue and report on these ten worked stone finds should be prepared for publication by Philip Macdonald (Queen's University of Belfast). It is proposed that analysis of the worked stone is not undertaken until a refined chronological sequence for the site has been established following the completion of the AMS radiocarbon dating programme and analysis of the pottery, clay pipe and coin assemblages.

Worked Bone, Antler and Horn

6.8.14 A total of 17 pieces of worked bone, antler and horn were recovered during the 2012 and 2013 excavations. In addition, a further four worked bone, antler and horn artefacts were excavated from Blundell's House in 2009. It is recommended that a formal catalogue and report on these 21 worked bone, antler and horn finds should be prepared for publication by Philip Macdonald (Queen's University of Belfast). It is proposed that analysis of the worked bone, antler and horn is not undertaken until a refined chronological sequence for the site has been established following the completion of the AMS radiocarbon dating programme and analysis of the pottery, clay pipe and coin assemblages.

Glass

6.8.15 An assemblage of 277 fragments of glass was recovered during the 2012 and 2013 excavations. With the exception of a single sherd from a seventeenth- or eighteenth-century bottle which was exposed in a path into outer ward (Small Find No.2208) and therefore is not technically a find from the excavations, this entire assemblage appeared to consist of fragments of modern bottle and window glass. A number of modern glass fragments were also recovered during the 2009 excavations at Blundell's House, but given their apparent modern date these were not awarded small find numbers. It is proposed to have the glass assemblages from the 2009, 2012 and 2013 excavations assessed by a specialist in order to confirm that no significant fragments of eighteenth century or earlier date have been misidentified. This being the case, it is not proposed to prepare either a formal catalogue or report for publication. At present, no specialist has been identified to undertake this work.

Lime Mortar

6.8.16 A 184 fragments of lime mortar and stones with lime mortar adhering to them were recovered during the course of the 2012 and 2013 excavations at Blundell's House. In addition, at the request of the Inspectorate, twelve specific samples of mortar (sample nos. 25, 39, 79-82, 102, 107, 117, 120, 122 and 128) were taken from exposed masonry during the course of the excavations with the intention that they could be incorporated into a conservation-led programme of petrological analysis of mortar taken from the fabric of the ruin's standing remains (see Paragraph 4.3.5). A number of these samples have already been passed to the Inspectorate with a view to their future analysis. It is anticipated that study and analysis of the lime mortar recovered during the 2012 and 2013 excavations will be integrated into a programme of work to analytically investigate the exposed 'floor' of creamy white, lime (580) at the base of the lime kiln, which is interpreted as representing the residue from the firing of the kiln (see Paragraph 4.5.14). This aspect of the project is to be led by the Northern Ireland Environment Agency and no recommendations for its completion are offered here.

Shell

6.8.17 A reasonable quantity of shell was recovered during the course of the 2012 and 2013 excavations (see Appendix 7). An initial assessment suggests that the bulk of the assemblage is made up of marine species - cockles, mussels and winkles being identified. Most of the shell was recorded as a bulk find, although a number of shells from unusual contexts were awarded small find numbers. It is likely that the shell was brought to Dundrum Castle for a variety of purposes. An initial assessment of the contexts which contained deposits of shell suggests that it variously represents the consumption of shellfish for food, the use of shells as a calcareous material in the production of quick lime or as a filler within lime mortars, or was brought to the site inadvertently because it was attached to seaweed that was used as fertiliser upon the spade cultivation ridges. It is proposed that once both the programme of AMS radiocarbon dating and the study of chronologically diagnostic find assemblages (i.e. pottery and numismatics) has been completed, and a refined dating sequence for the site phasing reported upon here is available, that a report upon the assemblage of shell is prepared for publication by Emily Murray (Queen's University Belfast).

Animal Bone

6.8.18 A significant assemblage of animal bone was recovered during the 2012 and 2013 excavation seasons (see Appendix 6), including a large quantity of well-preserved bone from the fills of both the lime kiln and a number of other medieval horizons. Good preservation of animal bone is rare in the acidic soils of Northern Ireland, and study of the assemblage from Dundrum Castle represents a valuable opportunity to gain an insight into the economic role of the castle. As with the shell, it is proposed that once a refined chronological sequence for the site has been established following the completion of the AMS radiocarbon dating programme and analysis of the pottery, clay pipe and coin assemblages, that a formal catalogue and report suitable for publication is prepared by Emily Murray (Queen's University Belfast).

Plant Macrofossils

6.8.19 It is recommended that a report on the plant macrofossils recovered from processing of the soil samples taken during the course of the excavations (see Appendices 8 and 9) is prepared for publication. As noted above (see Paragraph 6.7.2), it is proposed that the identification and analysis of the plant-macrofossils is undertaken by Rachel Patterson (Queen's University Belfast). Analysis of plant macrofossils will contribute to the reconstruction of the economic activity undertaken at the castle during the medieval period. Rachel was recommended for conducting this research by Dr Gill Plunkett and has previously prepared an archaeobotanical report for the Centre for Archaeological. It is suggested that analysis of the plant macrofossils is not undertaken until a refined chronological sequence for the site has been established following the completion of the AMS radiocarbon dating programme and analysis of the pottery, clay pipe and coin assemblages.

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