

Data Structure Report: Geophysical Survey and Excavation at the Mound of Down, County Down 2012

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Chapter 1: Summary

1.1 Background

1.1.1 The Mound of Down (SMR No. DOW 037:028) is an impressive, elliptical-shaped, earthwork enclosure that contains a crescent-shaped mound. The monument is located on the northwestern edge of Downpatrick. In 2012 an episodic programme of archaeological fieldwork, consisting of topographic and geophysical survey followed by a limited season of excavation, was undertaken at the monument with the aim of refining and expanding the known archaeological sequence of the site with a view to improving both its public presentation and informing any future management strategy developed for the site. The archaeological investigations formed part of a wider programme of works commissioned by the Northern Ireland Environment Agency that were intended to make the monument more presentable and attractive to both the local public and visitors from further afield.

1.1.2 Past reviews of the complex historical and place-name evidence relating to Downpatrick in the pre-Norman period suggest that the construction of the main enclosure coincided with the emergence of the place-name ‘Dún da Lethglas’ in the annalistic sources during the eleventh century (Flanagan 1971, 91-103). Thomas McErlean has suggested that the historical context in which the emergence of Dún da Lethglas, and by extension the construction of the enclosure element of the Mound of Down, can best be placed is the ending of dynastic disputes amongst the Dál Fiatach with the establishment of Niall as King of Ulaid in 1016 (2002, 72-73). Furthermore, it is widely accepted that the crescentic mound within the enclosure is an unfinished motte whose construction was begun shortly after John de Courcy’s arrival in Ulster in February 1177, but abandoned when he established his main caput at Carrickfergus by the summer of 1178 (McNeill 1981, 3, 42). The 2012 programme of investigations was designed to evaluate the accuracy of these unproven historical assumptions concerning the site.

1.2 Topographical and Geophysical Survey

1.2.1 Following clearance of the monument a new topographic survey of the Mound of Down was conducted. This identified that for the majority of its circuit the ditch surrounding the crescent-shaped mound was wide and deep, but in its northwest section which coincided with the open or ‘unfinished’ side of the mound, it was significantly narrower and shallower. This change in the form of the ditch is visible as a marked step in the base of the ditch and a dog-leg-shaped kink in the line of its outer edge. The topographic form of the mound and variations in size of the surrounding ditch are consistent with the ditch having been initially dug to the level it survives to in the northeast quadrant and the displaced soil then being used to form an inner bank or platform. This inner bank or platform appears to have been subsequently used to either retain or act as a base for the main body of the mound, the material for which was quarried from the widened and deepened ditch. It is unclear whether the ‘inner bank or platform’ represents an initial phase of Anglo-Norman motte construction or was a pre-existing structure, such as a pre-Norman rath.

1.2.2 In January 2012 ground resistivity and magnetic gradiometry geophysical surveys were conducted at the monument by the Centre for Archaeological Fieldwork, Queen’s University Belfast, working in partnership with Dr Tim Young of GeoArch Ltd. The surveys were conducted over the interior of the enclosure and part of the low-lying ridge of ground extending to the east of the enclosure. The largely even nature of the geological deposits at the site meant that good-

quality data, with uniform background levels, were recorded for both the ground resistivity and magnetic gradiometry. Despite the quality of the data, the surveys produced no evidence for ancient activity at the Mound of Down. The most obvious features picked up in the surveys were the lines of the paths within the monument created by the use of ride-on mowers to cut the grass. Much of the survey area also showed evidence for the presence of former spade-cultivation ridges. A series of small negative resistivity anomalies within the enclosure were also imaged. Although these might be archaeological pits, the most likely explanation for these features is that they are tree throws. The only other significant anomaly was an amorphous area of negative resistivity on the north side of the ditch of the mound.

1.3 Excavation

- 1.3.1 Excavations were conducted within the interior of the main enclosure in March and April 2012. Four trenches were manually excavated. The first trench was excavated over the amorphous area of negative resistivity on the north side of the ditch of the mound and demonstrated that the anomaly was geological in origin. It revealed a stratigraphic sequence typical for the interior of the Mound of Down. The sod overlay a thin cultivation soil, which in turn overlaid the surface of the natural boulder clay subsoil that had been truncated by spade cultivation. The upper part of the glacial till had been disturbed apparently due to weathering and the action of roots. Given that the surface of the subsoil would have been repeatedly exposed to the elements during the episodes of spade cultivation, this degradation was not unexpected.
- 1.3.2 The ditch around the crescentic mound was investigated in two cuttings. Trench Two was excavated across the deeper part of the mound's ditch on the northeastern part of its circuit. Excavation revealed that the ditch had steep sides and a relatively flat base and contained approximately a depth of 1.5 metres of deposits. The accumulated slumps and silts that made up the ditch's fills formed two groups: the stratigraphically earliest deposits consisted of several distinct layers that had been rapidly deposited - as a series of episodic slumps of unstable material from both the mound and outer edge of the ditch with some possibly deliberately back-filled material consisting of large stones. The upper half of the ditch sequence consisted of more slowly accumulating silts that had supported the growth of vegetation and which were sandwiched between occasional deposits of material that had slumped from both the mound and the outer edge of the ditch. An absence of finds from the lower fills, or any evidence to suggest the ditch had been recut, is consistent with an impression that the site was not intensively occupied for any duration following the construction of the crescentic mound. Radiocarbon dating of the charcoal fragments recovered from the basal fill of the ditch will be required in order to provide an archaeological date for the deeper part of the mound's ditch.
- 1.3.3 Trench Three was dug across the western, shallow part of the ditch's circuit. Excavation revealed that at this point in its circuit the ditch was only 0.35 metres deep. The sequence of ditch fills consisted of slowly accumulating silts sandwiched between slumps of material derived from the mound. The primary fill was a silty clay that contained a large number of stones and numerous fragments of eighteenth- or nineteenth-century bottle glass. The stone inclusions are interpreted as representing the clearance of stones brought to the surface during the digging of the spade cultivation ridges in the interior of the enclosure. The finds of bottle glass indicate that the easily accessible, shallow part of the ditch was re-cut during the eighteenth or nineteenth century, presumably so that its original silts could be used to fertilise the spade cultivation ridges.
- 1.3.4 The fourth trench was excavated into the back of the main enclosure bank at a point on its eastern circuit to the north of the mound. The bank was constructed from a sequence of dumps of loose gravel and stones contained within various

clay and sandy clay soil matrices. This internal fabric of the bank was consolidated by being capped with a series of deposits of soil. Excavation revealed a buried soil horizon survived beneath the bank and radiocarbon dating of organic material derived from samples of this buried soil is recommended. The buried soil horizon sealed a truncated linear feature aligned northeast-southwest, which is the only archaeological feature identified at the Mound of Down that demonstrably pre-dates the construction of the main enclosure.

1.4 Discussion

- 1.4.1 Despite the success of the excavations undertaken in 2012, because a programme of radiocarbon dating has yet to be commissioned, the Mound of Down remains archaeologically undated. Consequently, any conclusions about the site must remain provisional and rely heavily upon interpreting the upstanding remains in the context provided by a consideration of both the historical and place-name evidence. These suggest that the Mound of Down is a monument with three principal phases of development. First, a rath was built on the site at some point in the Early Christian period; secondly, the main enclosure was constructed; and finally, shortly after the arrival of John de Courcy in Ulster in 1177 AD construction of a motte upon the site of the earlier rath was begun and then abandoned before it could be completed.
- 1.4.2 The geophysical survey and excavations have both produced results worthy of publication in an academic format and prompted a re-consideration of the historical context and significance of the Mound of Down. However, although much progress has been made towards completing the objectives defined for the project, it must be admitted that they have yet to be fulfilled. In order to achieve the project aim of establishing the archaeological sequence of the site it is recommended that a programme of radiocarbon dating is commissioned and that a further season of excavations is undertaken.

Chapter 2: Introduction

2.1 General

2.1.1 The Mound of Down (SMR No. DOW 037:028), also known as the Mount, the Round Mount or the English Mount (Buchanan and Wilson 1997, 10), is situated on the northeastern outskirts of Downpatrick, County Down (centred upon Irish Grid Reference J483450). The site consists of an impressive, elliptical-shaped, earthwork enclosure which dominates an isolated drumlin overlooking the marshy floodplain of the Quoile. Located within the southern part of the enclosure is a steep, crescent-shaped mound. Prior to the establishment of the Quoile barrage and associated land reclamation in the mid-eighteenth century, the Quoile was a tidal estuary that would, at high tide, have extended around much of the northern, western and southern extent of the drumlin and presumably flooded the enclosure's ditch. Even today, the area immediately surrounding the drumlin remains a low-lying marsh that is prone to inundation, despite the system of drainage ditches that have been cut into it.

2.1.2 In the first four months of 2012 the author directed an episodic, three-part programme of archaeological investigations at the Mound of Down on behalf of the Centre for Archaeological Fieldwork, Queen's University Belfast. The investigations were undertaken at the request of the Northern Ireland Environment Agency: Built Heritage who funded the programme of work. In January 2012 ground resistivity and magnetic gradiometry geophysical surveys were undertaken at the site (see Chapter Three); in March and early April 2012 a limited programme of excavation took place within the interior of the monument (see Chapter Four); and finally in April 2012 a new description and topographic survey of the site was completed (see Section 2.4 and Figure One). This report details the results of these investigations and reviews the place-name evidence relating to the Mound of Down (see Section 2.5). The report concludes with both a short discussion that attempts to interpret the Mound of Down within its historical context (Chapter Five) and a series of recommendations for further work required to meaningfully complete and publish the investigations begun in 2012 (Chapter Six). The data generated during the course of the excavations is detailed in a series of appendices.

2.2 Project Aims and Research Objectives

2.2.1 The archaeological investigations at the Mound of Down formed part of a wider programme of works commissioned by the Northern Ireland Environment Agency in 2012 which were intended to make the monument more presentable and attractive to both the local public and visitors from further afield. The principle objective of this initiative was to realise the full tourist potential of the monument as a heritage asset for Downpatrick. In order to promote the Mound of Down specifically, and Downpatrick in general, as a visitor and tourist destination, the excavations were timed to coincide with the 2012 St Patrick's Day celebrations in Downpatrick. In addition, working in partnership with the Down County Museum, both local school children and members of the Downpatrick Young Archaeologists' Club were given the opportunity to meaningfully participate in the project by excavating test pits at the site.

2.2.2 The archaeological investigations at the Mound of Down were not purely a utilitarian exercise in economic development and social engagement. The investigations aimed to refine and expand the known archaeological sequence of the site with a view to improving both the public presentation of the monument and informing the future management strategy for the site. The methodological approach adopted was explicitly informed by a research agenda intended to address unresolved historical questions concerning the site. The principle research aims of the survey and excavations were to

better understand both the character and date of the monument. In order to achieve these research aims, the following three research objectives were defined following discussion with members of the Northern Ireland Environment Agency: Built Heritage Inspectorate.

- I] to establish the character and date of the main enclosure;
- II] to establish the character and date of the crescentic mound within the main enclosure;
- III] and to establish the date and nature of any occupation or other activity within the main enclosure.

2.3. *Geology*

2.3.1 The Mound of Down is situated on an isolated drumlin that supports a thin soil of relatively well draining surface water gley. The boulder clay that makes up the core of the drumlin is derived from a shale till, whilst the low-lying areas of marsh surrounding the drumlin on its northern, western and southern sides consist of deposits of alluvium (Ordnance Survey of Northern Ireland 1994). The underlying hard geology consists of greywacke and shale of the Strangford Group (Geological Survey of Northern Ireland 1997).

2.4 *Description of the Monument*

2.4.1 The earthwork enclosure is defined by a substantial inner bank and external ditch that circumscribe an elliptical-shaped area that extends approximately 215 metres (north-south) by 165 metres (east-west) (Figure One). Whilst the position of the earthworks exploit the natural slope of the drumlin, their creation represents a considerable undertaking that would have involved not only constructing the bank from material quarried from the ditch, but also scarping the natural slope of the drumlin to give the superficial impression, to those viewing the monument from the east in particular, that the entirety of the hill was artificial and that the construction of the defences was an even more substantial undertaking than it actually was. Although nearly continuous, the earthwork defences do not form a uniform circuit. The enclosure bank is most massive on its eastern side where the drumlin is conjoined to the higher ground to the east (formerly known as Windmill Hill and now occupied by Down High School and other properties adjoining Bridge Street) by a low-lying ridge of ground that rises just 8.5 metres above the surrounding floodplain of the Quoile. On this eastern side the top of the bank is set approximately 6.25 metres above the interior and 15.25 metres above the silted-base of the external ditch - a distance that would have been greater when the ditch was freshly dug. Whilst still a substantial feature, the bank is significantly less massive on the western side of the enclosure. At this point of its circuit the top of the bank is only approximately 1.0 metre above the interior of the enclosure and 6.5 metres above the current, silted-up base of the ditch. These variations in the scale of the bank and variations in the topographic form of the drumlin, mean that when viewed immediately from the east it is not possible to see into the interior of the enclosure, whilst it is possible to see into the interior of the enclosure when the site is viewed from the west. Presumably, this variation in the character of the enclosing bank reflects a concern to present a more impressive set of defences on the 'landward' approach to the site from the east, as opposed to other approaches across the Quoile marshes (this is an observation first made by John O'Donovan in 1834 cf. Herity 2001, 61). The enclosure ditch appears to be heavily silted and has a flat base. Its scale varies around its circuit. It is widest on the eastern and southeastern sides of the enclosure, where its width varies from 10.0 to 12.0 metres and it has a depth of approximately 2.5 metres. At its narrowest on the western side of the monument it varies between 4.0 and 5.0 metres wide and has a maximum depth of 1.2 metres.

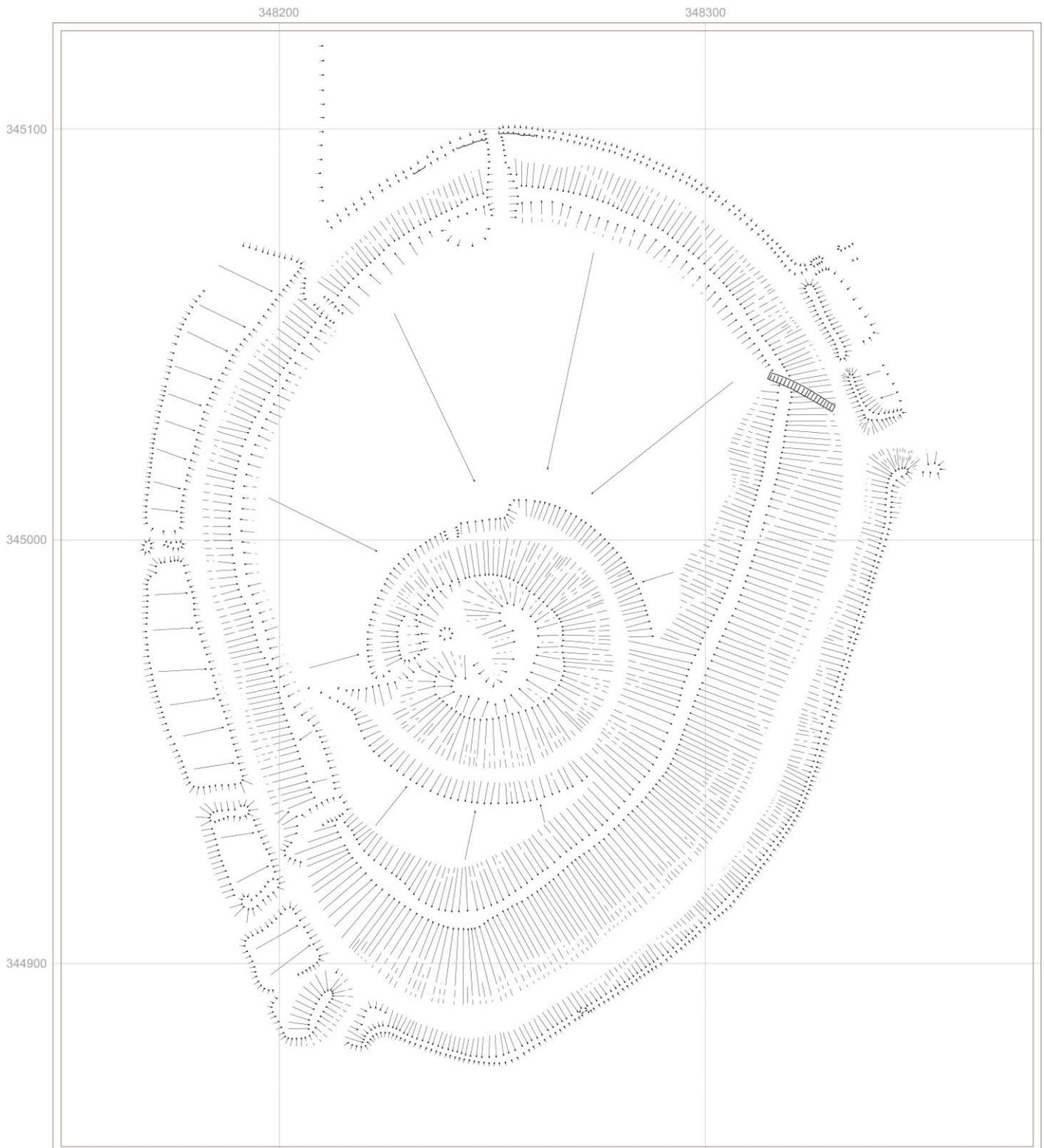


Figure One: Hachure Plan of the Mound of Down prepared by the Centre for Archaeological Fieldwork in 2012.

2.4.2 Abutting the external, western edge of the enclosure is a 13.0-15.0 metre-wide 'terrace' which slopes down, from the outer edge of the ditch, towards the adjacent marshy, flood plain to the west. Although sometimes identified as the remains of an outer line of earthworks (cf. Dubourdieu 1802, 275; Day and McWilliams 1992, 60), this feature almost certainly represents the natural slope of the foot of the drumlin. On its western side, the base of the drumlin has a steeply

scarped edge, which is about a metre high and gives the 'terrace' an artificial appearance, although the scarp was probably formed as a result of tidal erosion prior to the creation of the Quoile barrage. Whilst it is possible that part of this terrace-like feature is augmented by a raised beach deposit, in the few places where it has been exposed by erosion it consists of a glacial till – an observation consistent with the 'terrace' being the base of the drumlin.

2.4.3 Along its length the 'terrace' has been cut through in four places (from north to south at Irish Grid References J48174499, J48184494, J48194491 and J48214488), the two southernmost cuttings being particularly substantial in size. The soil that was displaced during the creation of the three southernmost cuttings was piled up into banks immediately adjacent to these three cuttings giving certain sections of the 'terrace' the appearance of being artificial, rectangular enclosures, however, this is almost certainly not the case. Visual inspection, undertaken shortly after the clearance of these features in February 2012, failed to reveal any evidence to suggest that any part of the 'terrace' had been exploited for the purposes of settlement or cultivation. The displaced material thrown up by the cutting of the features was not evenly distributed either side of the cuttings. The two southernmost cuttings have substantial banks of earth thrown up on their northern edges, whilst the third southernmost cutting is flanked by a substantial bank on its southern side. The reason for this asymmetrical arrangement of banks is not obvious. There are no discernible banks associated with the northernmost cutting. The cuttings vary in length between ten and sixteen metres, and have a maximum width at their base of three metres.

2.4.4 The purpose and date of these cuttings is uncertain and their interpretation is hindered by the fact that they may be heavily silted obscuring much of their original form. Superficially, they appear to have been made with the intention of joining the western section of the enclosure's ditch with the surrounding Quoile estuary. It is considered likely this was undertaken with the intention to either drain the ditch or to enable it to become water-filled, however, if the cuttings are intended to facilitate drainage, it is not obvious why it was considered necessary to create four of them over a relatively short distance. It has been suggested that the features may represent nausts (also known as nousts, nusts or nosts). Nausts are artificial boat shelters placed above the high-tide mark and used to protect vessels from storms during the winter months. The typical naust is a boat-shaped stone setting, either free-standing or revetted, that is open at its seaward end, although there is considerable variation in the form of individual examples (Tait 2012, 469-479). They are not uncommonly arranged in closely spaced groups of several shelters. Of Scandinavia origin, nausts are not an uncommon, long-lived site type in areas once associated with Viking settlement along the western and northern Scottish seaboard, as well as the Hebrides, Orkneys, Shetlands and Faroes. There are few recognised Irish examples, although one has been identified at Lonehart Harbour, Bere Island, Co. Cork where it is associated with an area of beach clearance (Breen and Sheehan 1996; Power 2010, 15), up to sixteen have been identified on Island Eddy, Galway Bay (Gosling, MacMahon and Roden 2010) and one is recorded at Ballymorran, Co. Down (NISMR No. MRD 187:012). Whilst being constructional close comparators to nausts (Tait 2012, 471), boat shelters on the west coast of Ireland typically take the form of free-standing rectangular pens of stone walls or earthen banks (Evans 1957, 229, fig.75). Although it is possible that the cuttings are nausts revetted into the foot of the drumlin upon which the Mound of Down has been built, it must be emphasised that this interpretation is far from certain. There is no evidence to suggest that the edges of the cuttings are revetted, although, given the amount of silting and vegetation across the features, excavation would be required to demonstrate that they are definitely not revetted. The cuttings also extend all the way from the scarp slope at the foot of the terrace through to the ditch of the enclosure. Consequently, none of them have the distinctive boat-shaped terminal that defines the site type. They are also larger than the typical size for a naust suggesting that it is unlikely they have been truncated (C.Breen pers.comm.). Another, highly speculative, suggestion is that the features might be associated

with boat building, however, there is no tradition or record of such industry taking place so close to Downpatrick cf. Parkinson 1928; Wilson 1995; Buchanan and Wilson 1997. If the features are nausts then the truncation of their boat-shaped terminals by the enclosure ditch would suggest that they pre-date the construction of the enclosure itself and are probably pre-Norman in date. Speculation on historical grounds that the main enclosure of the Mound of Down was constructed because its location enabled it to be reached by ships (see Paragraph 2.5.3) adds an interpretive significance to resolving the character of the cuttings through the western ‘terrace’.

2.4.5 For most of the remainder of its circuit the enclosure ditch is cut towards the base of the drumlin and the outer edge of the ditch is defined by a slight counterscarp bank and the base of the drumlin’s slope which extends out beyond it. For the northern third of the enclosure circuit, however, the ditch has been cut at the very base of the drumlin and its outer edge is either defined by the short length of an interrupted earthwork bank or a field boundary that may represent the modified remains of an earlier earthwork bank. This field boundary extends from a junction with a relict, north-south aligned field boundary adjacent to the northwestern part of the enclosure’s circuit (Irish Grid Reference J48214507) to a junction with a southwest-northeast aligned field boundary adjacent to the northeastern part of the enclosure’s circuit (Irish Grid Reference J48324506) located immediately adjacent to the northern edge of the low-lying ridge which joins the drumlin the monument is built upon to the higher ground to the east. Although much of the line of this field boundary is obscured by overgrowth, visual inspection suggests its character does not vary considerably. It has a width of around 1.9 metres and a maximum surviving height of 0.9 metres. Clearance of vegetation has revealed that, at least in certain sections, the inner face of the boundary is retained by a dry-stone wall. In its current form the date of the feature is unknown, but it is unlikely to be of any great antiquity. It is clearly represented on the Ordnance Survey 1859 revision of the original 6” survey, however, its depiction on the first edition 6” survey of 1834 is somewhat ambiguous. The field boundary is similar in form to the so-called ‘Louth ditch’ type of hedge which is planted between field stones on the revetment of an earthen bank - a not uncommon, eighteenth- and nineteenth-century hedge type in County Down (Aalen and Whelan 2011, 209, fig.19.B). The possibility that it may represent the remains of a more ancient earthwork is raised because the short length of the interrupted earthwork bank continues its line for a distance of approximately 39 metres beyond its northeastern junction (Irish Grid Reference J48324506) towards a point immediately adjacent to the base of the concrete steps that provide access to the interior of the monument (Irish Grid Reference J48344503) (see below). This earthwork bank, which defines the outer edge of the enclosure ditch, appears somewhat denuded and is also interrupted by a break nearly midway along its length (Irish Grid Reference J48334504). It also has been dug through at either end to create cuttings, similar to those on the western edge of the monument described above (see Paragraphs 2.4.3 and 2.4.4), that connect the enclosure ditch to the surrounding flood plain and former estuary of the Quoile. Material displaced from digging these cuttings has been piled up on the adjacent edges of the bank giving either end of the earthwork a more massive appearance. The northernmost cutting is connected to a drainage ditch that is conjoined with the system of drains cut into the Quoile marshes immediately to the north of the site. As with the comparable cuttings on the western side of the monument, the purpose of the central and southern cuttings is less obvious. For most of its length the outlying earthwork is approximately 4.2 metres wide and 0.9-1.1 metres high, whilst at either end its size increases significantly (southeast end: 3.0 metres high, 8.5 metres wide; northwest end 2.4 metres high, 4.5 metres wide) and the piling up of spoil associated with digging the cuttings gives the appearance that the ends of the bank turn outwards for a short distance. As with the ‘terrace’ on the western side of the enclosure, there is a slight scarp slope located approximately at the foot of the slope some eight metres out from the top of the outlying bank. This scarp slope is also probably the product of tidal erosion which occurred prior to the creation of the Quoile Barrage in the mid-eighteenth century. The coincidence of the outlying earthwork with the erosional scarp and apparent drainage cuttings creates the

superficial impression that two adjacent, northwest-southeast aligned rectangular structures are located at this part of the enclosure's circuit. Although it is admitted that this is a matter of interpretation, these apparent features are not considered to be real by the present author.

- 2.4.6 There is no obvious ancient entrance into the enclosure. Today, the visitor can most easily gain access to the interior of the site either through a series of concrete steps inserted into an angled passage cut through the bank on the northeastern part of its circuit (Irish Grid Reference J48324503), or via a 3.6 metre-wide cutting that passes through the northern part of the bank (Irish Grid Reference J48254508). This latter northern entrance is aligned with a linear causeway which runs, for a distance of approximately 120 metres, across an area of low-lying ground to the north of the site and joins the Mound of Down with Well Lane. The *Archaeological Survey of County Down* notes that this causeway is of unknown age, but is probably of no great antiquity (Anon. 1966, 203). Provisionally, it is suggested that the causeway and the entrance are late nineteenth or early twentieth century in date and that they are associated with cultivation of the interior of the site. Although the northern entrance has been eroded in recent years as a result of its use for providing vehicular access to the interior of the enclosure, it is not obvious that the base of the passage has yet been reduced to the level of the original ground surface upon which the bank was built. That the entrance is not depicted on either the 1834 or 1859/1862 6" Ordnance Survey maps of the area suggests that it is not an original feature. The coincidence of the base of the passage marked by the concrete steps, that provides access to the enclosure's interior for modern visitors, with the southeast end of the short section of outlying bank noted above (see Paragraph 2.4.5) has led to speculation that this may be the site of the original entrance and that the short length of bank represents an elaboration of the defences around the entrance. This interpretation is questionable. The passage way containing the concrete steps which has been cut through the bank is very narrow (width approximately 2.0 metres) and the steep sides of the cutting suggest that it is not of any great antiquity. Furthermore, an interpretation of the bank as defining the outer edge of the ditch, rather than providing part of an elaborate entrance system, seems more plausible.
- 2.4.7 Careful survey has identified two other narrow entrances into the enclosure on its western side. Both of these entrances are suitable only for access on foot and it is doubtful whether they are ancient features. The northernmost entrance (Irish Grid Reference J48214506) consists of a narrow, and currently overgrown, passage through the bank which leads via a steep eroded path onto a slight ramp that curves to the north in the base of the silted up ditch. It is first represented on a plan published in 1920 (Lawlor 1919-20, 110). Its position coincides with the northern end of the external 'terrace' on the western side of the monument and it is broadly aligned on a hedge-line extending northwards away from the monument for a short distance towards the Quoile marshes. The ramp within the base of the ditch is presumably constructed from material derived from cutting the passage through the bank above it. Its curved form suggests that it is a deliberately built feature rather than a natural accumulation of eroded material washed down the side of the bank. The southernmost entrance (Irish Grid Reference J48204493) also consists of a narrow passage that passes through the bank. It is located towards the south of an area where the inner edge of the enclosure bank shows some signs of having been disturbed. The narrow passage runs into a steep path that, through a dog-leg kink, extends into the ditch. The base of the path coincides with a deposit of material that extends into the silted up base of the ditch and which is probably made up of material that has eroded from the passageway. It is not certain whether these passages through the bank are deliberate cuttings or 'hollow-ways' that have been created over a period of time as a result of their use. Given the apparently artificial form of the ramp associated with the northernmost passage it may have been a deliberate cutting, whilst the southernmost entrance is probably a feature that has largely developed as a result of its repeated use over a prolonged

period. Due to being overgrown the northernmost of these entrances is no longer easily accessible, however, the southern passageway is actively used by local schoolboys and other adventurous members of the public.

2.4.8 The interior of the enclosure consists of the gently rounded summit of the drumlin. The highest point of the summit is located adjacent to a point roughly midway along the eastern edge of the enclosure. Located in the southern part of the enclosure, slightly off from the highest point of the drumlin, is a crescent-shaped mound which is, not unreasonably, frequently identified on morphological grounds as an unfinished motte (e.g. Lawlor 1919-20, Anon. 1966, 203; McNeill 1980, 12-13; but see McErlean 2002, 72). The mound rises to a height of some 8.4 metres above the adjacent interior of the enclosure. This means that its summit is approximately 2.4 metres above the highest point of the enclosure bank. The mound is approximately 55 metres in diameter and is surrounded by a ditch that is interrupted by a causeway on its western side. For the majority of its circuit the ditch is wide and deep (width 13.5 metres, depth 4.1 metres), however, its northwest quadrant is significantly narrower and shallower (width 5.9 metres, depth 1.0 metre). This change in the form of the ditch is visible in a marked step in the base of the ditch and a dog-leg-shaped kink in the line of its outer edge (Figure Two). Despite this change in form, it is notable that the line of the inner edge of the ditch, which also defines the outer edge of the mound, remains constant. This gives the base of the mound a near uniform diameter of approximately 55 metres despite its crescentic shape and the variation in its enclosing ditch.



Figure Two: Change in the form of the ditch surrounding the crescentic mound. Note how the ditch becomes narrower and shallower in the form of a dog-leg kink in the line of its outer edge.

2.4.9 Apart from the mound, the interior of the enclosure is apparently devoid of any visible features of archaeological significance. A series of denuded spade-cultivation ridges are evident in the northern half of the interior. These ridges

are aligned approximately northnorthwest-southsoutheast and are most easily observed where they cross the mown paths within the interior of the enclosure.

2.4.10 Whilst now located in a marginal area on the outskirts of Downpatrick, the Mound of Down was once located immediately adjacent to the road to Belfast which passed between the monument and the adjacent Windmill Hill, down Gaol Lane and into English Street (Parkinson 1928, 86). The Mound of Down was scheduled in 1974 and was in the private ownership of Lord Dunleath before it became a monument in State Care in 1981. Clearance and other improvements to ensure public access were undertaken in the early 1980s (Meek 1984) and the monument was officially opened to the public in October 1984 (Anon. 1984). The site currently lies within the Downpatrick Area of Archaeological Potential and the Area of Special Archaeological Interest.

2.5 *Place-Name Evidence*

2.5.1 It is not possible to fully appreciate the early accounts and descriptions of the Mound of Down without considering the place-names which those accounts frequently cite. Principally, the pre-Norman historical and literary sources associate three place-names with the settlement that came to be known as Downpatrick - Dún Lethglaise, Dún da Lethglas and Ráth Cealtchair. Whilst obviously connected, the exact relationship between the first two of these place-names is obscure (McKay 2007, 59-60). Prior to Deidre Flanagan's masterly study of the place-names of Downpatrick (1971), these two separate place-names were assumed to be alternative forms of the same name with Dún da Lethglas being a derivation of Dún Lethglaise, which after a period of simultaneous use of the two signifiers during the eleventh century, came to replace it. Flanagan, however, convincingly argued that the names, at least in their primary application, were not synonymous and although related in 'element-content' were two distinct 'name-compositions' (1971, 96). Her skilful analysis demonstrated that up to the early eleventh century AD the monastic centre, and by extension its associated secular settlement, was known as Dún Lethglaise, but that between 1007 and 1069 notice of a separate centre called Dún da Lethglas began to emerge in the annalistic sources (1971, 96). Prior to 1007 all of the annalistic references to Dún Lethglaise relate almost exclusively to ecclesiastical matters, whilst in the eleventh-century transition period between 1007 and 1069, although Dún Lethglaise was used exclusively for monastic notices, Dún da Lethglas had both ecclesiastical and civic associations (1971, 97). Analysis of the topographic contexts indicated by the use of the two place-names prompted Flanagan to suggest that the two separate centres of Dún Lethglaise and Dún da Lethglas were situated on the adjacent drumlins, located on the northwestern outskirts of Downpatrick, known today as Cathedral Hill and the Mound of Down respectively (1971, 91-92).

2.5.2 The final use of Dún Lethglaise in an annalistic reference occurred in AD 1069, whilst Dún da Lethglas continued to be used in the annals, albeit with less frequency in comparison with the contracted Dún, until the last quarter of the fourteenth century with 'extended rather than definitive reference as an "address" name' being variously used to refer not only to both the centres on Cathedral Hill and the Mound of Down, but also the wider associated medieval settlement at Downpatrick (Flanagan 1971, 97). For example, in the annalistic sources Dún da Lethglas emerges as an episcopal title in 1117 and as a diocesan name by 1282 (cf. Flanagan 1971, 100). By the arrival of John de Courcy in 1177 the place-name is fully established as Dún da Lethglas or Dún. In the Anglo-Norman and later medieval period the name in Latin and English documentation is variously Dunum, Dun or Down(e), whilst in Gaelic sources the common form is Dún (Flanagan 1971, 89). The earliest extant use of the name Dún Pádraig occurs in Josias Bodley's account of his visit to Lecale in the winter of 1602-03 (Anon 1854, 77), and it is subsequently used with increasing frequency after the creation

of the Manor of Downpatrick in 1617 (Flanagan 1971, 89). This use of the Patrick-element ultimately derives from the cathedral dedication *Ecclesia S. Patricii Duni*, which was first attested in 1183 (Flanagan 1971, 89) and arises from the founding of the Benedictine Abbey of St Patrick on Cathedral Hill by John de Courcy. Although in the 1640s Fr Edmund MacCana used the name *Dun-da-leth-ghlas* in his Irish Itinerary apparently with specific and exclusive reference to the Mound of Down (Flanagan 1971, 91-92; cf. Reeves 1854, 51, fn.s), he was presumably drawing upon local topographic lore and, not untypically, using the place-name anachronistically.

- 2.5.3 The period of name change in the eleventh century that is attested in the annalistic sources was interpreted by Flanagan as reflecting an increase in precedence of the primarily civic name *Dún da Lethglas* over the early monastic name *Dún Lethglaise* during the eleventh century. Thomas McErlean has persuasively suggested that the eleventh-century context in which the emergence of *Dún da Lethglas*, and by extension the construction of the enclosure element of the Mound of Down, can best be placed is the ending of dynastic disputes amongst the *Dál Fiatach* with the establishment of Niall as King of Ulaid in 1016 (2002, 72-73). The opportunity to establish a new royal centre had in all probability arisen following the recorded destruction of *Dún Echdach* (Duneight, County Down) in 1011 by Flaithbertach Ua Néill (MacAirt and MacNiocaill 1983, 442-443). The royal centre of the *Dál Fiatach* had shifted to *Dún Echdach* in the ninth century, presumably from somewhere on Cathedral Hill in Downpatrick cf. Byrne 1973, 119. Niall's use of naval power to assert his authority as a provincial over-king would make *Dún da Lethglas*, from where it would be possible to launch and beach a fleet (possibly from the naust-like features noted in Paragraphs 2.4.3 and 2.4.4), a more attractive site for a royal centre than the in-land *Dún Echdach* cf. McErlean 2002, 72-73.
- 2.5.4 It is unclear whether the place-name 'Dún Lethglasie' predates the establishment of an ecclesiastical centre on Cathedral Hill. Flanagan has noted, however, that if *Dún Lethglasie* did emerge primarily as the name of an ecclesiastical foundation, this would be a 'very rare' example of the element *dún* with ecclesiastical reference. The earliest reference using the place-name in the Annals of Ulster date to either AD 496 or AD 498 and records 'the storming of *Dún Lethglasie*' (MacAirt and MacNiocaill 1983, 56-59). Francis Byrne has plausibly suggested that these may be a record of the taking over of the site of the later monastery by the *Dál Fiatach* following the fall of Emain Macha and the subsequent withdrawal eastwards of the Ulaid in the later fifth century AD (Buchanan and Wilson 1997, 1); the phrasing of the entry certainly implies, if not proves, an attack on a fortified secular settlement, rather than an early monastic centre.
- 2.5.5 In terms of the meaning of the place-name, *Dún* refers to a fort or a fortified place, usually of high status. The precise meaning of *Lethglas* is uncertain, however, Flanagan has suggested two possibilities. It may mean 'greensided (place)' (i.e. a compound of *leth* 'side' and *glas* 'green') a reference to the land bordered by the tidal marshes of the Quoile, or alternatively it may signify '(land along) one side of a stream or current' (i.e. a compound of *leth* 'side' and *glas* 'stream' or 'current'), again signifying land bordered by the Quoile. The form *Dún Lethglasie* is intelligible in this context, however, *Dún da Lethglas* is problematic as no plural form of *Lethglas* appears in the available documentation (Flanagan 1971, 103). Presumably, it means the fort of the green-sided places or places beside the stream signifying at least two distinct, but related, centres situated by the Quoile (Wilson 1995, 11).
- 2.5.6 The third pre-Norman place-name associated with the settlement that came to be known as Downpatrick is *Ráth Cealtchair*, meaning the fort of *Cealtchair*. Although this name has been used by the Ordnance Survey on recent maps to refer to the Mound of Down, there is no evidence to suggest that this attribution is based upon any recorded local natural

usage in the nineteenth century (Flanagan 1971, 107). Instead its use by the Ordnance Survey's appears to be derived from various nineteenth-century studies of documentary evidence (e.g. Reeves 1847, 142-143; Reeves 1854, 51, fn.s; O'Lavery 1878, 265-267) or records of local antiquarian tradition (e.g. Herity 2001, 61; Day and McWilliams 1992, 41, 60) - which is not to say that the identification is necessarily incorrect. Several early literary references associate Celtchair mac Uthechair a mythical warrior of the Ulster Cycle, with the Downpatrick area - however only three instances of the actual name Ráth Cealtchair occur in the early sources: one in saga, a quotation from an ecclesiastical source by Ussher and an early thirteenth-century confirmation of a grant by de Courcy (Flanagan 1971, 106, 108, nos.4, 5 and 11). That Ráth Cealtchair was the name of a real place, rather than an imaginary location, is proven by its use in the Norman grant, however, its precise location remains uncertain. Reeves identified it with the Mound of Down (1847, 142-143; 1854, 51, fn.s), whilst Deidre Flanagan tentatively suggested that the name referred to a location on Cathedral Hill, however, this latter suggestion was, at least partly, based upon the now discredited identification of a late prehistoric hillfort enclosing Cathedral Hill.

2.5.7 In the seventeenth century the previously undocumented name the 'Round Mount' (*Rundmount* and *Roundmont*) is used to signify the Mound of Down in two documents dating to 1637 cf. Flanagan 1971, 104, whilst the name the English Mount is used on estate maps dating to c.1708 and 1729 (Buchanan and Wilson 1997, Maps 4 and 6). O'Donovan cited James King's *Account of Lord Cromwell's Lands and Estates as Originally Granted and in his Possession* dating to 1612 recording 'the round Mount alias Downeroskae' (Herity 2001, xxviii, 61). Flanagan suggested that originally the names Round Mount and English Mount were used to refer to just the motte-like structure within the enclosure, but that over time the term 'the Mount' came to be used to refer to the entire site (1971, 104). Support for the suggestion that the entire monument was known as 'the Mount' by at the latest the 1830s is provided by references to walking 'round the Mount' in the diaries of Aynsworth Pilson (e.g. 22nd July 1838 Public Record Office of Northern Ireland Ref. D.365/4 Ms). Interestingly, in the final volume of Pilson's diaries there are numerous references to his being 'wheeled down to the orchard & round the bank' during the summer months (Public Record Office of Northern Ireland Ref. D.365/5 Ms). These appear to be references to Pilson being taken 'for a walk' in a bath chair around the outside of the main enclosure of the Mound of Down and indicate that the main enclosure, and perhaps by extension the area of ground immediately surrounding it, was known as the Bank in the nineteenth-century. The frequent references in the diaries to going 'round the Bank' implies a circular walk and it is obvious from the diaries that the 'Bank' is situated close to where Pilson lived. An entry in an earlier volume for Sunday 14th May 1854 indicates that a route existed through the orchard below Pilson's house to the Mound of Down (Public Record Office of Northern Ireland Ref. T.3207/3). That the name the 'Bank' signified more than just the earthworks of the enclosure is suggested by earlier references in Pilson's diaries that indicate that he was farming the land he referred to as 'the bank' and which presumably was made up of the low-lying ground to the east of the monument. Pilson's diaries include entries stating that 'we have the clover and rye-grass on the bank put into lap-cocks' (6th June 1854), 'we got the clover and grass hay on the bank secured in seven small cocks, which we compute about four tons. This will be a valuable crop, as the article is likely to be dear, caused by the dryness of the Spring' (8th July 1854), 'we put the hay of the bank into the loft today 6 cocks' (8th August 1861), and 'in the evening wheeled round the Bank. We got ten sheep feeding on the bank' (16th August 1861) (Public Record Office of Northern Ireland Refs. T.3207/3 and D.365/5 Ms). Taken collectively these references suggest a practice of growing grass, cutting it in mid Summer and then grazing the aftermath.

2.6 Past Accounts and Archaeological Investigations of the Site

2.6.1 In comparison to the length of speculations on the attribution of place-names to the Mound of Down, descriptions of the monument by eighteenth- and nineteenth-century scholars are relatively brief. The site is mentioned briefly in Harris's Survey of County Down where it is described as 'a large *Rath* now to be feen near it [i.e. Downpatrick]' (1744, 215). Dubourdieu describes how the 'mount takes up a confiderable extent, not lefs than three quarters of an Englifh mile in circumference; three artificial ramparts furround it, the greatest of which is thirty feet broad' (Dubourdieu 1802, 275) and reproduces a poorly executed illustration of the monument (Dubourdieu 1802, pl. following p.278; reproduced as Figure Three). In 1834 John O'Donovan described 'the Rath near Downpatrick' as 'the largest barbaric fortress I have yet met' (Herity 2001, xxviii, 61). The Ordnance Survey Memoirs compiled by M.M. Kertland in 1836 describe the monument as 'a very large fort' 'close to the north west of the town', whilst the 'answers to queries' compiled by Civil Assistant Matier describe 'the rath or mount on the north west side of Down' as being '60 feet high, circumference 2,600, is surrounded by three great ramparts, one 30 feet [?] breadth' (Day and McWilliams 1992, 41, 60). Reeves variously describes the monument as a 'large earthen fort, which, with its extensive intrenchments, lies close to the cathedral, on the north' (1847, 142) or 'a very remarkable object ... one of the finest earthen forts remaining. ... This entrenchment is situate a little to the north of the cathedral' (1854, 51, fn.s). In addition to quoting Harris's description, O'Lavery simply describes it as a 'great rath' 'lying to the north of the Cathedral' (1878, 264, 265). The 'Mount' is mentioned several times in the extant diaries of Aynsworth Pilson (see Paragraph 2.5.7), although he does not describe the monument in any detail. Interestingly, Pilson does record the intermittently observed survival into the middle of the nineteenth century of a tradition of young men and women gathering at the site on Easter Monday in order to spend the day in dancing and 'the sports usually practised on these occasions' (4th April 1836, 16th April 1838, 17th April 1854 and 9th April 1855; Public Record Office of Northern Ireland Refs T.3207/1, D.365/4 Ms and T.3207/3),



Figure Three: Illustration of the Mound of Down included in Dubourdieu's *Statistical Survey of the County of Down, with Observations on the Means of Improvement; Drawn Up for the Consideration, and by Order of the Dublin Society* (from Dubourdieu 1802, pl. following p.278).

2.6.2 Prior to the geophysical survey and excavation in 2012, the Mound of Down had only been the subject of one previous episode of archaeological investigation. The site was excavated by H.C.Lawlor, on behalf of the Belfast Natural History

and Philosophical Society during the summer of 1920 (Lawlor 1919-20; however, in the second appendix to *Ulster: Its Archaeology and Antiquities*, Lawlor dates the excavations to 1918 cf. 1928, 217). Working with a team of ten labourers, Lawlor's excavations consisted of a trench "three foot wide [approximately 0.9 metres] round the crescent-shaped top" of the mound, "a trench in the bottom of the inner fosse" which surrounds the mound, numerous 'test' pits dug "at random" within the interior of the enclosure and a trench "in the neighbourhood of what was evidently a landing stage or pier on the north side" of the monument (1919-20, 112). From his published account it is uncertain whether Lawlor was present at the site throughout the course of the excavations, however, it is possible that he only attend the excavation periodically in order to check on progress. Unfortunately, Lawlor did not include a plan showing the precise location of his trenches and 'test' pits in his published account of the excavations, possibly because, as he noted, "in all places the finds were few and disappointing" (1919-20, 112).

2.6.3 In the trench located on the top of the mound "only a few much corroded small iron nails were turned up" (1919-20, 112). He describes the ditch of the mound as being "in no place more than twelve to eighteen inches [i.e. approximately 0.30 to 0.45 metres] deep" (1919-20, 112). He notes that finds recovered from the ditch fills included a few pieces of late medieval or even seventeenth-century glass, an iron horse-shoe, some pot sherds of uncertain date, animal bone and part of a clay pipe of seventeenth century date (1919-20, 112-113). It is uncertain at what point on the ditch's circuit he located his trench or how wide the cutting was. The surprisingly shallow depth recorded for the ditch by Lawlor suggests that either he failed to correctly identify the base of the feature or excavated in the ditch's shallow northwestern quadrant which excavation in 2012 demonstrated was only some 0.35 metres in depth (see below). Excavation of the 'test' pits within the enclosure revealed that the "topsoil averaged around eighteen inches [approximately 0.45 metres] ... and was to all intents and purposes virgin soil, probably never tilled" (1919-20, 112). Given the visible presence of the remains of spade cultivation ridges across much of the interior of the enclosure, it is reasonable to dismiss Lawlor's conclusion that the interior of the enclosure had not been tilled. The fragments of pottery he recovered "from an ordinary modern midden or farm-yard manure heap" (1919-20, 112) were probably derived from manuring of the cultivation ridges, rather than the product of 'recent' top dressing of the soil in order to improve the grass as Lawlor concluded. It is regrettable that these sherds were "cast aside" as they would presumably contribute to the dating of the cultivation of the interior, however, from Lawlor's account it seems that some pottery and iron nails recovered from his 'test' pits were retained (Lawlor 1919-20, 112-113). Examination of these sherds, and those recovered from the ditch cutting, was undertaken by both staff from the British Museum and E.C.R. Armstrong and Dudley Westropp at the National Museum in Dublin shortly after the excavation ended. These independent assessments both concluded that none of the sherds pre-dated the seventeenth century (Lawlor 1919-20, 113), however, in an unpublished appraisal of the archaeology of Downpatrick Nick Brannon recorded that a reassessment of these pottery sherds had shown the presence of thirteenth- to fourteenth-century French wares (1992, 2). When approached by the current author in 2012, Nick Brannon had no recollection of this reassessment of the pottery from the Mound of Down taking place (N.Brannon pers.comm.). The current location of the Lawlor archive is unknown, although it does not form part of the collections of the Down County Museum (M.King pers.comm.). It is possible that they form part of the collections of the Ulster Museum/National Museums Northern Ireland. Identifying the location of the archive and reassessing its contents would contribute to achieving the aims and objectives of the project (see Section 2.2). The trenching at the site of "the boat quay" was undertaken with a view to identifying "a refuse heap or dumping ground for waste from the camp", but only resulted in the recovery of "a few large nails and fragments of comparatively modern bricks and a few bits of coal" (Lawlor 1919-20, 113). It is reasonable to assume that the structure which Lawlor considered to be a quay was the linear causeway which runs from the enclosure's

apparently secondary, northern entrance across an area of low-lying ground to the north of the site and joins the Mound of Down with Well Lane (see above).

2.6.4 Lawlor's failure to identify any archaeological features or significant horizons is perhaps not significant. Working with labourers and potentially being absent from the site during the course of much of the work are not ideal conditions for recognising any archaeological remains other than masonry features. Although it would be a mistake to dismiss Lawlor's abilities as an excavator out of hand, it is questionable whether he was skilled enough to recognise negative features if their fills were not markedly different from the natural subsoil. The 1920 excavations at the Mound of Down were undertaken relatively early in Lawlor's archaeological career, previously he had only worked at the Giant's Ring. What is significant is that at no point in his investigations did the labourers recover any souterrain ware. Given that Lawlor had already defined this type of domestic coarse-ware pottery and had recognised examples of it elsewhere in Downpatrick at the same time he was excavating at the Mound of Down (1919-20, 119), it is reasonable to assume that its absence from the site was genuine. Souterrain ware is commonly found in Counties Antrim and Down and its vogue extends from the seventh or eighth century AD until the late twelfth or thirteenth century AD (Ryan 1973, 623-628; Edwards 1990, 73-75; C.McSparron pers.comm.). Lawlor's failure to recover any sherds of souterrain ware from the site suggests, as he himself concluded (1919-20, 113-15), that the Mound of Down was not intensively occupied for any significant period of time during either the pre-Norman or Anglo-Norman period.

2.7 *Archiving*

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

2.8 *Acknowledgements*

2.8.1 The programme of fieldwork at the Mound of Down was directed by Philip Macdonald (Queen's University Belfast). The geophysical surveys were conducted in partnership with Tim Young (GeoArch Ltd) with the assistance of Brian Sloan (Queen's University Belfast). The excavations were directed with the assistance of Brian Sloan and crewed by Grace McAlister, Stuart Alexander, Dermot Redmond and Sarah Kerr (Queen's University Belfast). Brian Sloan, Stuart Alexander and Dermot Redmond (Queen's University Belfast) assisted the author in the topographic survey of the monument. The author's appreciation of the monument has been greatly enhanced by discussions with Liam McQuillan, Ken Neill, Paul Logue and John O'Keeffe of the Northern Ireland Environment Agency: Built Heritage and Steve Flanders (Queen's University Belfast). Maybelline Gormley (Northern Ireland Environment Agency: Built Heritage) provided vital assistance in co-ordinating the timing of the geophysical survey. Logistical assistance during the course of the excavations was kindly provided by Liam McQuillan and Robert Noade (Northern Ireland Environment Agency: Built Heritage). Co-ordination of the involvement of the Downpatrick Young Archaeologists' Club and children from local primary schools in the excavation of test pits at the site was organised by Mike King and Moria O'Rourke (Down County Museum). Preparation of this report has also greatly benefited from the advice and assistance of Sarah Gormley, Grace McAlister, Finbar McCormick, Cormac McSparron, Ruairí Ó Baoill (all of Queen's University Belfast), Siobhan Stevenson (National Museums Northern Ireland) and Nick Brannon. The final form the illustrations used in the report were kindly prepared by Sapphire Mussen (Queen's University Belfast).

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

3.1 Introductory Remarks

3.1.1 In January 2012 the Northern Ireland Environment Agency: Built Heritage commissioned the Centre for Archaeological Fieldwork, Queen's University Belfast, working in partnership with GeoArch Ltd, to undertake both resistivity and magnetometry surveys of the interior of the enclosure at the Mound of Down. In the event, it was possible to also complete both resistivity and magnetometry surveys of part of the low-lying ridge of ground to the east of the enclosure. This survey is reported on, for the first time, here.

3.2 Method Statement

3.2.1 The survey grids were laid out by tape measure and an EDM total station, with subsequent recording of grid nodes by use of a survey-grade GPS. The grid corners were marked with spray paint and, during actual geophysical survey, by bamboo canes. The region to the south of the internal mound was surveyed on an adjusted grid system with the east-west aligned gridlines set at a ten metre offset from the remainder of the site grid in order to make the geophysical surveying more efficient.

3.2.2 The ground resistivity survey was 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. Data were collected with the 0.5 metre mobile probe spacing at 0.5 metre intervals on traverses 0.5 metres apart. Within each grid square data collection started at $x=0.25\text{m}$, $y=0.25\text{m}$; this symmetrical acquisition pattern allowed grids to be collected on east-west traverses where appropriate, as well as the normal north-south traverses. 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 de-spike 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 ohms. 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 the 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. The resistance data are presented in Figure Four.

3.2.3 Magnetic gradiometry was undertaken with a Bartington Grad 601 Dual. Data were collected at 0.125 metre intervals on traverses set 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 magnetic gradiometry data is presented as Figure Five.

3.2.4 The site plans have been prepared in CorelDraw, supplementing the survey data with base mapping reproduced from Land and Property Services data with the permission of the Controller of Her Majesty's Stationery Office.

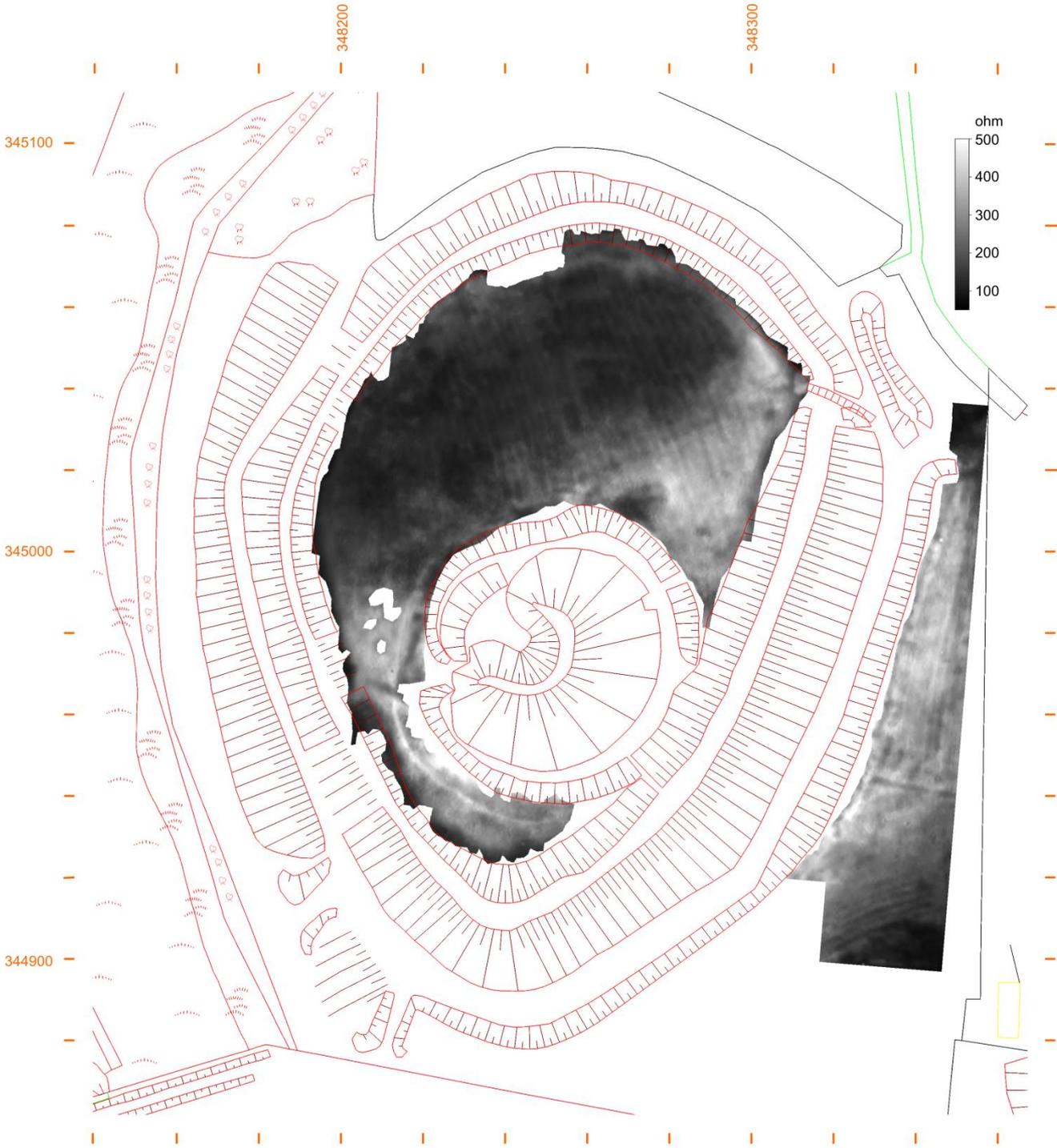


Figure Four: Results of the ground resistivity survey at the Mound of Down.

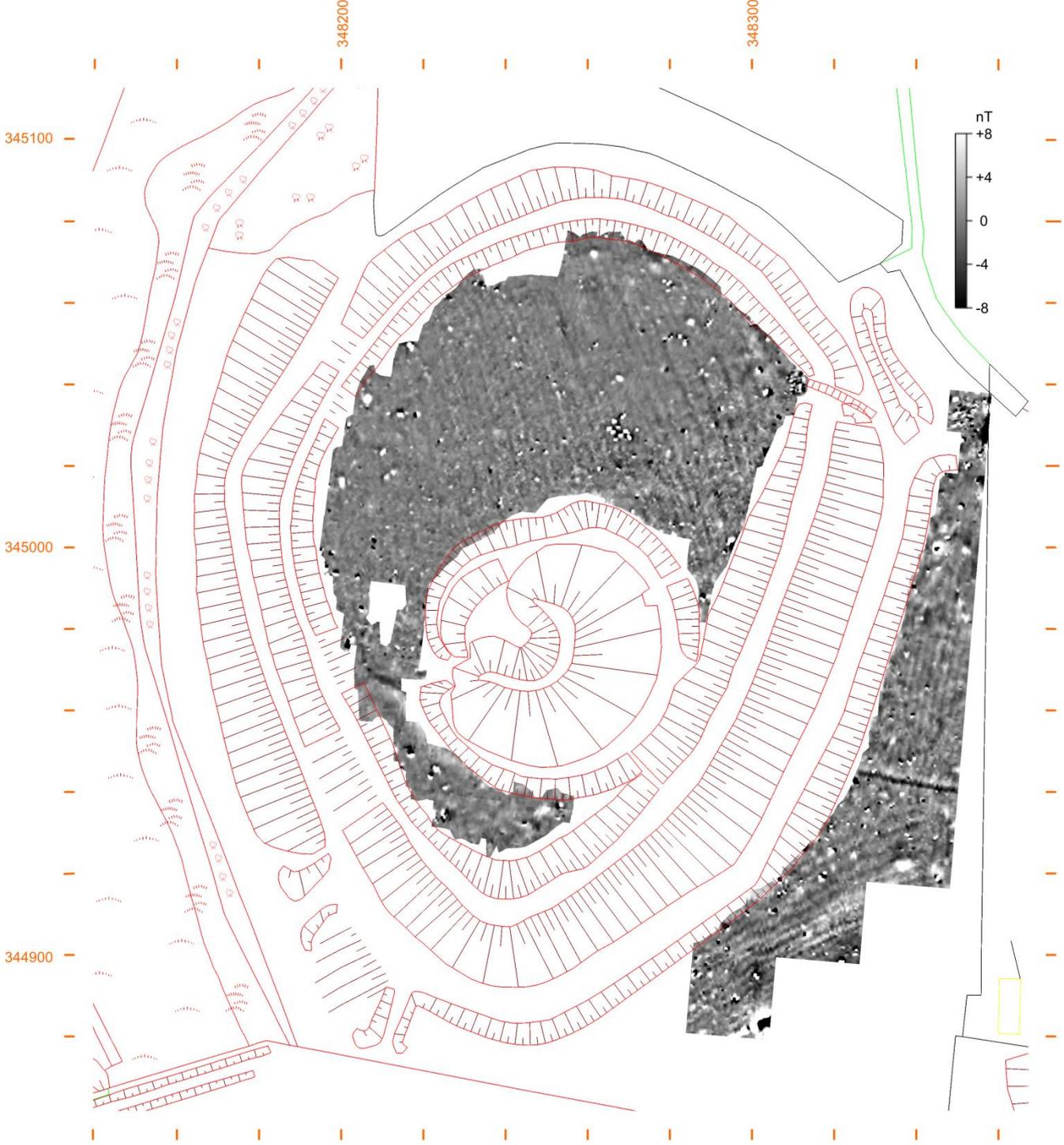


Figure Five: Results of the magnetic gradiometry survey at the Mound of Down.

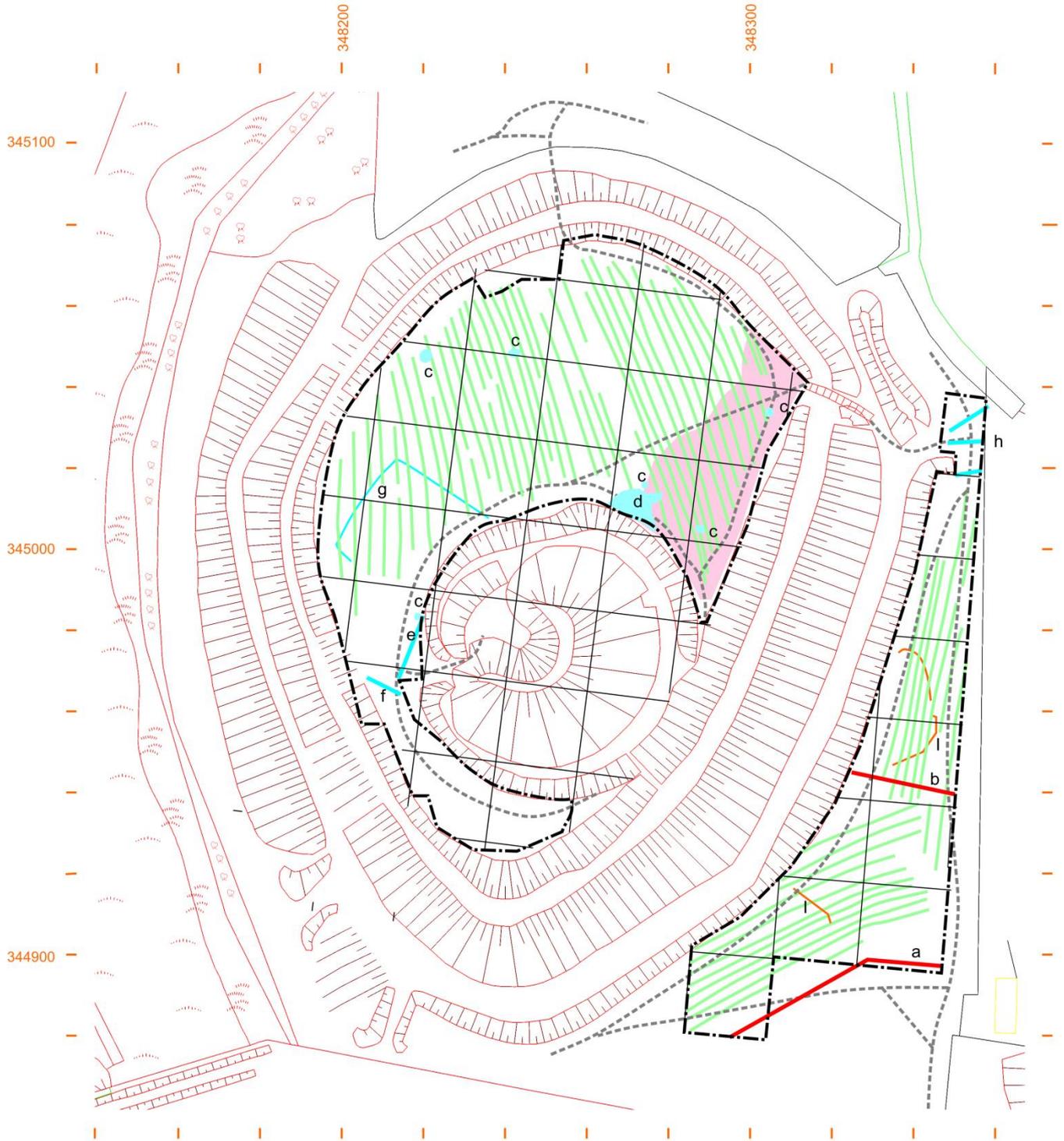


Figure Six: Interpretation of the ground resistivity magnetic gradiometry geophysical surveys undertaken at the Mound of Down.

3.3 *Interpretation*

3.3.1 The largely even nature of the geological deposits at the site meant that good-quality data, with uniform background levels, were recorded for both the ground resistivity and magnetic gradiometry. In the surveyed area external to the enclosure, the survey extended across the low-lying ridge the Mound of Down to the higher ground to the east. The ground resistivity was very low at either end of that traverse and significantly higher on the raised ground in the centre. Within the enclosure, the resistivity decreased from recorded values of resistance of about 380 ohm at the top of the hill, to values of around 110 ohm at the lower end of the enclosure. The lower slopes of the enclosure's interior were wet, with small amounts of surface water being present in some areas at the time of survey. The geological background was not entirely even, however. Within the enclosure some variation is visible within the resistivity data, including a subtle concentric variation leading to irregular bands of variation around the northern part of the interior of the monument. The origin of these zones is uncertain, but may relate to the internal structure of the drumlin (Figure Four).

Modern Landscape Features

3.3.2 Some of the variation in the resistivity within the enclosure can be related to the modern landscape. In particular the creation of paths by mechanical mowing of the grass at the site has produced surprisingly large resistivity changes. Around the west and south of the inner mound, the modern path is represented by a narrow zone of very elevated resistivity. Similar, but much broader, zones of elevated resistivity follow the inside of the main rampart to the east and north of the enclosure (accentuated by the reduced resistivity over the tail of the adjacent bank). In contrast the main path running on a northeast-southwest alignment across the centre of the northern part of the site is most obviously marked by a zone of lowered resistivity. This is interpreted to be the effect of ponded groundwater upslope of the compacted zone beneath the path.

3.3.3 Although the gradiometer data are essentially quiet, this uniformity enhances the visibility of the scattered pieces of ferrous debris. Some of these items are likely to have been introduced with midden material during the period of cultivation represented by the spade cultivation ridges, but the occurrence of ferrous 'spikes' in the margins of the overgrown ramparts and other apparently uncultivated parts of the site may reflect modern rubbish. The cluster of objects some 20 metres north of the motte-like mound is interesting, and might possibly be of archaeological significance. The gradiometer survey of the area around the inside of the modern visitor entrance to the enclosure is largely masked by the magnetic field associated with the steel associated with the concrete steps, particularly the handrail.

3.3.4 Outside the enclosure, the southern margin of the surveyed area is approximately coincident with a modern, buried, waste water pipe (red line on Figure Six, 'a'). This is shown on the very southern edge of the resistivity survey as a negative linear anomaly and on the gradiometry as a strong, variable polarity, anomaly that just impinges on the surveyed area. In the central part of the external survey, prominent geophysical anomalies are associated with the course of a shallow gully (red line on Figure Six, 'b'). The gully shows a negative resistivity anomaly with a positive anomaly corresponding to the low ridge on its north side. The gradiometer survey shows a strong negative feature on the course of the gully - probably indicating that the gully conceals a substantial stone-built drain.

Spade Cultivation

3.3.5 Much of the survey area showed geophysical evidence for former spade-cultivation ridges. Only in the area of the footpath running up the hill inside the enclosure was there any easily recognisable topographic expression of the ridges - possibly as a result of differential compaction on the footpath. The observed topographic ridges corresponded to the positive magnetic anomalies and to positive resistivity anomalies. The spacing of the surviving ridges inside the enclosure was approximately 2.3 metres. The spacing of the anomalies outside the enclosure, where there was no visible topographic expression of the features, was just slightly less at 2.1 metres. Inside the enclosure the ridges run broadly down-slope on an approximately northnorthwest-southsoutheast alignment. Outside of the enclosure one set traverses the low-lying ridge and the other set runs contour-parallel around the southern side of the ridge.

Other Features

3.3.6 There are a series of small negative resistivity anomalies within the enclosure. Although these might be archaeological pits or even in some cases be the locations of Lawlor's 'test' pits from the 1920 excavations (see Paragraphs 2.6.2 and 2.6.3), the most likely explanation for the pit-like features that are up to a few metres in size is that they are tree throws (Figure Six, 'c'). A larger area of negative resistivity anomaly lies on the north side of the ditch of the motte-like mound (Figure Six, 'd'). This anomaly has a rather amorphous extent. It has no topographic expression other than being the local crest of the hill and being a relatively flat area compared with the rest of the enclosure. The overall anomaly appears to include a discrete westsouthwest-eastnortheast-aligned stronger, narrower negative anomaly. Although an archaeological explanation for this anomaly was considered possible, its amorphous shape suggested it was probably natural in origin - an interpretation confirmed by the excavation of Trench One (see Section 4.3). To the west of the motte-like mound were two linear negative resistivity anomalies. One runs northnortheast-southsouthwest approximately tangentially to the ditch of the mound immediately to its north (Figure Six, 'e'). To some extent this relationship is similar to the linear low within the general resistivity low located north of the mound, which is also effectively tangential to the ditch associated with the mound. Neither of these features had any significant associated magnetic anomaly. The second prominent negative linear runs between the ditch of the mound and the inner edge of the enclosure bank, just to the south of the causeway 'entrance' to the mound (Figure Six, 'f'). It is unclear whether this represents a distinct cut feature, or whether it is the product of water accumulation at the foot of the rise which lies to its south. This combination of a rise in topography with a linear hollow to its north also has an associated magnetic anomaly. Northwest of the mound there is a possible negative linear anomaly with a roughly right-angled turn (Figure Six, 'g'). This anomaly possibly corresponds to a cut feature, but does not have an associated magnetic anomaly and so may just be another reflection of the internal structure of the drumlin. The area northeast of the mound (pink tone on Figure Six) contained rather more enhanced magnetism than other areas of the site. This may be indicative of either disturbed occupation deposits or possibly an enhanced level of midden addition during the period of spade cultivation.

3.3.7 The external survey produced few anomalies: the area close to the base of the concrete steps produced three negative linear resistivity anomalies (Figure Six, 'h'). These were seen over such short distances that their significance is hard to assess. They presumably represent ditches or gullies. The southern part of the survey produced a few rather diffuse negative magnetic anomalies, possibly of geological origin (Figure Six, 'i').

Chapter 4: Account of the Excavations

4.1 *Introductory Remarks*

4.1.1 Excavations were conducted within the interior of the main enclosure at the Mound of Down over a four-week period between the 12th March and the 5th April 2012. A total of four trenches (Trenches One to Four) and nineteen test pits (Trenches Five to Twenty-Three) were manually excavated. The four trenches were excavated by staff from the Centre for Archaeological Fieldwork under the direction of the author, whilst the test pits were excavated by children from both the Downpatrick Young Archaeologists' Club and various local primary schools under the supervision of staff from the Centre for Archaeological Fieldwork. The participation of the children was kindly organised by staff from Down County Museum.

4.1.2 It is intended that the phased Harris matrices for the site (see Appendix Two) are referred to whilst reading the following accounts of the excavations.

4.2 *Excavation Methodology*

4.2.1 It was not anticipated that the stratigraphic sequences at the Mound of Down would be overly complex. Consequently, it was not considered appropriate to adopt the Single Context Planning method of site recording for the excavation. The small size of the trenches was, however, considered a potential methodological weakness. The problematic character of excavating small trenches, as opposed to relatively large 'open' areas, has long been recognised (Barker 1982, 44-67), and it is possible that subtle horizons within the archaeological stratigraphy of the ditch cuttings (Trenches Two and Three) and ephemeral timber structures within the cutting into the back of the enclosing bank (Trench Four) were not recognised during the course of excavation. The context record for the site was created using the standard context recording method (see Appendices 1 and 2). Individual features were planned (Scale 1:10) and photographed both prior to, and following, excavation. Where it was practically possible to do so, individual negative features were excavated by being half-sectioned and drawn (Scale 1:10) before the remainder of their fills were removed. Overall plans (Scale 1:20) of the trenches were prepared throughout the course of the excavation, and representative sections (Scale 1:10) of the completed trenches were also drawn. In addition to photography (see Appendix 3) and illustration (see Appendix 4), the principal site records consisted of context sheets augmented by a director's diary. Separate registers of small finds (Appendix 5) and samples (Appendix 6) were also be maintained. The stratigraphic sequences and finds recovered from the test pits were recorded using the same methodology as that employed on the excavation trenches. However, no plans or section drawings of the completed test pits were prepared; the excavated test pits were simply recorded photographically. 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 and test pits were tied into the plan of the monument and the Irish Ordnance Survey Grid using an EDM Total Station. Following the completion of recording, the trenches and test pits were manually backfilled.

4.3 *Trench One*

4.3.1 Trench One was located immediately adjacent to the northern edge of the ditch surrounding the motte-like mound (Figure 000). The trench was sited here in order to assess an amorphous low resistance anomaly (dimensions approximately 14.5

metres by 8.5 metres) that had been identified during the geophysical survey conducted in January 2012 (see Paragraph 3.3.6; Figure Six, 'd'). As previously noted, this anomaly had no topographic expression other than being located upon the crest of the hill on a relatively flat area compared with the rest of the enclosure. The trench was 12.0 metres long, 1.0 metre wide and aligned approximately east-west. Excavation demonstrated that the anomaly had no archaeological origin.



Figure Seven: Trench One, following excavation of cultivation soil (Context No. 102/103) exposing truncated surface (Context No. 104) of subsoil (Context No. 105), looking east.

4.3.2 Underlying a thin sod (Context No.101; depth 0.04 metres) was a cultivation soil (Context No.102) that extended throughout the length of the trench. The cultivation soil was relatively thin (depth 0.06-0.09 metres) and contained several discrete patches of boulder clay (Context No. 103) apparently derived from the underlying natural subsoil during episodes of cultivation. The cultivation soil directly overlay the truncated surface (Context No.104) of the glacial till subsoil (Context No.105). A significant quantity of finds, provisionally dated to the eighteenth and nineteenth century, were recovered from the cultivation soil. These finds were presumably derived from middens collected from the nearby town and used to fertilise the cultivation ridges. Consequently, the provisional date of the artefacts presumably reflects the period when the interior of the enclosure was used for cultivation. Only one possible feature cut into the subsoil was partially exposed in Trench One. Approximately 1.90 metres from the eastern end of the trench, and extending beyond the northern edge of excavation, was a shallow, sub-circular depression (Context No. 106; maximum diameter 0.38 metres, maximum depth 0.06 metres). Although the depression was excavated as if it were an archaeological feature, it

was almost certainly the remains of a hole created during cultivation by the removal of a protruding stone from the underlying boulder clay. It was filled by the cultivation soil (excavated as Context No. 107) and contained a single fragment of coal (Small Find No. 1105). The comparatively shallow depth of the cultivation soil within Trench One is probably a consequence of a process of hillwash/solifluction/soil creep. That the trench was located towards the summit of the drumlin would have made the local effects of erosion and transportation of the bare soil heaped up into spade cultivation ridges more severe as there would be no soil being washed downslope to this point to replace the soil being washed downslope.



Figure Eight: North-facing section of sondage cut into the natural subsoil (Context No. 105) at the western end of Trench One, looking south.

4.3.3 The character of the underlying glacial till (Context No.105) was investigated in a *sondage* cut into the western end of the trench (Figure Eight). The uppermost 0.04 metres of the till had the appearance of a loose, near sterile, gravel-rich clay, whilst beneath this level the subsoil consisted of hard, sterile, grey boulder clay (excavated to a total depth of 0.15 metres). The degradation of the upper part of the glacial till was apparently the result of weathering and the action of roots penetrating into the subsoil. Given that the surface of the subsoil would have been repeatedly exposed to the elements during the episodes of spade cultivation, this degradation was not unexpected and was demonstrated to have also occurred elsewhere within the interior of the enclosure by the excavation of the test pits. The effects of root action, however, appear to have been more severe at this part of the site probably because the relative shallowness of the cultivation soil meant that the surface of the subsoil was comparatively closer to the modern ground surface.

4.4 Trench Two

4.4.1 The ditch around the crescentic mound was investigated in two cuttings. Trench Two was excavated across the deeper part of the mound's ditch on the northeastern part of its circuit; whilst Trench Three was excavated across the shallow

part of the ditch on the western edge of its circuit (see Section 4.5). Significant safety issues were encountered during the excavation of Trench Two, partly because of the narrow width of the trench and partly due to contraction as a result of drying out, of the clay soil matrix of the basal fill (Context No. 218). Consequently, it was not possible to excavate the entirety of the basal fill of the ditch and in order to safely complete the excavation of the outer edge of the ditch it was necessary to excavate a small, ‘stepped’ extension to the trench. Trench Two was initially 4.9 metres in length, 1.0 metre wide and aligned approximately northeast-southwest. A ‘stepped’ extension, 1.0 metre wide, was dug into the northeastern end of the southeast-facing side of the trench. The extension effectively extended the overall length of the trench to 5.3 metres.



Figure Nine: Trench 2, prior to excavation of ‘stepped’ extension, following excavation of basal fill of voided clay with large stone inclusions (Context No. 218), looking west.

4.4.2 Excavation revealed that the ditch (Context No.220) had steep sides and a relatively flat base. The accumulated slumps and silts that made up the ditch’s fills had a maximum depth of approximately 1.5 metres. The ditch fills divided into two groups: the stratigraphically earliest deposits (Context Nos. 210, 214, 215, 216, 217 and 218) consisted of several

distinct layers that had been rapidly deposited - as a series of episodic slumps of unstable material from both the mound and outer edge of the ditch with some possibly deliberately back-filled material consisting of large stones. The upper half of the ditch sequence consisted of more slowly accumulating silts (Context Nos. 208, 209, 211 and 212) that had supported the growth of vegetation and which were sandwiched between occasional deposits of material that had slumped from both the mound and the outer edge of the ditch (Context Nos. 206, 207 and 213). There was no evidence to suggest that the ditch had been re-cut or subject to any routine programme of cleaning.

4.4.3 Stratigraphically, the earliest 'fill' was a yellowish brown silty clay with a large number of sharp angular stone inclusions that extended down the mound side of the ditch (Context No. 216). The deposit had a near uniform depth of 0.07 to 0.10 metres and it was uncertain whether it represented a slump of material from the mound or just the weathered surface of the ditch's edge. That the basal fill of the ditch overlay it suggests that it probably represents *in situ* weathering of the natural subsoil rather than a legitimate ditch fill. The basal fill of the ditch (Context No. 218) consisted of a voided deposit of large, sub-angular to sub-rounded stones in a light grey brown clay soil matrix and had a maximum depth of 0.43 metres. The presence of voids within the deposit suggested that it had accumulated rapidly, either as the result of a slump of material from the mound or as a result of an attempt to deliberately backfill the ditch. The basal fill contained no finds and a sizable soil sample taken from this deposit (Sample No. 7) contained only a few fragments of charcoal too small to identify. Overlying the basal fill was a loose deposit of gravel and small stones within a sandy clay soil matrix (Context No. 217) whose disposition indicated that it was a slump from the outer edge of the ditch. This deposit, which had a maximum depth of 0.45 metres, contained the only potential find from the lower set of rapidly deposited ditch fills - a possible, small fragment of non-ferrous slag (Small Find No. 1148). Overlying the slump was another loose deposit whose disposition indicated was a slump from the outer edge of the ditch. This deposit of slump (Context No. 214) consisted of gravel and small stones in a greyish brown sandy clay matrix and had a maximum depth of 0.19 metres. It was overlain by a second deposit of voided large, sub-angular to sub-rounded stones in a light grey brown clay soil matrix (Context No. 215) that was similar in character to the basal fill. Overlying this was the last of the initial set of rapidly deposited ditch fills (Context No. 210) - a slump of gravel-rich silty clay derived from the mound, rather than the outer ditch edge. The general absence of finds from these lower fills, or any evidence to suggest the ditch had been recut, is consistent with an impression that the site was not intensively occupied for any duration following the construction of the crescentic mound. Radiocarbon dating of the charcoal fragments recovered from the basal fill (Context No. 218) of the ditch will be required in order to provide an archaeological date for the deeper part of the mound's ditch.

4.4.4 Overlying the slump of gravel-rich silty clay (Context No. 210) was the first of the slowly accumulating silts that formed the stratigraphically later group of ditch fills. This was a thin (maximum depth 0.07 metres) deposit of bluish grey silty clay with a dark organic component (Context No. 212) indicating that it had supported the growth of vegetation. It was overlain by a thicker deposit (maximum depth 0.32 metres) of light grey brown clay with orange mottles (Context No. 211). Overlying this deposit was a slump of gravel in a dark brown silty clay soil matrix (Context No. 213) derived from the outer edge of the bank, which was in turn sealed by an orangey brown silty clay (Context No. 208) with a maximum depth of 0.21 metres. This latter silt contained a large number of stone inclusions apparently derived from the natural boulder clay. These are interpreted as representing material cleared from the interior of the enclosure whilst it was being cultivated and which were dumped into the conveniently located ditch. Overlying this silt was another deposit of orangey brown silty clay (Context No. 209) which contained a smaller number of stones, again probably derived from clearance associated with the cultivation of the enclosure's interior. This silt was overlain by two slumped deposits of gravel in silty clay soil matrices - one derived from the outer edge of the ditch (Context No. 206) the other slumped from

the mound-side of the ditch (Context No. 207). Only a single find was recovered from this later set of ditch fills - a sherd of glass (Small Find No. 1141) from the orangey brown silty clay (Context No. 208).

4.4.5 Overlying the two slump deposits (Context Nos. 206 and 207) was a sequence of superficial, modern deposits. The earliest of these was a relatively thick (maximum depth 0.16 metres), compacted layer of silty clay (Context No. 205). It is considered that the compaction of this deposit is a result of the use of mechanical ride-on grass mowers in the base of the ditch of the mound. It was overlain by a thin, humic topsoil (Context No. 203) that contained several fragments of modern bottle glass. This topsoil was overlain by three thin slump deposits of silty sand (Context No. 204) and silty clay (Context Nos. 202 and 209) all derived from the outer edge of the ditch.

4.5 Trench Three

4.5.1 The second cutting (Trench Three) across the ditch of the mound was excavated in the western, shallow part of the ditch's circuit. The trench was aligned approximately east-west and was 9.9 metres long and a metre wide. The trench extended five metres to the west beyond the outer edge of the ditch in order to cross a linear low-resistance anomaly recorded during the geophysical survey (Figure Six, 'e'; see Paragraph 3.3.6). Prior to excavation, the interpretation of this anomaly was not obvious, however, it was considered possible that it represented a slight counterscarp bank formed as a result of cleaning out of the ditch. If this was the case then it suggested the possibility that a buried soil horizon may have been preserved below this feature. In the event, excavation demonstrated that the resistivity anomaly represented a shallow negative feature (Context No. 308) interpreted as being part of a relatively recent boundary associated with cultivation of the interior of the enclosure.

4.5.2 Excavation revealed that at this point in its circuit the ditch (Context No. 313) was only 0.35 metres deep. The sequence of deposits filling the ditch consisted of slowly accumulating silts sandwiched between slumps of material derived from the mound. The primary fill of the ditch was a silty clay, 0.18 metres deep, which contained a large number of stone inclusions (Context No. 312) and a large amount of eighteenth- or nineteenth-century bottle glass (Small Find Nos. 1116-1121, 1127, 1133 and 1142-1146), as well as a horseshoe of comparable date (Small Find No. 1132). The stone inclusions were all apparently derived from the natural glacial till and, as with the similar deposits in Trench Two (Context Nos. 208 and 209; see Paragraph 4.4.4), are interpreted as representing the clearance of stones brought to the surface during the digging of the spade cultivation ridges in the interior of the enclosure. The finds of eighteenth- or nineteenth-century bottle glass indicate that the easily accessible, shallow part of the ditch was re-cut at this date, presumably so that its original silts could be used to fertilise the spade cultivation ridges. Following completion of the excavation a *sondage* was cut 0.5 metres into the base of the ditch to demonstrate, beyond doubt, that the silt containing the bottle glass did indeed represent the ditch's primary fill. Overlying the primary fill (Context No. 312) was a slump of stone-rich sandy loam (Context No. 311) derived from the adjacent mound. This slump deposit was sealed by a layer of silty clay (Context No. 310) that also included a number of stones that were again interpreted as representing clearance associated with spade cultivation of the monument. This second silty fill was, in turn, sealed by another stone-rich slump of sandy loam (Context No. 309) derived from the mound. A final, thin fill of silty clay (Context No. 303) was overlain by a thin spread of sandy clay with stones (Context No. 302) that had, once again, slumped into the ditch from the mound.



Figure Ten: Trench Three following excavation, looking eastnortheast.

4.5.3 Underlying the modern sod (Context No. 301) in the western part of Trench Three, which extended beyond the outer edge of the ditch, was a near northeast-southwest aligned linear feature (Context No. 308; maximum width 1.1 metres, maximum depth 0.14 metres) that was cut through a thin humic sandy clay soil (Context Nos. 305 and 307) to the surface of the underlying boulder clay subsoil (Context No. 304). The linear feature (Context No. 308) was filled with a greyish brown silty clay (Context No. 306) and, as noted above (see Paragraph 4.5.1), is interpreted as possibly being part of a boundary associated with cultivation of the interior of the enclosure. It is uncertain whether the humic sandy clay soil (Context Nos. 305 and 307) that the feature cut through can be identified as a cultivation soil, or would be more accurately identified as a general topsoil. Nor was it possible to identify a direct stratigraphic relationship between this soil (Context No. 305) and the ditch fills, although it is reasonable to assume that they were broadly contemporary.

4.6 *Trench Four*

4.6.1 Trench Four was excavated into the back of the bank forming the main enclosure at a point on its eastern circuit to the north of the mound. The trench was 4.9 metres long, 2.0 metres wide and aligned approximately east-west.

4.6.2 Underlying the sod (Context No. 401) and thin, humic topsoil (Context No. 402) was a deposit of silty clay loam (Context No. 403) that extended up to the base of the bank and was interpreted as the upper part of a thin (maximum depth 0.11 metres) cultivation soil. Excavation demonstrated that the bank was constructed by dumping a series of deposits of loose gravel and stones contained within various clay and sandy clay soil matrices. The earliest of these layers of bank material was a dump of large stones within a clay soil matrix (Context No.407). The large stones within

this deposit had been deliberately laid at the foot of the bank with the apparent intention that they would retain the overlying dumps of gravel and small stones that made up the fabric of the bank. Overlying this initial deposit a sequence of gravel (Context No. 410), small stones (Context No. 409) and gravel (Context No. 408), all within sandy loam or sandy clay loam soil matrices, had been built up. The disposition of these layers suggested that they were deposited from the south indicating that, in this part of the enclosure's circuit, the bank was built in anti-clockwise direction. Serving to cap these internal deposits, and consolidate the internal fabric of the bank, was a sequence of yellowish brown sandy loam (Context No. 406), gravel in a clay soil matrix (Context No. 404) and sandy clay loam (Context No. 405) that had been successively laid over the back of the bank. These deposits had been subjected to considerable disturbance in the form of both animal burrowing and substantial root action.



Figure Eleven: Trench four following excavation, looking northeast.

- 4.6.3 Excavation demonstrated that the bank had been built directly on to a buried, silty clay loam, soil horizon (Context No. 411/412) that survived to a depth of up to 0.15 metres. Physically underneath the bank this buried soil was excavated as Context No. 411, where the soil horizon extended beyond the foot of the bank it was excavated as Context No. 412. Although essentially the same deposit, beyond the area where it was physically sealed by the bank the integrity of the buried soil horizon had been compromised by spade cultivation - hence, the use of two separate context numbers. Excavation of the buried soil horizon (Context No. 411) beneath the bank resulted in the retrieval of a fragment of non-ferrous slag (Small Find No. 1150) and two pieces of burnt bone (Small Find Nos. 1151 and 1153). In addition, the deposit was heavily sampled (Sample No. 5) and processing of this sample resulted in the recovery of a number of short-lived organic entities, including charred grains, which would be suitable for radiocarbon dating and thereby provide a *terminus post quem* for the construction of the bank.

4.6.4 Underlying the buried soil was the base of a shallow linear feature (Context No.4 14) that was aligned northeast-southwest. This feature extended beyond both the northern and southern edges of excavation, had a maximum width of 0.54 metres and was a maximum of 0.09 metres deep. Filled with a single deposit of silty clay loam with occasional stone inclusions (Context No. 413) the purpose of this feature remains uncertain, however, it represents the first feature identified at the Mound of Down that demonstrably pre-dates the construction of the main enclosure. It also poses an important interpretive challenge beyond the identification of its function. The lack of material culture dating to the Early Christian and medieval periods recovered from the Mound of Down in either the 1920 or 2012 excavations (but, see Paragraph 2.6.3), combined with the absence of any visible structures (apart from the apparently uncompleted motte) within the enclosure, suggests that the site was not intensively occupied for any significant period of time during either the pre-Norman or Anglo-Norman period. However, it is not easy to reconcile this observation with the survival of an early feature (Context No. 414) in Trench Four. The area underneath the enclosure bank in the trench represents the one excavated part of the site which had not been disturbed by either spade cultivation or the insertion of the motte-like mound. Is it just coincidence that this is the one part of the site in which an early archaeological feature was uncovered? The general absence of early material culture notwithstanding, the preservation of this feature raises the possibility that spade cultivation has destroyed evidence for earlier activity in other parts of the site.

Chapter 5: Discussion

5.1 Introductory Remarks

5.1.1 Despite the excavations in 1920 and 2012, because a programme of radiocarbon dating has yet to be commissioned, the Mound of Down remains archaeologically undated. Consequently, any conclusions about the site must remain provisional and will rely heavily upon interpreting the upstanding remains in the context provided by a consideration of both the historical and place-name evidence.

5.2 Towards a Provisional Interpretation of the Mound of Down

5.2.1 The crescentic form of the mound provides one of the principle challenges to interpreting the site. The mound is usually acknowledged as some form of Anglo-Norman motte whose unusual shape is variously explained by its construction being abandoned before it was completed (e.g. Anon. 1966, 203; McNeill 1980, 12-13), as a result of slumping following a catastrophic failure of its structural integrity (N.Brannon pers.comm.) or as a consequence of modification to accommodate artillery in the seventeenth century (Anon. 2009, 59). The suggestion that the shape of the mound is a result of slumping can be easily dismissed - as previously noted its outer edge forms a uniform circle of approximately 55 metres diameter. If the crescentic form of the mound was a result of a catastrophic failure in the mound's internal structural integrity, then it could be reasonably expected that there would be a resultant bulge in the line of the northwestern part of the ditch's circuit where the mound material had slumped. That this doesn't occur indicates that the mound's shape is not the result of a catastrophic slump. Similarly, the suggestion that the mound's shape is a product of alteration in the seventeenth century to accommodate artillery is not convincing. The northwestern base of the mound is not an obvious place to locate artillery. Although such a position would command views to the east and northeast across the Quoile Estuary, a better position to command these approaches to Downpatrick would be immediately behind the main enclosure bank in the northwestern part of its circuit, where indeed there appears to be some alteration to the bank of the main enclosure. It should be noted that Thomas McErlean has raised 'serious objections' to the identification of the mound as a motte and has speculatively suggested that it may represent the remains of a Gaelic inauguration mound (2002, 72). This intriguing view cannot be as easily dismissed as the other alternative explanations to the unfinished motte interpretation favoured here. In the immediate pre-Norman centuries the inauguration site used by the Dál Fiatach has been assumed to be Cráeb Telcha (Crew Hill, Co. Antrim), the apparent former centre of the Dál nAraide until the expansion of the Dál Fiatach c.800 AD (Byrne 1973, 119; 2005, 859; Macdonald 2008, 84). It is likely, however, that the Dál Fiatach would have either created or adopted an inauguration site in eastern Down closer to the centre they established at Dún Lethglasie following their expulsion from Emain Macha and subsequent movement eastwards in the late fifth century. The site of this early, hypothetical, Dál Fiatach place of inauguration is unknown and McErlean may be correct to suggest that it could have been the motte-like mound at the Mound of Down.

5.2.2 Although it is acknowledged that no definitive interpretation is possible without excavation of the mound itself, the explanation favoured here is that, at least in its current form, is that the mound represents an unfinished motte that probably dates to the 'campaigning' phase of John de Courcy's conquest of Ulster. As noted above, the ditch around the 'motte' is not constant in depth or width. For the majority of its circuit the ditch is wide and deep, however, its northwest quadrant is significantly narrower and shallower (Figures One and Two). It is notable that the less substantial northeast quadrant of the ditch and the causewayed 'entrance' into the interior of the 'motte' are adjacent to the open, 'unfinished'

side of the crescentic-shaped mound. The topographic form of the mound and variations in size of the surrounding ditch are consistent with the ditch having been initially dug to the level it survives to in the northeast quadrant and the displaced soil then being used to form an inner bank or platform. This inner bank or platform appears to have been subsequently used to either retain or act as a base for the main body of the mound, the material for which was quarried from the widened and deepened ditch. It is unclear whether the 'inner bank or platform' represents an initial phase of Anglo-Norman motte construction or was a pre-existing structure, such as a pre-Norman rath, however, it is notable that other raths in County Down, such as those at Castleskreen (Dickinson and Waterman 1959; Anon. 1966, 198-200, no.793, fig.127), Rathmullan Lower (Anon. 1966, 195, no.786.1, fig.121; Lynn 1981-82) and Lismahon, Ballykinler Lower (Waterman 1959; Anon. 1966, 186, no.756, fig.119), were converted into mottes during the Anglo-Norman period.

5.2.3 That the motte located on the Mound of Down was unfinished is consistent with the historical evidence. It is unknown how long John de Courcy retained the settlement that later became Downpatrick as a centre of operations for his conquest of the kingdom of Uladh after the second Battle of Down in the summer of AD 1177. Although historically it is not directly attested, it is reasonable to assume that he abandoned the site relatively quickly in favour of Carrickfergus which offered him the strategic base of a harbour that was located both centrally and within close proximity to the natural routes into much of the territory that he wanted to, and subsequently did, conquer. McNeill has argued that the reference contained within Giraldus Cambrensis's *Expugnatio Hibernica* to de Courcy's defeat during a raid into the kingdom of Fir Lí in July 1178 suggests that he had already established his main caput at Carrickfergus by this date (McNeill 1981, 3, 42). Cambrensis writes that as a result of this defeat de Courcy and the survivors of his party, "fought their way through to his castle, despite the fact that they had to cover a distance of thirty miles, over which they continually had to defend themselves against a large force of the enemy" (trans. Scott and Martin 1978, 179). By the twelfth century the kingdom of Fir Lí was located in an area approximately covering north Co. Antrim and possibly the northern part of Co. Derry east of the Bann suggesting that de Courcy's defeat took place in this region. McNeill has plausibly argued that the cited distance of thirty miles, which de Courcy's party had to retreat over, is consistent with his castle being located at Carrickfergus (as the crow flies a distance of 23 miles from Ballymena) rather than Downpatrick (a direct distance of 45 miles from Ballymena) (McNeill 1981, 3). This suggests that de Courcy had abandoned his initial base in Downpatrick at some point between six and eighteen months after his arrival in Ulster in early AD 1177. Such a short period of occupation would explain why the motte within the enclosure at the Mound of Down was not finished.

5.2.4 The outer enclosure at the Mound of Down has, on occasion, been interpreted as also being Anglo-Norman in date and forming a bailey (Orpen 1911, 13, fn.1; Lawlor 1919-20, 107-109; Lawlor 1928, 216-217; Anon. 1966, 203, no.408.2), however, this is unlikely to be correct. Mottes are normally positioned either straddling the bailey or appended to the bailey, as is the case at Clough Castle, Co. Down (Waterman 1954a; Anon. 1966, 200-203, no.794, figs.128 and 129, pl.42) and Dromore, Co. Down (Waterman 1954b; Anon. 1966, 203, no.409.2, fig.131, pl.40). The position of the motte at the Mound of Down, set entirely as it is within the main enclosure, is not typical of the plan of Anglo-Norman motte-and-bailey castles and only usually occurs where a motte has been inserted into a pre-existing enclosure that is adapted for use as a bailey, as is the case at Cardiff Castle in South Wales where the Norman motte occupies the northwest corner of a late Roman fort (Jarrett 1969, 70-73, no.13, fig.31). This would suggest that the main enclosure at the Mound of Down pre-dates the Anglo-Norman period. Although it was unusual, the Irish did build forts significantly stronger than raths prior to the Anglo-Norman period (McNeill 1980, 115) - the hillfort at Clogher, Co. Tyrone would serve as a potential analogue, although in its final form it was a multi-vallate structure (Warner 2000; see also Warner 2009).

Whilst it is possible that the enclosure was modified and possibly heightened during the Anglo-Norman period, given that construction of the motte is interpreted as having been abandoned before the mound was completed, it is unlikely that this was the case.

- 5.2.5 Supporting evidence for the suggestion that the motte was built upon the site of an earlier structure is provided by the observation that in order for the motte at the Mound of Down to fit into its current position so close to the edge of the enclosure, and be higher than the adjacent bank of the enclosure, it has been built with unusually steep sides (compare Lawlor 1919-20, fig. on p.110 with Anon. 1966, 188, fig.120). This would suggest that there was a reason why it was located precisely where it was, rather than a short distance to the northeast where it would not have been necessary to have built the mound with such steep sides - hence the suggestion that it was built upon the site of a pre-existing rath.
- 5.2.6 Due to the failure to commission any radiocarbon dates from the suitable samples retrieved during the 2012 excavations, there is no direct archaeological evidence to suggest a date for the main enclosure at the Mound of Down. If, however, the mound is correctly interpreted as being constructed on the site of a pre-existing rath then it is unlikely that the enclosure pre-dates the Early Christian period. This is because it is inherently unlikely that anybody would have gone to the trouble of building a rath at the site if it was already enclosed by a massive earthwork that would have dwarfed even a substantial platform or raised rath. As a monument type raths date to the Early Christian period (Stout 1997, 22-31), therefore it follows that the main enclosure must also be Early Christian in date.
- 5.2.7 The observations and inferences outlined above lead to the provisional conclusion that the Mound of Down is a monument with three principal phases of development. First, a rath was built on the site at some point in the Early Christian period; secondly, the main enclosure was constructed; and finally, shortly after the arrival of John de Courcy in Ulster in 1177 AD construction of a motte upon the site of the earlier rath was begun and then abandoned before it could be completed. Such an interpretation is consistent with the place-name and historical evidence reviewed earlier (see Section 2.5). Deidre Flanagan had argued that the emergence of a new, secular centre called Dun da Lethglas in the eleventh century could be related to the Mound of Down (1971, 91-103) and Thomas McErlean had suggested that the likely historical context for the creation of the main enclosure was the ending of dynastic disputes amongst the Dál Fiatach with the establishment of Niall as King of Ulaid in 1016 (2002, 72-73). Francis Byrne had suggested that the royal centre of the Dál Fiatach had shifted to Duneight in the ninth century, presumably from somewhere in the Downpatrick area (1973, 119). Although it has previously been assumed that this earlier secular centre was located somewhere on Cathedral Hill, it remains an intriguing possibility that it could have been the hypothetical rath, which it is suggested above lies beneath the unfinished motte at the Mound of Down. Was this first phase of the site the Ráth Cealtchair featured in the early literary sources and whose name survived, albeit as a less specific signifier, to feature in the early thirteenth-century confirmation of a grant by John de Courcy?

Chapter 6: Recommendations for Further Work

6.1 Assessing Fulfilment of the Project Objectives

6.1.1 The archaeological investigations at the Mound of Down aimed to refine existing sequence for the site in order to enable an improvement in the public presentation of the monument and also inform the future management strategy of the site (see Paragraph 2.2.2). Three specific research objectives were identified prior to the commencement of the project:

- I] to establish the character and date of the main enclosure;
- II] to establish the character and date of the crescentic mound within the main enclosure;
- III] and to establish the date and nature of any occupation or other activity within the main enclosure.

6.1.2 The geophysical survey and excavations have both produced results worthy of publication in an academic format and prompted a re-consideration of the historical context and significance of the Mound of Down. However, although much progress has been made towards completing the three research objectives defined for the project, it must be admitted that none of the objectives has yet been fulfilled. In order to achieve the project aims it is recommended that a programme of radiocarbon dating is commissioned and that a further season of excavations is undertaken at the site (see Section 6.2).

6.2 Recommendations for Further Work

6.2.1 First, it is recommended that additional geophysical research is undertaken at the Mound of Down. Although not part of the original project brief, the survey of the area to the east of the enclosure has demonstrated the potential of the immediate environs of the enclosure for additional ground resistivity and magnetic gradiometry surveys. It is recommended that the existing geophysical survey data sets are expanded to incorporate all of the area immediately surrounding the enclosure, including the apparent 'terrace' to the west side of the main enclosure. Not only would this help place the site within its wider landscape context, but it would also include the area, 10 metres to the south of the outer edge of the enclosure ditch, from which pottery of late thirteenth to early fourteenth century date was recovered in 1935 (Lawlor 1936; Waterman 1954a, 158-160, fig.18; Irish Grid Reference J48254486). In addition, it is recommended that both ground penetrating radar and a resistivity system incorporating an array of electrodes in a single line in order to create a pseudo-section of resistivity values are employed to model the depth of silts and the original form of the ditches associated with both the mound and the main enclosure. The survey data generated will be of value in both interpreting the function of the cuttings through the 'terrace' that joined the enclosure ditch to the surrounding Quoile estuary, and in planning any future programme of excavation.

6.2.2 Secondly, it is recommended that an attempt is made to locate the archive relating to Lawlor's excavations at the site in 1920. This material will form an invaluable resource for refining the interpretation of both the existing and any future geophysical survey data. For example, if the location of Lawlor's 'test' pits could be identified this would enable a clearer interpretation of the series of small negative resistivity anomalies within the enclosure (Figure Six, 'c'). Furthermore, the possibility that the pottery assemblage from the 1920 excavation contains thirteenth- to fourteenth-century French wares (see Paragraph 2.6.3) is potentially of the highest interpretive significance.

- 6.2.3 Thirdly, it is recommended that the Mound of Down is subject to a further season of archaeological excavation with the aim of further refining an understanding of the site in order to both provide a better interpretation of it to the public and to inform future management strategies for the care and maintenance of the monument. The small-scale excavations of 2012 (Excavation Licence No. AE/12/29) reported upon here have done much to prompt a re-consideration of the site, however, a definitive understanding of the monument will only be attained if a further excavation is undertaken at the site. It is recommended that the ditch of the enclosure is excavated, preferably in two separate trenches - one located on the landward side of the monument and the other on the Quoile-side of the enclosure. In addition, excavation of part of the crescentic mound would enable an assessment of the idea developed above (see Section 5.2) that the mound is an unfinished motte built upon the site of an Early Christian rath. Finally, a trench across one of the breaks in the western terrace would help establish the form and function of these enigmatic features. This proposed season of excavations would be a significantly more substantial undertaking than the programme of excavations supported by the Northern Ireland Environment Agency in 2012.
- 6.2.4 Fourthly, it is recommended that a limited programme of radiocarbon dating based upon samples recovered during the 2012 excavations is undertaken. Specifically, it is suggested that several dates are commissioned from short-lived organic material derived from the buried soil preserved underneath the enclosure bank in Trench 4 (see Paragraph 4.6.3) and a couple of dates are submitted for the charcoal fragments recovered in Trench 2 from the basal fill of the mound ditch (see Paragraph 4.4.3).
- 6.2.5 Finally, it is envisaged that following completion of the further season of excavations recommended above (see Paragraph 6.2.3) a comprehensive account of the results of both the future excavations and the 2012 investigations is prepared for publication in a suitable academic format. In the meantime, it is recommended that a detailed summary of the research undertaken to date, and suitable for an interested and informed local audience, is submitted to a local journal such as the *Ulster Journal of Archaeology* or the *Lecale Review*.

Bibliography

- Anon. (ed.). 1854. Bodley's visit to Lecale, County of Down, A.D. 1602-3, *Ulster J. Archaeol.* (fir ser.) 2, 73-95.
- Anon. 1966. *An Archaeological Survey of County Down*, Her Majesty's Stationery Office, Belfast.
- Anon. 1984. A battle ground becomes a tourist spot, *Down Recorder*, Thursday 11th October 1984.
- Anon. (ed.) 2009. *A Guide to the Historic Monuments of Northern Ireland in State Care*, Northern Ireland Environment Agency, Belfast.
- Aalen, F.H.A. and Whelan, K. 2011. Fields, in F.H.A.Aalen, K.Whelan and M.Stout (eds), *Atlas of the Irish Rural Landscape*, (second edition) Cork University Press, Cork. 200-211.
- Barker, P. 1982. *Techniques of Archaeological Excavation*, (second edition) B.T.Batsford Ltd, London.
- Brannon, N. 1992. *Downpatrick. An Urban Archaeological Appraisal*, (unpublished document), Environment Service: Historic Monuments and Buildings, Belfast.
- Breen, C. and Sheehan, J. 1996. Lonehort Harbour, Ardnaragh East, Bere Island, in I.Bennett (ed.), *Excavations 1995. Summary Accounts of Archaeological Excavations in Ireland*, Wordwell, Bray. 5-6.
- Buchanan, R.H. and Wilson, A. 1997. *Downpatrick*, (Irish Hist. Towns Atlas No.8) Royal Irish Academy, Dublin.
- Byrne, F.J. 1973. *Irish Kings and High-Kings*, B.T.Batsford Ltd, London.
- Byrne, F.J. 2005. Ireland before the Battle of Clontarf, in D.Ó Cróinín (ed.), *A New History of Ireland I. Prehistoric and Early Ireland*, Oxford University Press, Oxford. 852-861.
- Day, A. and McWilliams, P. (eds.) 1992. *Ordnance Survey Memoirs of Ireland. Volume Seventeen. Parishes of County Down IV. 1833-7. East down and Lecale*, The Institute of Irish Studies, Queen's University Belfast (in association with the Royal Irish Academy), Belfast.
- Dickinson, C.W. and Waterman, D.M. 1959. Excavation of a rath with motte at Castleskreen, Co. Down, *Ulster J. Archaeol.* 22 (third ser.) 67-82.
- Dubourdieu, J. 1802. *Statistical Survey of the County of Down, with Observations on the Means of Improvement; Drawn Up for the Consideration, and by Order of the Dublin Society*, Graisberry and Campbell, Dublin.
- Edwards, N. 1990. *The Archaeology of Early Medieval Ireland*, B.T.Batsford Ltd, London.
- Evans, E.E. 1957. *Irish Folk Ways*, Routledge & Kegan Paul, London.

Flanagan, D. 1971. The names of Downpatrick, *Dinnseanchas* 4, 89-112.

Geological Survey of Northern Ireland 1997. *Geological Map of Northern Ireland. Scale 1:250000. Solid Geology*, (second edition), British Geological Survey, Nottingham.

Gosling, P., MacMahon, B. and Roden, C. 2010. Nausts, púcáns and ‘mallúirs’, *Archaeol. Ir.* 93, 30-34.

Harris, W. 1744. *The antient and present state of the county of Down. Containing a chorographical description, with the natural and civil history of the same. Illustrated by observations made on the baronies, parishes, towns, villages churches, abbeys, charter schools, mountains, rivers, lakes, medicinal and other springs, &c. with a survey of the new canal; as also a new and correct map of the county*, Edward Exshaw, Dublin.

Herity, M. (ed.) 2001. *Ordnance Survey Letters Down. Letters Containing Information Relative to the Antiquities of the County Down Collected During the Progress of the Ordnance Survey in 1834*, Four Masters Press, Dublin.

Jarrett, M.G. 1969. Cardiff, in V.E.Nash-Williams. *The Roman Frontier in Wales*, (second edition, revised by M.G.Jarrett) University of Wales Press, Cardiff. 70-72.

Lawlor, H.C. 1919-20. Excavations at the mound and on the site of Rathkeltchar, Downpatrick, *Proc. Belfast Nat. Hist. Phil. Soc.* (1919-20), 105-120.

Lawlor, H.C. 1928. *Ulster: Its Archaeology and Antiquities*, R.Carswell & Son, Belfast.

Lawlor, H.C. 1936. Find of Anglo-Norman fictilia at Downpatrick, *Irish Natur. J.* 6, 118-119.

Llyn, C.J. 1981-82. The excavation of Rathmullan, a raised rath and motte in County Down, *Ulster J. Archaeol.* 44-45 (third ser.), 65-171.

MacAirt, S. and MacNiocaill, G. (eds) 1983. *The Annals of Ulster (to A.D.1131)*, Dublin Institute for Advanced Studies, Dublin.

Macdonald, P. 2008. Archaeological evaluation of the inaugural landscape of Crew Hill (Cráeb Telcha), County Antrim, *Ulster J. Archaeol.* 67, 84-106.

McErlean, T. 2002. Early medieval period, c.400-1177, in T.McErlean, R.McConkey and W.Forsythe, *Strangford Lough. An Archaeological Survey of the Maritime Cultural Landscape*, (Northern Ir. Archaeol. Mono. No.1) Blackstaff Press, Belfast. 57-90.

McKay, P. 2007. *A Dictionary of Ulster Place-Names*, (second edition) Cló Ollscoil na Banríona, Belfast.

McNeill, T.E. 1980. *Anglo-Norman Ulster. The History and Archaeology of an Irish Barony, 1177-1400*, John Donald, Edinburgh.

- McNeill, T. 1981. *Carrickfergus Castle, County Antrim*, (Northern Ir. Archaeol. Mono. No.1) Her Majesty's Stationery Office, Belfast.
- Meek, M. 1984. Mound of Down, Downpatrick, *Lecale Misc.* 2, 26-27.
- Ordnance Survey of Northern Ireland 1994. *Strangford Lough. Sheet 21. Soil Map. 1:50000*, Ordnance Survey of Northern Ireland (for the Department of Agriculture for Northern Ireland), Belfast.
- O'Laverty, J. 1878. *An historical account of the Diocese of Down and Connor, ancient and modern. Vol.1*, James Duffy & Sons, Dublin.
- Orpen, G.H. 1911. *Ireland Under the Normans 1169-1216. Vol.II*, Clarendon Press, Oxford.
- Parkinson, R.E. (ed.) 1928. *The City of Downe from its Earliest Days by the Late Edward Parkinson*, W.Erskine Mayne, Belfast.
- Power, D. 2010. 'Find, identify and record' *Archaeol. Ir.* 91, 12-15.
- Reeves, W. 1847. *Ecclesiastical Antiquities of Down, Connor, and Dromore, Consisting of a Taxation of those Dioceses, Compiled in the Year MCCCVI.; with Notes and Illustrations*, Hodges and Smith, Dublin.
- Reeves, W. 1854. Irish itinerary of Father Edmund MacCana. Translated from the original Latin and illustrated by notes, *Ulster J. Archaeol.* (fir. ser.) 2, 45-59.
- Ryan, M. 1973. Native pottery in early historic Ireland, *Proc. Roy. Ir. Acad.* 73C, 619-645.
- Scott, A.B. and Martin, F.X. (eds) 1978. *Expugnatio Hibernica. The Conquest of Ireland by Giraldus Cambrensis*, Royal Irish Academy, Dublin.
- Stout, M. 1997. *The Irish Ringfort*, (Irish Settlement Stud. No.5), Four Courts Press (in association with the Group for the Study of Irish Historic Settlement), Dublin.
- Tait, I. 2012. *Shetland Vernacular Buildings 1600-1900*, The Shetland Times, Lerwick.
- Warner, R. 2000. *Clogher: an archaeological window on early medieval Tyrone and mid Ulster*, in C.Dillon and H.Jefferies (eds), Tyrone: History and Society, Geography Publications, Dublin. 39-54.
- Warner, R. 2009. Clogher in late prehistory, in G.Cooney, K.Becker, J.Coles, M.Ryan and S.Sievers (eds), *Relics of Old Decency: Archaeological Studies in Later Prehistory. Festschrift for Barry Raftery*, Wordwell, Dublin. 507-518.
- Waterman, D.M. 1954a. Excavations at Clough Castle, Co. Down, *Ulster J. Archaeol.* 17 (third ser.), 105-163.
- Waterman, D.M. 1954b. Excavations at Dromore Motte, Co. Down, *Ulster J. Archaeol.* 17 (third ser.), 164-168.

Waterman, D.M. 1959. Excavations at Lismahon, Co. Down, *Medieval Arch.* 3, 139-176.

Wilson, A. 1995. *Saint Patrick's Town*, Isabella Press, Belfast.

Appendix 1: Context List

Trench 1

<i>Context No.</i>	<i>Description</i>
101	Sod
102	Silty loam (cultivation soil)
103	Redeposited boulder clay within cultivation soil (102)
104	Surface of natural subsoil (truncation caused by spade cultivation)
105	Natural subsoil: boulder clay
106	Possible cut feature (excavation demonstrated was not real – equivalent to 104)
107	Silty loam; possible fill of cut feature 106 (excavation demonstrated was not real – equivalent to 102)

Trench 2

<i>Context No.</i>	<i>Description</i>
201	Sod
202	Silty clay (slump from outer ditch edge)
203	Humic silty loam topsoil
204	Silty sand (slump from outer ditch edge)
205	Compacted silty clay (base of topsoil compacted by use of mechanical grass cutters)
206	Gravel-rich silty clay (slump from outer ditch edge) (fill of context 220)
207	Gravel-rich silty clay (slump from motte/mound) (fill of context 220)
208	Silty clay (fill of context 220)
209	Silty clay (fill of context 220)
210	Gravel-rich silty clay (slump from motte/mound) (fill of context 220)
211	Clay (fill of context 220)
212	Silty clay (fill of context 220)
213	Gravel-rich silty clay (possible slump from outer ditch edge) (fill of context 220)
214	Gravel and small stones in sandy clay soil matrix (slump from outer ditch edge) (fill of context 220)
215	Voided clay containing large stones (fill of context 220)
216	Silty clay with numerous small stones (possible slump from motte/mound or degraded edge of ditch) (fill of context 220)
217	Gravel and small stones in sandy clay soil matrix (slump from outer ditch edge) (fill of context 220)
218	Voided clay containing large stones (basal fill of context 220)
219	Silty clay (slump from outer ditch edge)
220	Cut feature: motte/mound ditch
221	Natural subsoil: boulder clay

Trench 3

<i>Context No.</i>	<i>Description</i>
301	Sod
302	Sandy clay (slump from motte/mound) (fill of context 313)
303	Silty clay (fill of context 313)
304	Natural subsoil: boulder clay
305	Humic sandy clay (topsoil / cultivation soil)
306	Silty clay (fill of context 308)
307	Humic sandy clay (topsoil / cultivation soil)
308	Cut feature
309	Stone-rich sandy loam (slump from motte/mound) (fill of context 313)
310	Silty clay (fill of context 313)
311	Stone-rich sandy loam (slump from motte/mound) (fill of context 313)
312	Silty clay with large stone inclusions (primary fill of context 313)
313	Cut feature: eighteenth- or nineteenth-century re-cut of motte/mound ditch

Trench 4

<i>Context No.</i>	<i>Description</i>
401	Sod
402	Humic silty loam topsoil
403	Silty clay loam (cultivation soil) at foot of bank
404	Gravel deposit in sandy clay soil matrix (bank material)
405	Sandy clay loam (bank slump)
406	Redeposited sandy loam (bank material)
407	Large stones in clay soil matrix (bank material)
408	Gravel deposit in sandy clay loam soil matrix (bank material)
409	Small stones in sandy loam soil matrix (bank material)
410	Gravel deposit in sandy clay soil matrix (bank material)
411	Buried soil: humic silty clay loam
412	Silty clay loam (cultivation soil)
413	Silty clay loam (fill of context 414)
414	Cut feature
415	Surface of subsoil: disturbed by cultivation
416	Natural subsoil: boulder clay

Test Pit 5

<i>Context No.</i>	<i>Description</i>
501	Sod
502	Silty clay loam (cultivation soil)
503	Surface of natural subsoil (truncation caused by spade cultivation)
504	Natural subsoil: boulder clay

Test Pit 6

<i>Context No.</i>	<i>Description</i>
601	Sod
602	Silty clay loam (cultivation soil)
603	Surface of natural subsoil (truncation caused by spade cultivation)
604	Natural subsoil: boulder clay

Test Pit 7

<i>Context No.</i>	<i>Description</i>
701	Sod
702	Silty clay loam (cultivation soil)
703	Surface of natural subsoil (truncation caused by spade cultivation)
704	Natural subsoil: boulder clay

Test Pit 8

<i>Context No.</i>	<i>Description</i>
801	Sod
802	Silty clay loam (cultivation soil)
803	Surface of natural subsoil (truncation caused by spade cultivation)
804	Natural subsoil: boulder clay

Test Pit 9

<i>Context No.</i>	<i>Description</i>
901	Sod
902	Silty clay loam (cultivation soil)
903	Surface of natural subsoil (truncation caused by spade cultivation)
904	Natural subsoil: boulder clay

Test Pit 10

<i>Context No.</i>	<i>Description</i>
1001	Sod
1002	Silty clay loam (cultivation soil)
1003	Surface of natural subsoil (truncation caused by spade cultivation)
1004	Natural subsoil: boulder clay

Test Pit 11

<i>Context No.</i>	<i>Description</i>
1101	Sod
1102	Silty clay loam (cultivation soil)
1103	Surface of natural subsoil (truncation caused by spade cultivation)
1104	Natural subsoil: boulder clay

Test Pit 12

<i>Context No.</i>	<i>Description</i>
1201	Sod
1202	Silty clay loam (cultivation soil)
1203	Surface of natural subsoil (truncation caused by spade cultivation)
1204	Natural subsoil: boulder clay

Test Pit 13

<i>Context No.</i>	<i>Description</i>
1301	Sod
1302	Silty clay loam (cultivation soil)
1303	Surface of natural subsoil (truncation caused by spade cultivation)
1304	Natural subsoil: boulder clay

Test Pit 14

<i>Context No.</i>	<i>Description</i>
1401	Sod
1402	Silty clay loam (cultivation soil)
1403	Surface of natural subsoil (truncation caused by spade cultivation)
1404	Natural subsoil: boulder clay

Test Pit 15

<i>Context No.</i>	<i>Description</i>
1501	Sod
1502	Silty clay loam (cultivation soil)
1503	Surface of natural subsoil (truncation caused by spade cultivation)
1504	Natural subsoil: boulder clay

Test Pit 16

<i>Context No.</i>	<i>Description</i>
1601	Sod
1602	Silty clay loam (cultivation soil)
1603	Surface of natural subsoil (truncation caused by spade cultivation)
1604	Natural subsoil: boulder clay

Test Pit 17

<i>Context No.</i>	<i>Description</i>
1701	Sod
1702	Silty clay loam (probable topsoil / possible cultivation soil)
1703	Surface of natural subsoil (possible truncation caused by spade cultivation)
1704	Natural subsoil: boulder clay

Test Pit 18

<i>Context No.</i>	<i>Description</i>
1801	Sod
1802	Silty clay loam (probable topsoil / possible cultivation soil)
1803	Surface of natural subsoil (possible truncation caused by spade cultivation)
1804	Natural subsoil: boulder clay

Test Pit 19

<i>Context No.</i>	<i>Description</i>
1901	Sod
1902	Silty clay loam (cultivation soil)
1903	Surface of natural subsoil (truncation caused by spade cultivation)
1904	Natural subsoil: boulder clay

Test Pit 20

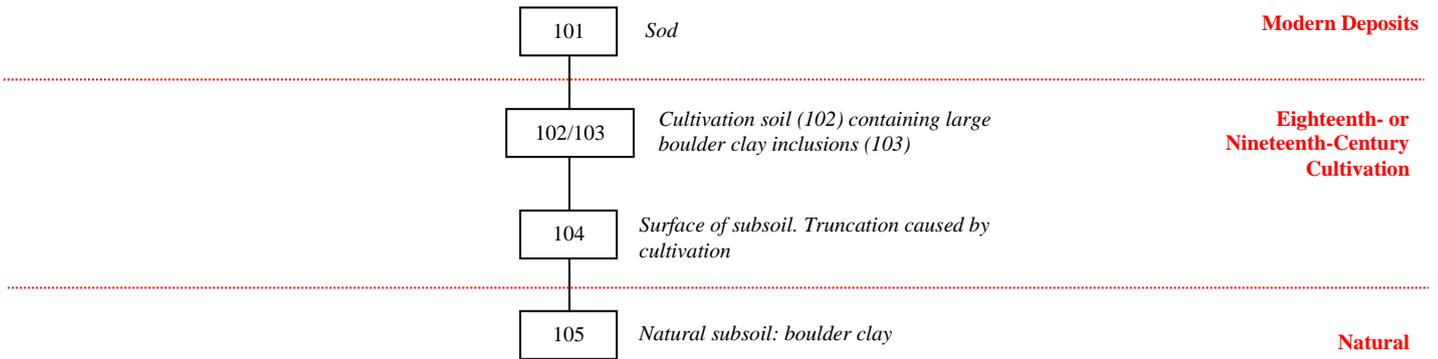
<i>Context No.</i>	<i>Description</i>
2001	Sod
2002	Silty clay loam (cultivation soil)
2003	Surface of natural subsoil (truncation caused by spade cultivation)
2004	Natural subsoil: boulder clay

Test Pit 21

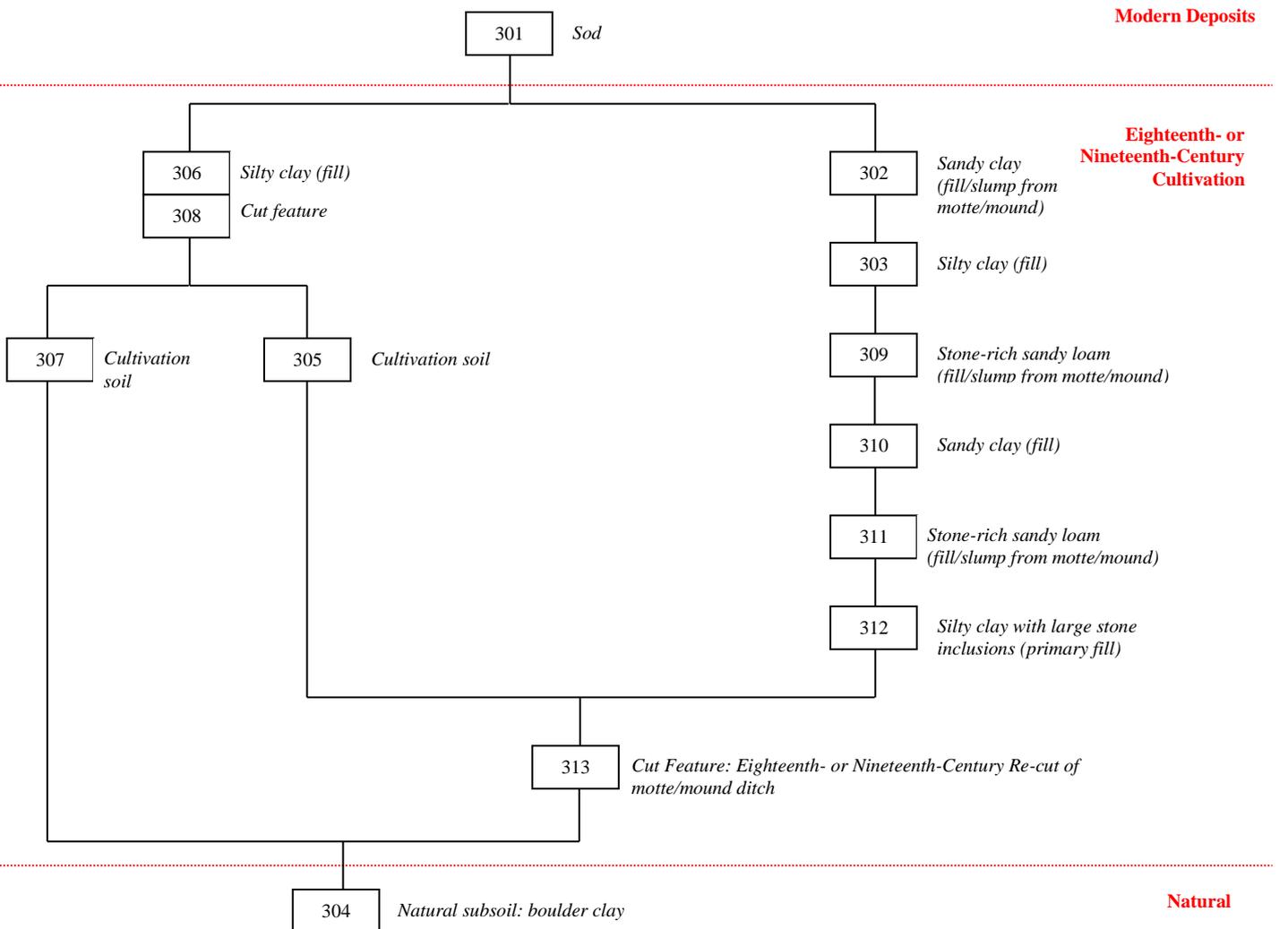
<i>Context No.</i>	<i>Description</i>
2101	Sod
2102	Silty clay loam (cultivation soil)
2103	Surface of natural subsoil (truncation caused by spade cultivation)
2104	Natural subsoil: boulder clay

Appendix 2: Harris Matrices

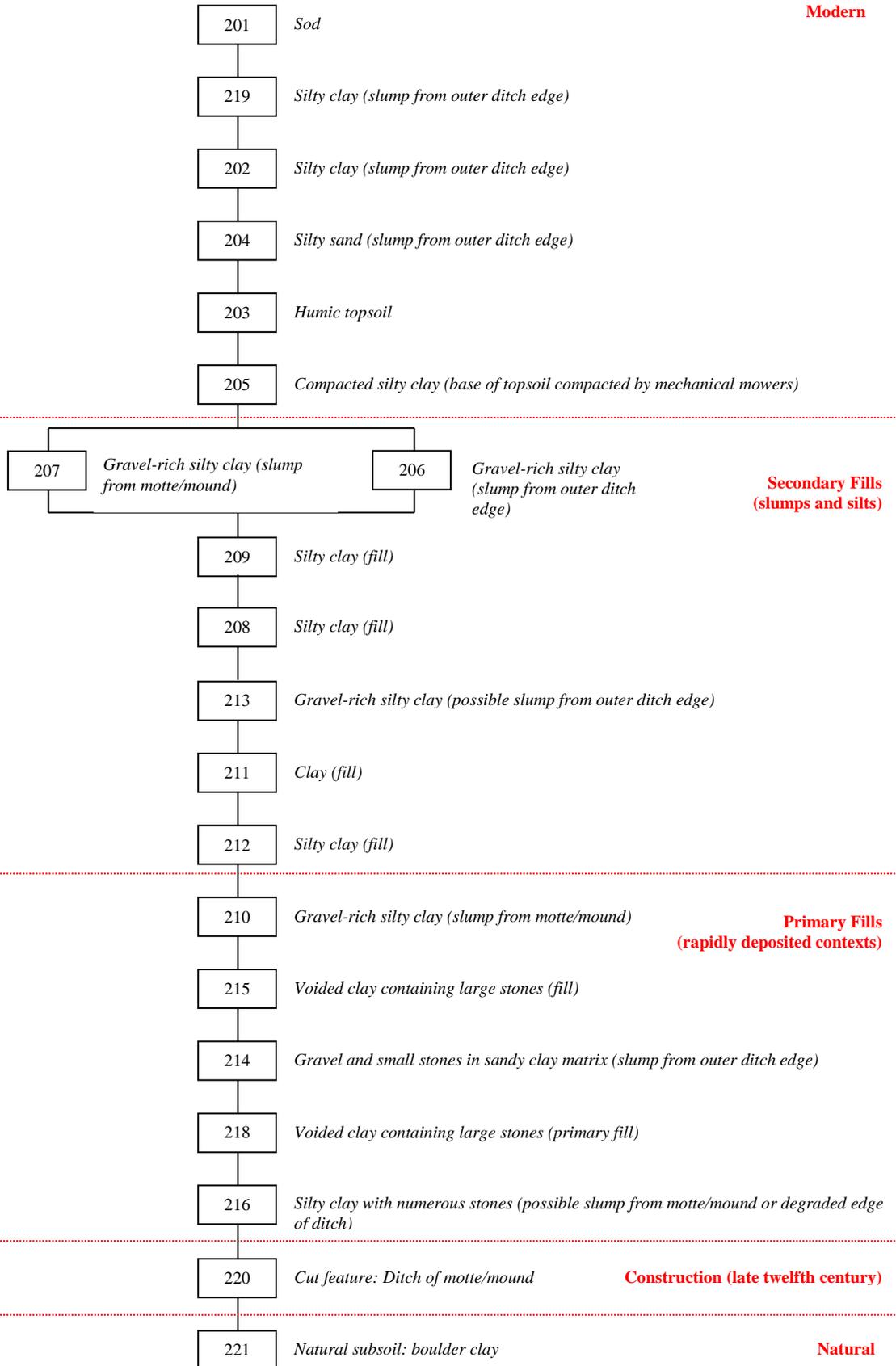
Trench 1



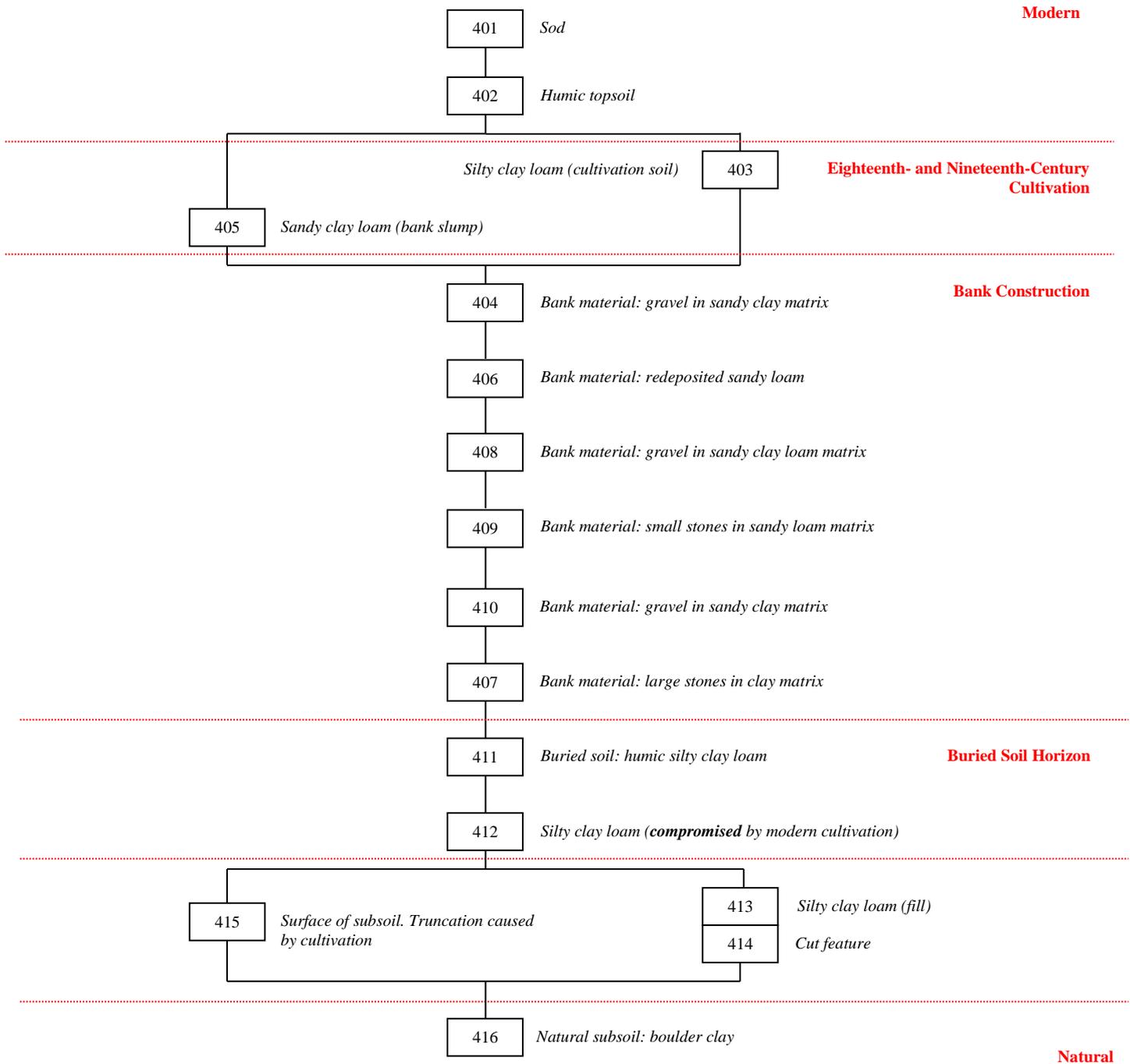
Trench 3



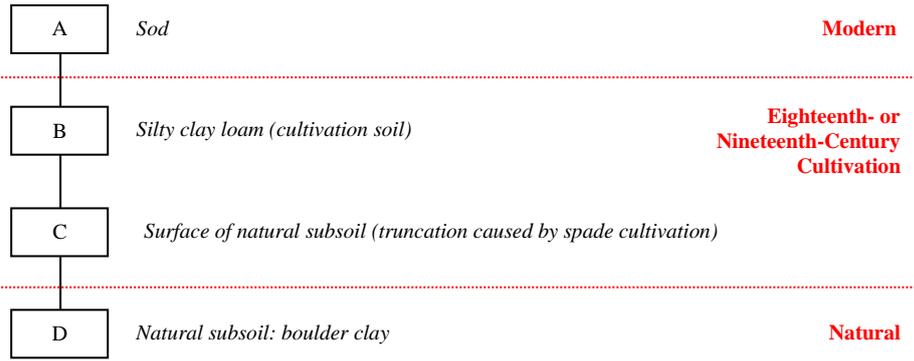
Trench 2



Trench 4



Test Pits 5-16, 19-21

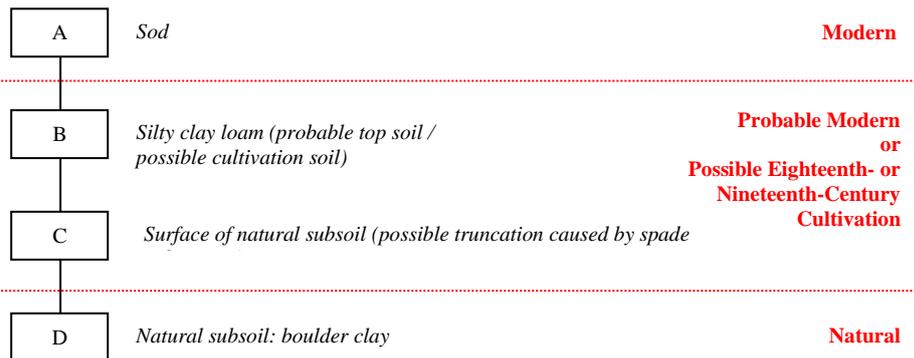


Context	Test Pit 5	Test Pit 6	Test Pit 7	Test Pit 8	Test Pit 9	Test Pit 10	Test Pit 11	Test Pit 12
A	501	601	701	801	901	1001	1101	1201
B	502	602	702	802	902	1002	1102	1202
C	503	603	703	803	903	1003	1103	1203
D	504	604	704	804	904	1004	1104	1204

Context	Test Pit 13	Test Pit 14	Test Pit 15	Test Pit 16	Test Pit 19	Test Pit 20	Test Pit 21
A	1301	1401	1501	1601	1901	2001	2101
B	1302	1402	1502	1602	1902	2002	2102
C	1303	1403	1503	1603	1903	2003	2103
D	1304	1404	1504	1604	1904	2004	2104

Table 000: Context concordance table for Test Pits 5-16, 19-21.

Test Pits 17-18



Context	Test Pit 17	Test Pit 18
A	1701	1801
B	1702	1802
C	1703	1803
D	1704	1804

Table 000: Context concordance table for Test Pits 17-18.

Appendix 3: Photographic Record

[All images taken with either a Panasonic DMC-TZ20 or a Nikon Coolpix 4500 digital camera]

12th March 2012

- 1-2 Northern entrance, prior to clearance, looking northeast [P1000840-1000841]
3-4 Northern entrance, prior to clearance, looking southeast [P1000842-1000843]
5-23 Northern entrance, prior to clearance, looking east (series of images intended to make up mosaic image)
[P1000844-1000861]
24-27 Northern entrance, prior to clearance, looking north [P1000862-1000865]
28 Northern entrance, prior to clearance, looking south [P1000866]
29 Northern entrance, clearance in progress [P1000867]
30-34 Trench 1, prior to excavation, looking east [P1000868-1000872]
35-36 Trench 3, prior to excavation, looking east [P1000873-1000874]
37 Trench 3, prior to excavation, looking north ('motte' ditch) [P1000875]
38 Trench 3, prior to excavation, looking south ('motte' ditch) [P1000876]
39-40 Trench 3, prior to excavation, looking west [P1000877-1000878]
41-42 Northern entrance, clearance in progress [P1000879-1000880]
43-44 Trench 3, following excavation of sod (301), exposing cultivation soil (305 and 307), fill (306) of linear feature
(308) and upper fills (302 and 303) of 'motte' ditch (313), looking east [P1000881-1000882]
45 Trench 3, following excavation of sod (301), exposing upper fills (302 and 303) of 'motte' ditch (313), looking
north [P1000883]
46 Trench 3, following excavation of sod (301), exposing fill (306) of linear cut feature (308), looking north
[P1000884]
47-60 Various shots of the 'terrace' feature abutting the external, western edge of the enclosure [P1000885-P1000898]

13th March 2012

- 1-2 Trench 1, following excavation of sod (101) exposing surface of cultivation soil (102 and 103), looking east
[100_4273 - 100_4274]
3 Trench 3, northeast-facing section of sondage through linear cut feature (308), looking southwest [100_4280]
4 Trench 3, southwest-facing section of sondage through linear cut feature (308), looking northeast [100_4281]
5 Trench 3, following excavation of sondage through linear cut feature (308), looking west [100_4282]
6 Trench 3, following excavation of sondage through linear cut feature (308), looking east [100_4283]

14th March 2012

- 1-2 Trench 3, following excavation of greyish brown sandy silty clay fill (306) of cut feature (308), looking north
[P1000899-1000900]
4-6 Trench 3, following excavation of greyish brown sandy silty clay fill (306) of cut feature (308), looking south
[P1000901-1000904]

- 7 Trench 3, following excavation of greyish brown sandy silty clay fill (306) of cut feature (308), looking east [P1000905]
- 9 Trench 3, following excavation of greyish brown sandy silty clay fill (306) of cut feature (308), looking north [P1000906]
- 10-11 Trench 3, following excavation of greyish brown sandy silty clay fill (306) of cut feature (308), looking east [P1000907-1000908]
- 12 Trench 3, following excavation of greyish brown sandy silty clay fill (306) of cut feature (308), looking south [P1000909]
- 13 Trench 3, following excavation of greyish brown sandy silty clay fill (306) of cut feature (308), looking northeast [100_4284]
- 14-15 Trench 3, following excavation of greyish brown sandy silty clay fill (306) of cut feature (308), looking south [100_4285 – 100_4286]

15th March 2012

- 1-9 Trench 1, following excavation of cultivation soil (102/103) exposing surface (104) of subsoil, looking east [P1000910-1000918]
- 10-21 Trench 1, following excavation of cultivation soil (102/103) exposing surface (104) of subsoil, looking north (series of images, running from west to east, intended to make up mosaic image) [P1000919-1000930]
- 22-24 Excavation of Trench 3 in progress, looking northwest from an elevated position [P1000931-1000933]
- 25-26 Excavation of Trench 3 in progress, looking north from an elevated position [P1000934-1000935]
- 27-28 The 'motte' from an elevated position, looking north [P1000936-1000937]
- 29-31 Excavation of Trench 3 in progress, looking south from an elevated position [P1000938-1000940]
- 32-33 Enamelled tin button decorated with a Masonic symbol (Small Find No.1099) [P1000941-1000942]
- 34 Trench 1, south-facing section of sondage cut into natural subsoil (105), looking north [100_4287]
- 35 Trench 1, west-facing section of sondage cut into natural subsoil (105), looking east [100_4289]
- 36 Trench 1, north-facing section of sondage cut into natural subsoil (105), looking south [100_4290]
- 37 Trench 1, east-facing section of sondage cut into natural subsoil (105), looking west [100_4291]

17th March 2012

- 1 Trench 2, prior to excavation, looking southeast [P1000943]
- 2 Trench 2, prior to excavation, looking southwest [P1000944]
- 3-4 Trench 2, prior to excavation, looking southeast (series of images intended to make up mosaic image) [P1000945-1000946]
- 5-8 Trench 3, following excavation of slump ditch fill (302), looking north [P1000947-1000950]
- 9 Trench 3, following excavation of slump ditch fill (302), looking east [P1000951]
- 10-12 Trench 3, following excavation of slump ditch fill (302), looking north [P1000952 and 100_4292 – 100_4293]
- 13 Trench 3, following excavation of slump ditch fill (302), looking south [100_4296]
- 14 Trench 1, box cut through natural boulder clay subsoil at western end of trench, looking west [P1000953]
- 15-16 Trench 1, box cut through natural boulder clay subsoil at western end of trench, looking south [P1000954-1000955]

- 17 Trench 1, box cut through natural boulder clay subsoil at western end of trench, looking north [P1000956]
18-20 Trench 2, following excavation of sod (201), looking northwest (series of images, running from southwest to northeast, intended to make up mosaic image) [P1000957-1000959]
21-27 Trench 3, following excavation of slump ditch fill (309), looking east [P1000960-1000965 and 100_4297]
28-30 Trench 3, following excavation of slump ditch fill (309), looking north [P1000966-1000968]

18th March 2012

- 1 Surveying at the Mound of Down [P1000969]
2-9 Downpatrick Young Archaeologists' Club excavating Test Pits 5-7 [P1000970-1000977]
10-11 Test Pit 7 following excavation, looking northwest [P1000978-1000979]
12 Trench 4, prior to excavation, looking east [100_4301]

19th March 2012

- 1-9 The Mound of Down from the west [P1000980-1000985, P1000987-1000989]
10 Trench 3, final excavation photograph showing labelled ditch section, looking north [P1000994]
11-14 Trench 3, final excavation photograph from an elevated position, looking east [P1000995-1000998]
15-17 Trench 3, final excavation photograph, looking eastnortheast [P1000999, P1010001-1010002]
18-26 Trench 3, final excavation photograph, looking north (series of images, running from east to west, intended to make up mosaic image) [P1010003-1010011]
27-30 Trench 3, final excavation photograph, looking southeast [P1010012-1010015]
31 Trench 3, final excavation photograph of eastern half of trench, looking east [P1010016]
32 Trench 3, final excavation photograph showing ditch section, looking south [P1010017]
33-41 Trench 3, final excavation photograph, looking south (series of images, running from east to west, intended to make up mosaic image) [P1010018-1010026]
42 Trench 3, final excavation photograph, looking east [P1010027]
43-48 Trench 4, excavation in progress [P1010028-1010033]
49 Trench 2, excavation in progress [P1010034]
50-52 Trench 4, following excavation of topsoil (402), looking east [P1010035-1010036 and 100_4302]
53-54 Trench 4, following excavation of topsoil (402), looking southeast [P1010037-1010038]
55-56 Trench 4, following excavation of topsoil (402), looking northeast [P1010039-1010040]

20th March 2012

- 1-5 Excavating test pits with primary school children [P1010041-1010045]
6 Ken Pullin (Ulster Archaeological Society) visiting excavations [P1010046]
7 Test Pit 11, final excavation photograph, looking northeast [P1010047]
8 Test Pit 12, final excavation photograph, looking northeast [P1010048]
9 Test Pit 10, final excavation photograph, looking southeast [P1010049]
10 Test Pit 9, final excavation photograph, looking northeast [P1010050]
11 Test Pit 8, final excavation photograph, looking northeast [P1010051]

12 Test Pit 5, final excavation photograph, looking northeast [P1010052]

21st March 2012

1 Test Pit 18, final excavation photograph, looking northeast [P1010053]

2 Test Pit 17, final excavation photograph, looking east [P1010054]

3 Test Pit 16, final excavation photograph, looking east [P1010055]

4 Test Pit 15, final excavation photograph, looking north [P1010056]

5 Test Pit 14, final excavation photograph, looking east [P1010057]

6 Excavation of test pits in progress, looking south [P1010058]

7 Test Pit 13, final excavation photograph, looking south [P1010059]

22nd March 2012

1 Test Pit 6, final excavation photograph, looking northeast [P1010060]

2 Test Pit 19, final excavation photograph, looking northeast [P1010061]

3 Test Pit 20, final excavation photograph, looking northeast [P1010062]

4 Test Pit 21, final excavation photograph, looking east [P1010063]

5-6 Trench 4, following excavation of silty clay loam at base of bank (403), looking northeast [P1010064-1010065]

7-8 Trench 4, following excavation of silty clay loam at base of bank (403), looking east [P1010066-1010067]

9-10 Trench 4, following excavation of silty clay loam at base of bank (403), looking southeast [P1010068-1010069]

23rd March 2012

1 Trench 3, following excavation of sondage cut into the natural subsoil (304), looking east [100_4303]

2-3 Trench 3, following excavation of sondage cut into the natural subsoil (304), looking west [100_4304 – 100_4305]

27th March 2012

1-2 Trench 4, following excavation of gravel-rich bank material (410), looking northeast [P1010070-1010071]

3-4 Trench 4, following excavation of gravel-rich bank material (410), looking east [P1010072-1010073]

5-6 Trench 4, following excavation of gravel-rich bank material (410), looking southeast [P1010074-1010075]

7 Trench 4, west-facing section, following excavation of gravel-rich bank material (410), looking east [P1010076]

8 Trench 2, prior to excavation of 'stepped' extension, following excavation of basal fill of voided clay with large stones (218), looking northwest [P1010077]

9-13 Trench 2, prior to excavation of 'stepped' extension, following excavation of basal fill of voided clay with large stones (218), looking northwest (series of images, running from southwest to northeast, intended to make up mosaic image) [P1010078-1010082]

- 14 Trench 2, prior to excavation of 'stepped' extension, following excavation of basal fill of voided clay with large stones (218), looking west [P1010083]
- 15 Trench 2, prior to excavation of 'stepped' extension, following excavation of basal fill of voided clay with large stones (218), looking northeast [P1010084]
- 16 Trench 2, prior to excavation of 'stepped' extension, following excavation of basal fill of voided clay with large stones (218), looking west [P1010085]
- 17 Trench 2, prior to excavation of 'stepped' extension, following excavation of basal fill of voided clay with large stones (218), looking west [P1010086]
- 18 Trench 2, prior to excavation of 'stepped' extension, following excavation of basal fill of voided clay with large stones (218), looking west [P1010087]

28th March 2012

- 1-2 Trench 4, following excavation of basal bank material (407), looking northeast [P1010088-1010089]
- 3-4 Trench 4, following excavation of basal bank material (407), looking east [P1010090-1010091]
- 5-6 Trench 4, following excavation of basal bank material (407), looking southeast [P1010092-1010093]
- 7-14 Trench 4, north-facing section, following excavation of basal bank material (407), looking south (series of images, running from east to west, intended to make up mosaic image) [P1010094-1010101]
- 15-20 Trench 4, south-facing section, following excavation of basal bank material (407), looking north (series of images, running from east to west, intended to make up mosaic image) [P1010102-1010107]
- 21-22 Trench 2 'stepped' extension prior to excavation, looking northeast [P1010108-1010109]

29th March 2012

- 1-4 Trench 4, following excavation of buried soil horizon (411 and 412), looking east [P1010110-1010111 and 100_4306-4307]
- 5-7 Trench 4, following excavation of buried soil horizon (411 and 412), looking southeast [P1010112-1010113 and 100_4309]
- 8-10 Trench 4, following excavation of buried soil horizon (411 and 412), looking northeast [P1010114-1010115 and 100_4308]
- 11 Trench 4, linear cut feature (414) prior to excavation, looking south [100_4310]
- 12-16 Trench 4, linear cut feature (414) prior to excavation, looking northeast [P1010116-1010117 and 100_4311 – 100_4313]
- 17-19 Trench 4, excavation in progress, site visit from Liam McQuillan [P1010118-1010120]
- 20-24 Trench 4, following excavation of cutting across linear cut feature (414), looking northeast [P1010121-1010123 and 100_4316 – 100_4317]
- 25-28 Trench 4, linear cut feature (414) prior to excavation, looking southwest [P1010124-1010125 and 100_4314 – 100_4315]

30th March 2012

- 1-2 Trench 2 'stepped' extension following excavation, looking northeast [P1010126-1010127]

- 3-4 Trench 2 'stepped' extension following excavation, looking northwest [P1010128-1010129]
5-6 Trench 4 following excavation, looking east [P1010130-1010131]
7-8 Trench 4, linear cut feature (414) following excavation, looking northeast [P1010132-1010133]
9-10 Trench 4 following excavation, looking east [P1010134-1010135]
11-12 Trench 4 following excavation, looking southeast [P1010136-1010137]
13-14 Trench 4 following excavation, looking northeast [P1010138-1010139]
15-17 Trench 4 following excavation, looking east [P1010140 and 100_4318 – 100_4319]
18-20 Trench 4, west-facing section following excavation, looking east [P1010141 and 100_4327 – 100_4328]
21-25 Trench 4, south-facing section following excavation, looking north [100_4320 – 100_4322 and 100_4325 – 100_4326]
26-27 Trench 4, south-facing section following excavation, looking northeast [100_4323 – 100_4324]

4th April 2012

- 1-9 Surveying in progress [P1010142-1010150]

5th April 2012

- 1 Test Pit 22, final excavation photograph, looking north [P1010151]
2 Excavation in progress [P1010152]
3 Test Pit 23, final excavation photograph, looking west [P1010153]
4-6 Surveying in progress [P1010154-1010156]

Appendix 4: Field Drawing Register

<i>Drawing No.</i>	<i>Date</i>	<i>Scale</i>	<i>Type</i>	<i>Description</i>
1	7.3.12	1:50	Plan	Grid Layout. Geophysics/Excavation concordance (showing position of Trenches 1 and 3)
2	13.3.12	1:10	Section	Trench 3, northeast-facing section of sondage cut through linear feature (308) (showing context 306)
3	13.3.12	1:10	Section	Trench 3, southwest-facing section of sondage cut through linear feature (308) (showing context 306)
4	14.3.12	1:20	Plan	Trench 3, following excavation of linear feature (308) (showing contexts 302, 303, 304, 305, 307 as well as 308)
5	15.3.12	1:20	Plan	Trench 1, following excavation of cultivation soil (102/103) (showing contexts 104 and 105; and possible contexts 106 and 107)
6	16.3.12	1:10	Section	Trench 1, west-facing section of possible feature (106) (showing possible context 107)
7	16.3.12	1:20	Plan	Trench 1, following excavation of possible feature (106)
8	22.3.12	1:20	Section	Trench 3, south-facing section (showing contexts 301, 302, 303, 305, 306, 307, 308, 309, 310, 311, 312 and 313)
9	22.3.12	1:20	Plan	Trench 3, final post-excavation plan (showing features 308 and 313 cut into subsoil (304))
10	28.3.12	1:10	Section	Trench 2, southeast-facing section (showing contexts 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217 and 218)
11	28.3.12	1:20	Plan	Trench 4, following partial excavation of primary bank material (407) (showing contexts 407, 411 and 412)
12	29.3.12	1:20	Plan	Trench 4, following excavation of buried soil horizon (411) (showing contexts 413, 414, 415 and 416)
13	29.3.12	1:10	Section	Trench 4, northeast-facing section of sondage cut into negative feature (414) (showing context 413)
14	29.3.12	1:10	Section	Trench 4, southwest-facing section of sondage cut into negative feature (414) (showing context 413)
15	30.3.12	1:20	Plan	Trench 4, overlay of No.12 following excavation of negative feature (414) cut into natural subsoil (416)
16	30.3.12	1:10	Section	Trench 2, southeast-facing section of stepped extension (showing contexts 201, 202, 204, 205, 206, 213, 214, 217 and 219)
17	30.3.12	1:10	Section	Trench 2, northwest-facing section of stepped extension (showing contexts 201, 202, 204, 206, 213, 214, 217 and 219)
18	30.3.12	1:10	Section	Trench 4, south-facing section (showing contexts 401, 402, 403, 404, 405, 406, 407, 408, 410, 411, 412, 413 and 414)
19	30.3.12	1:10	Section	Trench 4, west-facing section (showing contexts 401, 402, 404, 406, 407, 408, 409, 410 and 411)
20	30.3.12	1:20	Plan	Trench 2, final post-excavation plan showing ditch of mound cut through subsoil

Appendix 5: Small Finds Register

<i>Small Find No.</i>	<i>Trench / Test Pit No.</i>	<i>Context No.</i>	<i>Description</i>
1001	3	301	Brick fragment
1002	3	301	'Slate' pencil
1003	1	101	Pot sherd
1004	1	101	Pot sherd
1005	1	101	Slate fragment
1006	1	101	Flint
1007	3	306	Slate fragment
1008	1	101	Glass
1009	3	306	Pot sherd (blue and white: Victorian)
1010	3	306	Pot sherd (white glazed)
1011	1	102	Clay pipe fragment
1012	1	102	Clay pipe fragment
1013	1	102	Ironwork
1014	1	102	Glass
1015	1	102	Brick fragment
1016	1	102	Pot sherd
1017	1	102	Burnt flint
1018	3	306	Pot sherd (brown glazed)
1019	1	102	Glass
1020	1	102	Glass
1021	1	102	Burnt bone
1022	1	102	Burnt bone
1023	1	102	Pot sherd
1024	1	102	Flint
1025	1	102	Ironwork
1026	1	102	Clay pipe fragment
1027	1	102	Brick fragment
1028	3	306	Brick fragment
1029	3	306	Burnt flint
1030	3	306	Coal
1031	3	306	Pot sherd
1032	3	306	Glass
1033	1	102	Glass
1034	1	102	Brick fragment
1035	1	102	Pot sherd (handle)
1036	1	102	Pot sherd
1037	1	102	Pot sherd
1038	1	102	Brick fragment

<i>Small Find No.</i>	<i>Trench / Test Pit No.</i>	<i>Context No.</i>	<i>Description</i>
1039	1	102	Glass
1040	1	102	Flint
1041	1	102	Pot sherd
1042	1	102	Pot sherd
1043	1	102	Pot sherd
1044	1	102	Pot sherd
1045	3	306	Brick fragment
1046	3	306	Pot sherd (white glazed)
1047	3	306	Ironwork?
1048	3	306	Burnt stone
1049	3	306	Ironwork?
1050	3	306	Pot sherd (black glazed)
1051	3	306	Worked flint flake
1052	1	104	Clinker / coal
1053	1	104	Clinker / coal
1054	1	104	Clinker / coal
1055	1	104	Clinker / coal
1056	1	104	Pot sherd
1057	1	104	Flint
1058	1	104	Pot sherd (blue and white: Victorian)
1059	1	104	Pot sherd
1060	1	104	Glass
1061	1	104	Flint
1062	1	104	Coal
1063	1	104	Coal
1064	1	104	Coal
1065	1	104	Coal
1066	1	104	Coal
1067	1	104	Coal
1068	1	104	Pot sherd
1069	1	104	Glass
1070	1	104	Coal
1071	1	104	Coal
1072	1	104	Coal
1073	1	104	Flint
1074	1	104	Pot sherd
1075	1	104	Coal
1076	1	104	Brick fragment
1077	1	104	Coal

<i>Small Find No.</i>	<i>Trench / Test Pit No.</i>	<i>Context No.</i>	<i>Description</i>
1078	1	104	Coal
1079	1	104	Glass
1080	1	104	Coal
1081	1	104	Coal
1082	1	104	Pot sherd
1083	1	104	Ironwork (nail)
1084	1	104	Coal
1085	1	104	Glass
1086	1	104	Glass
1087	1	104	Coal
1088	3	307	Brick fragment
1089	3	307	Glass
1090	3	307	Pot sherd
1091	3	307	Brick fragment
1092	3	307	Coal
1093	3	307	Brick fragment
1094	3	307	Plastic fragment
1095	3	307	Pot sherd
1096	3	307	Brick fragment
1097	3	307	Pot sherd
1098	3	307	Glass
1099	3	307	Masonic Button (tin enamel)
1100	3	305	Coal
1101	3	305	Glass
1102	3	305	Glass
1103	3	305	Glass
1104	3	305	Flint nodule
1105	1	107	Coal
1106	N/A	Unstrat.	Flint flake
1107	3	303	Slag
1108	2	201	Bottle glass
1109	2	201	Bottle glass
1110	2	201	Bottle glass
1111	2	201	Bottle glass (three pieces)
1112	2	202	Bottle glass
1113	3	301	Coin
1114	2	203	Bottle glass
1115	2	203	Bottle glass
1116	3	312	Bottle glass

<i>Small Find No.</i>	<i>Trench / Test Pit No.</i>	<i>Context No.</i>	<i>Description</i>
1117	3	312	Bottle glass
1118	3	312	Bottle glass
1119	3	312	Bottle glass
1120	3	312	Bottle glass
1121	3	312	Bottle glass
1122	2	205	Pot sherd (post-medieval)
1123	2	205	Pot sherd (post-medieval)
1124	2	205	Pot sherd
1125	2	205	Brown glass
1126	2	205	Glass (milk bottle)
1127	3	312	Glass
1128	3	312	Slate
1129	2	205	Slate fragment
1130	2	205	Pot sherd (post-medieval)
1131	2	205	Slate fragment
1132	3	312	Ironwork (horseshoe)
1133	3	312	Glass
1134	2	203	Bottle glass
1135	2	203	Bottle glass
1136	2	205	Glass
1137	4	402	Pot sherd
1138	4	402	Glass
1139	2	205	Green glass
1140	2	205	Glass
1141	2	208	Glass
1142	3	312	Glass
1143	3	312	Glass
1144	3	312	Glass
1145	3	312	Glass
1146	3	312	Glass
1147	3	Unstrat.	Bottle glass
1148	2	217	Slag
1149	4	411	Slag?
1150	4	411	Slag
1151	4	411	Burnt bone
1152	2	Unstrat.	Clay pipe bowl
1153	4	411	Burnt bone
1154	12	1202	Plastic
1155	19	1902	Burnt bone

<i>Small Find No.</i>	<i>Trench / Test Pit No.</i>	<i>Context No.</i>	<i>Description</i>
1156	9	902	Bottle lid
1157	8	802	Burnt bone
1158	20	2002	Burnt bone
1159	9	902	Burnt bone
1160	20	2002	Bottle stop
1161	19	1902	Bottle stop
1162	8	802	Slate fragment
1163	16	1602	Slate fragment
1164	6	602	Slate fragment (writing slate?)
1165	17	1702	Pot sherd
1166	13	1302	Pot sherd
1167	20	2002	Pot sherd
1168	6	602	Pot sherd
1169	10	1002	Pot sherd (black ware)
1170	9	902	Pot sherd
1171	9	902	Pot sherd
1172	6	602	Pot sherd
1173	17	1702	Pot sherd
1174	17	1702	Pot sherd
1175	13	1302	Pot sherd
1176	5	502	Pot sherd
1177	5	502	Pot sherd
1178	5	502	Pot sherd
1179	5	502	Pot sherd
1180	5	502	Pot sherd
1181	5	502	Pot sherd
1182	7	702	Pot sherd
1183	7	702	Pot sherd
1184	7	702	Pot sherd
1185	5	502	Pot sherd
1186	5	502	Pot sherd
1187	5	502	Pot sherd
1188	15	1502	Pot sherd
1189	15	1502	Pot sherd
1190	15	1502	Pot sherd
1191	15	1502	Pot sherd
1192	15	1502	Pot sherd
1193	15	1502	Pot sherd
1194	15	1502	Pot sherd

<i>Small Find No.</i>	<i>Trench / Test Pit No.</i>	<i>Context No.</i>	<i>Description</i>
1195	11	1102	Pot sherd
1196	18	1802	Pot sherd
1197	18	1802	Pot sherd
1198	7	702	Pot sherd (black ware)
1199	7	702	Pot sherd (black ware)
1200	8	802	Pot sherd
1201	8	802	Pot sherd
1202	8	802	Pot sherd
1203	8	802	Pot sherd
1204	7	702	Glass
1205	7	702	Glass
1206	7	702	Glass
1207	16	1602	Glass
1208	16	1602	Glass
1209	10	1002	Glass
1210	10	1002	Glass
1211	10	1002	Glass
1212	17	1702	Glass
1213	9	902	Glass
1214	9	902	Glass
1215	9	902	Glass
1216	9	902	Glass
1217	20	2002	Glass
1218	20	2002	Glass
1219	5	502	Glass
1220	22	2202	Glass
1221	15	1502	Glass
1222	14	1402	Glass
1223	14	1402	Glass
1224	1	102	Glass
1225	23	2302	Bottle glass
1226	5	502	Glass
1227	13	1302	Glass
1228	6	602	Glass
1229	8	802	Glass
1230	8	802	Glass
1231	12	1202	Flint
1232	12	1202	Flint
1233	12	1202	Flint

<i>Small Find No.</i>	<i>Trench / Test Pit No.</i>	<i>Context No.</i>	<i>Description</i>
1234	12	1202	Flint
1235	12	1202	Flint
1236	12	1202	Flint
1237	8	802	Flint
1238	8	802	Flint
1239	19	1902	Flint
1240	19	1902	Flint
1241	19	1902	Flint
1242	19	1902	Flint
1243	19	1902	Flint
1244	19	1902	Flint
1245	19	1902	Flint
1246	19	1902	Flint
1247	19	1902	Flint
1248	19	1902	Flint
1249	19	1902	Flint
1250	21	2102	Flint (core face rejuvenation flake)
1251	20	2002	Pebble
1252	9	902	Flint
1253	9	902	Flint
1254	9	902	Flint
1255	9	902	Flint
1256	9	902	Flint
1257	9	902	Flint
1258	5	502	Flint
1259	13	1302	Flint
1260	15	1502	Flint
1261	15	1502	Flint
1262	15	1502	Flint
1263	6	602	Flint
1264	6	602	Flint
1265	6	602	Flint
1266	6	602	Flint
1267	6	602	Flint
1268	20	2002	Quartz
1269	20	2002	Quartz
1270	7	702	Flint
1271	7	702	Flint
1272	20	2002	Flint

<i>Small Find No.</i>	<i>Trench / Test Pit No.</i>	<i>Context No.</i>	<i>Description</i>
1273	14	1402	Burnt flint
1274	14	1402	Burnt flint
1275	14	1402	Burnt flint
1276	14	1402	Burnt flint
1277	14	1402	Burnt flint
1278	5	502	Stone fragment
1279	10	1002	Flint
1280	10	1002	Flint
1281	10	1002	Flint
1282	10	1002	Flint
1283	1	102	Coal
1284	16	1602	Clinker/Coal
1285	15	1502	Coal
1286	9	902	Coal
1287	17	1702	Coal
1288	21	2102	Coal
1289	13	1302	Coal
1290	19	1902	Coal
1291	11	1102	Coal
1292	6	602	Coal
1293	14	1402	Coal
1294	5	502	Coal
1295	8	802	Coal
1296	10	1002	Coal
1297	12	1202	Coal
1298	18	1802	Coal/Clinker
1299	7	702	Coal
1300	20	2002	Coal
1301	12	1202	Brick
1302	12	1202	Brick
1303	12	1202	Brick
1304	18	1802	Brick
1305	18	1802	Brick
1306	5	502	Brick
1307	5	502	Brick
1308	5	502	Brick
1309	17	1702	Brick
1310	17	1702	Brick
1311	10	1002	Brick

<i>Small Find No.</i>	<i>Trench / Test Pit No.</i>	<i>Context No.</i>	<i>Description</i>
1312	10	1002	Brick
1313	10	1002	Brick
1314	10	1002	Brick
1315	10	1002	Brick
1316	10	1002	Brick
1317	10	1002	Brick
1318	10	1002	Brick
1319	11	1102	Brick
1320	19	1902	Button
1321	5	502	Ironwork
1322	11	1102	Ironwork
1323	23	2302	Ironwork
1324	8	802	Ironwork (horseshoe)
1325	10	1002	Slag
1326	8	802	Ironwork (iron nail)
1327	18	1802	Slag

Appendix 6: Samples Register

<i>Sample No.</i>	<i>Trench No.</i>	<i>Context No.</i>	<i>No. of bags</i>	<i>Purpose/Comments</i>	<i>Retained/Processed ?</i>
1	3	306	1	For dating evidence	Processed
2	3	303	2	Taken from top of deposit	Processed
3	3	312	1	For dating evidence	Processed
4	3	310	1	For dating evidence	Processed
5	4	411	12	For dating evidence	Processed
6	4	413	5	For dating evidence	Processed
7	2	218	2	For dating evidence	Processed
8	2	212	1	For dating evidence	Processed
9	4	406	1	For identification/description	Retained
10	4	407	1	For identification/description	Retained
11	4	408	1	For identification/description	Retained
12	4	409	1	For identification/description	Retained
13	4	410	1	For identification/description	Retained