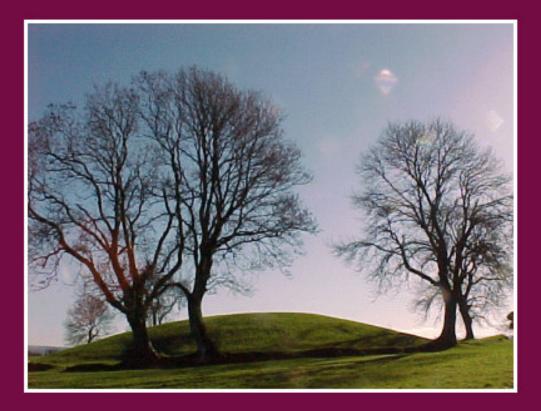
Centre for Archaeological Fieldwork School of Archaeology and Palaeoecology Queen's University Belfast



Data Structure Report: No. 13.

Excavations at Navan Fort, Co. Armagh AE/02/68

On behalf of



Data Structure Report: Navan Fort, Co. Armagh

Chris Lynn, Cormac McSparron and Peter Moore

CAF DSR 013

SMR No: ARM 012:012 Grid Reference: H 8470 4515 Excavation Licence: AE/02/68

Contents

Photographic plates

Chapter 1.0	Summary		1
Chapter 2.0	Introduction		6
Chapter 3.0	Excavation		33
Chapter 4.0	Discussion		39
Chapter 5.0	Recommendations for further work		42
Chapter 6.0	Bibliography		44
Appendix 1: Context log			45
Appendix 2: Harris matrices			49
Appendix 3: Photographic Record			52
Appendix 4: Field Drawing Register			56
Appendix 5: Finds			58
Appendix 6: Sample log			59
Figures and I	Plates		
Figures 1 – 2			4 – 5
Figures 3 – 12c			13 – 32

60 - 62

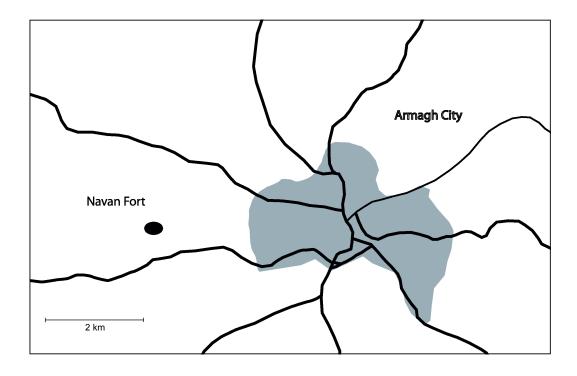
1. Summary

- 1.1. An excavation was carried out at Navan Fort, Co. Armagh (Figure 1), from 5Th August to 6th September 2002, directed by Dr Chris Lynn, Environment and Heritage Service: Built Heritage, with a crew from the Centre for Archaeological Fieldwork. The assistant directors were Cormac McSparron and Peter Moore.
- 1.2. Navan Fort is a scheduled monument (SMR: ARM 012:012) consisting of a massive circular bank and ditch, 236m in diameter, which encloses a drumlin. The size of the embankments varies. At its most impressive, in the south west of the monument the ditch is 16m wide and 3m deep and the bank is 9m wide and 2.5m tall. On the flat summit of the drumlin is a ringwork (Site A) circa 37m in diameter and a mound (Site B) circa 50m in diameter and 5 m in height.
- 1.3. Navan Fort (*Emain Macha*) is a monument within the 'Navan Complex (Figure 2)', an area that contains a concentration of late prehistoric archaeological sites that stretches for approximately 1 kilometre around the fort itself. More recent human activity has damaged many of the sites but the importance of the landscape within a prehistoric context remains unquestionable. Within the complex over forty sites have been identified ranging from substantial earthworks to crop marks.
- 1.4. There have been a number of previous archaeological investigations at Navan Fort. Excavations were carried out by Dudley Waterman at Site A and Site B from 1961 to 1971 (Waterman & Lynn, 1997) (Figure 4- 5). In 1998 Jim Mallory of the School of Archaeology and Palaeoecology, Queens University Belfast, excavated a portion of the ditch surrounding Navan Fort (Mallory & Lynn, 2002). Further excavations were carried out at Site C from 1999 to 2001 (Figure 6) by Dr Chris Lynn of the Environment and Heritage Service: Built Heritage, to investigate a series of geophysical survey results obtained in 1994 and 1995 by the Department of Archaeology, University of Boston, and the Department of Geological Sciences, California State University. This work revealed a series of three concentric ring-slots with a diameter of 30 metres between Site A and Site B on the summit of the drumlin. This series of features was named Site C. The results obtained during Lynn's programme of excavations have appeared in *Emania* and the interim report on the 2001 excavation was published in *Antiquity* (Mallory & Lynn, 2002, 532-41)
- 1.5. Dr Lynn's programme of excavations continued in 2002 when a total of six trenches were opened (Figure 3). One of the aims for the excavation in 2002 was to complete previous archaeological investigations that took place towards the top of the site in

2001 at the junction of Rings Ci and A3. The excavations had concentrated on Site C, which has been shown to comprise three concentric ring-slots, the inner and outer of which contained burnt material. The feature joins figure-of-eight style with the smaller triple ring-slot feature underneath 'Site A' found by Waterman in 1961. It post-dates a palisade slot emanating from the area excavated under 'Site B'. This and a series of four radiocarbon dates indicates that the 'Site A/C' feature was probably built around the same time as the 'Site B' mound (around 95 BC). It was clearly intended for ceremonial purposes and may even have been used as part of the commissioning rites of the monument.

- 1.6. The 2002 excavation involved the opening of a 2 x 2.5 metre trench (Trench 6) to the north of Trench 1 (first dug in 1999) to find the ends of the converging ring-slots at Site C. The deposits were very disturbed by animal (probably rabbit) activity which exploits the softer archaeological deposits. It appeared, however, that the ends of the slots A3 and Ci were complete and undisturbed. The slots ended by shelving steeply upwards and the last post was approximately the same size as the others within the slots. The terminals of A3 and Ci were 80 centimetres apart, centre to centre, and the packing merged along the zone of contact to form a single deposit. This confirmed that the wooden structures in the separate (inner) rings of the figure-of-eight were contemporary. The trench yielded finds, mainly from the disturbed deposits, but probably still of Iron Age date and included a fragment of copper alloy binding, an iron pin shank or awl, and a tapering fragment of lignite rod.
- 1.7. An important issue raised by the investigation of Site C was the location of an entrance to Navan Fort (assuming that there was a formal entrance to the sanctuary). The present large entrance west of Site B is probably relatively recent, created to allow access to a nearby farm. Speculation about the location of a possible entrance has focussed on the downhill, eastern section of the enclosure where there are several possible candidates. Excavation in 2001 of an apparent gap in the east side of Site C revealed that this was a genuine opening, an 'entrance' which was flanked on the north by a slot running off to the east. It is possible that this northern element of the palisade slot runs down the eastern side of the drumlin towards an entrance, which is the case at similar sites such as Knockaulin and Tara (Ráith na Rí). Therefore, the orientation of the Iron Age structures on the summit, the layout of the earthwork in relation to the natural topography, comparisons with similar arrangements at Knockaulin and Tara together with the findings of a geophysical survey all suggested that the location of any possible entrance would be towards the east side of the monument, investigated in Trenches 1, 3 and 4. The eastern section of the monument, where any possible entrance may lie, is much levelled and the site of the bank is in scrub ground outside the area maintained for visitor access.

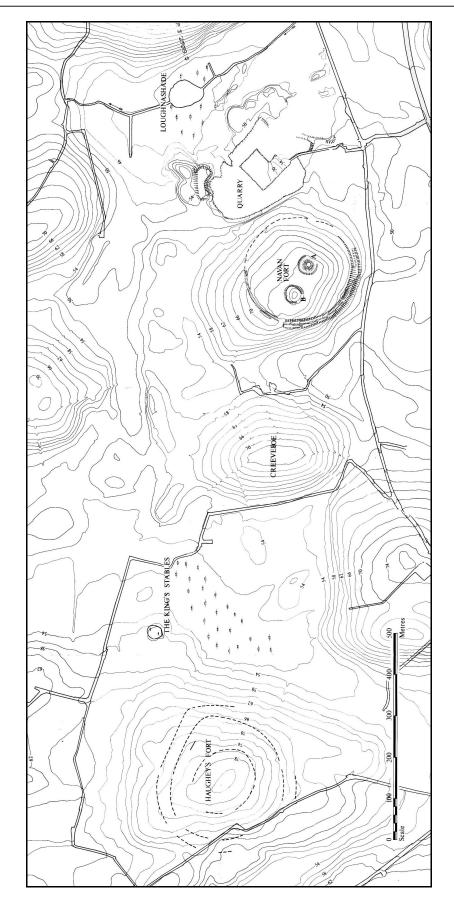
- 1.8. A trench 2 x 6 metres (Trench 2) was opened on the eastern slope of the drumlin, some 20 metres from the inner edge of the ditch. The trench was laid out to determine whether a local hollow on the hill side was a sunken access perhaps flanked by an artificial feature. The trench located several parallel slots running west east down the slope. Some may have been drains but one was larger, *c*.60 centimetres deep. There was no evidence of post-holes; however its fill contained several large limestone boulders. Trench 5 was opened across the second (northern) ridge of the hollow; similar features to those uncovered in Trench 2 were recorded.
- 1.9. Trench 1 was excavated on the site of the bank at the point at which one of the possible entrances was located. The excavation revealed a metalled or cobbled surface running west into the earthwork. Across a flat base the path was 2 metres wide rising at each edge to rougher cobbling giving an overall width of 6 metres. The deepest part of the surface was covered with a deposit of fine clay 50 centimetres deep. The only diagnostic evidence recovered was a clay pipe stem which came from this superincumbent material. However, this may have been intrusive, given the amount of recent material recovered from the base of the topsoil layer. This surface is therefore not securely dated and no stratigraphic relationship could be established between the surface and the bank or pre-bank surface. On balance it is unlikely that this surface represents an original access.
- 1.10. Trenches 3 and 4 were located on the inside of the monument perimeter, directly to the west of Trench 1 as described above. The trenches were designed to investigate the possibility that the surface (see 1.10.) continued into the monument and across the ditch. The ditch cut, however, was located and core samples taken of the fill. Significantly it appears that at this section the ditch is somewhat narrower than at any other point and that the outside edge is some 5 metres inside the perimeter marked by the hedgerow.





Location map

Figure 2 (overleaf)General map of the Navan complex



2. Introduction

- 2.1. The following report details the preliminary results of the excavations undertaken from 5th August to 6th September 2002, at Navan Fort, Navan Td., Co. Armagh, by Dr Chris Lynn, Environment and Heritage Service: Built Heritage, with a crew from the Centre for Archaeological Fieldwork, School of Archaeology and Palaeoecology, Queens University Belfast.
- 2.2. Reason for excavation and research aims

The excavations at Navan Fort 2002 were designed to answer a number of questions about the monument.

There have been a number of previous archaeological excavations at Navan Fort. Excavations were carried out by Dudley Waterman at Site A and Site B from 1961 to 1971. In 1998 Professor Jim Mallory of the School of Archaeology and Palaeoecology, Queen's University Belfast, excavated a portion of the ditch surrounding Navan Fort. Further excavations took place at Site C, located by geophysical survey undertaken in 1994 and 1995. This programme of work was directed by Dr Chris Lynn of the Environment and Heritage Service: Built Heritage, and took place between 1999 and 2001. The 2002 season of work represented a continuation of this programme.

The aims of the excavation were to:

- Ascertain if a potential entrance way at the eastern sector of the monument was an ancient entrance way to the monument or a later agricultural feature.
- Investigate a hollow on the eastern slope of the drumlin which was believed might have been part of a sunken access or processional avenue leading to the top of the mound.
- Locate and identify a geophysical anomaly on the east of the drumlin which was believed may have been a palisade trench.
- Complete the excavation of a small area of Site C, which had previously received extensive excavation during the 1999 and 2000 seasons of work.

2.3. Location

Navan Fort, Navan Td., Co. Armagh (SMR: ARM 12:12), is located on a drumlin 2.6km west of the city of Armagh (H8470 4515) (Figure 1). Navan Fort is just one of a number of related monuments in the immediate area known collectively as the Navan Complex (Warner 1994) (Figure 2).

2.4. Description

Navan Fort is a circular enclosure with an internal diameter of 236 m. It is defined by a deep ditch and external bank which is most apparent on the west side of the monument. At the south west of the monument the ditch is 16m wide and 3m deep and the bank is 9m wide and 2.5m tall. The internal area of the monument is 4.23 hectares and the approximate complete area of the monument, including the bank and external ditch, is approximately 6.3 hectares. The drumlin on which the monument is located has a maximum elevation of 75.66 m OD. The countryside surrounding Navan Fort is rolling drumlin countryside, although the elevation of the site gives it excellent views in all directions. On the flat summit of the drumlin is a ringwork (Site A), circa 37m in diameter, and a mound (Site B), circa 50m in diameter and 5m in height. Site C, a series of three concentric ring-slots, with a diameter of 30 m, was discovered during geophysical surveying of the monument in 1994 and 1995 by the Department of Archaeology, University of Boston, and the Department of Geological Sciences, California State University.

2.5. Early accounts of Navan Fort.

Navan Fort is one of the most important archaeological monuments in Europe. It is important not just because of the complex prehistoric activity uncovered there in successive excavations but in the significant role which Navan plays in early Irish myths, pseudo-history and history. It is unique in that, as *Emain Macha*, it is central to the Ulster Cycle of tales, being both the backdrop to many individual events and the capital of Ulaid. There are also numerous annalistic and genealogical references to Navan Fort / *Emain Macha* and it is possible that the site is mentioned by the 2nd century AD geographer Ptolemy.

The identification of Navan Fort with *Emain Macha* is well established and rests on two main bodies of evidence. First, there are a number of references to *Emain Macha* relating its position to that of Armagh. In the tale Bricriu's feast, for example, Cú Chulainn is described as setting out in a south-easterly direction from *Emain Macha* "until he came to where *Ard Marchach* or *Ard Macha* is, because at that time it was a

forest". (Flanagan 1997, 7). There are a number of other similar passages in other tales. Second, linguistic evidence points strongly to an association of Navan Fort and *Emain Macha*. The change in anglicised versions of *Emain Macha*, from variants very close to *Emain*, to the modern English Navan, can be traced in 17th century documents (*Ibid*, 8).

It is outside the scope of this report to detail all the references to *Emain Macha* in the Ulster Cycle except to say they are many, varied and not all consistent with one another. Some tales use *Emain Macha* as a backdrop to various activities such as the games of the *macrad* in the *cluichemag*, or playing field (Mallory 1997, 203). Other tales give detailed, but formulaic, descriptions to buildings at *Emain Macha*, such as the descriptions of Conchobar's palaces (*Ibid*, 205-6) However, it has been noted that there are interesting correlations between one description of Conchobar's great hall, from the *Tochmarc Emire*, and the Phase 4 structure at Site B (*Ibid*: Lynn 1992, 51). Also the date of the burning of *Emain Macha* by Fergus in the late first century BC as recorded in the story of Deirdre correlates well with the date of the felling of the central post of the Phase 4 structure at Site B in 95 BC (Mallory 1997, 206)

Annalistic references to *Emain Macha* are common. The foundation of *Emain Macha* is variously dated in the Irish annals from 668 BC, in the *Annals of the Four Masters*, to 307 BC, in the *Annals of Tigernach and Inisfallen (Ibid*, 199). The period of activity at *Emain Macha* is stated as being between 630 years in the *Annals of Clonmacnoise* to about 1000 years according to the *Annals of Ulster (ibid)*. The *Tain* and death *of* Cú Chulainn are dated to 19 BC in the *Annals of Tigernach* and the fall of the last king of *Emain Macha* is recorded at the battle of *Achad Lethderg* as occurring between 324 and 332 AD in various sources (*Ibid*, 200). A few sources raise the possibility of some royal association with Navan up to about 450 AD (*Ibid*).

The earliest reference to Navan Fort may come from Ptolemy's *Geographia* of the 2nd century AD. There are two places mentioned in the *Geographia*, *Isamnion* and *Regia*, which may refer to Navan. *Isamnion* is located in the territory of the *Volunti*, which is considered to be a corruption of *Uluti* the tribe occupying the Navan area in the Iron Age (Mallory 1997, 197-198) However, Ptolemy identified *Isamnion* as a promontory, not a town. The linguistic similarity of the name *Isamnion* with *Emain Macha* and the confusion between Ptolemy and the geographer Marcianus on the number of promontories and towns in Ireland, have led some academics, however, to identify Navan with *Isamnion* (*Ibid*). Ptolemy's *Regia* has also been attributed to Navan. The name means 'royal centre' and it is located within inland Ulster. However, it is equally possible that this reference pertains to Clogher, Co. Tyrone (*Ibid*).

2.6. Previous archaeological investigations at Navan Fort.

Extensive excavations were carried out at Navan Fort by Dudley Waterman, Ancient Monuments, Ministry of Finance, between 1961 and 1971. He excavated in two areas on the top of the drumlin; Site A appeared to be a ploughed out earthwork 37 m in diameter, and at Site B a large mound 50 m in diameter and 5 m high. At Site A two phases of circular construction trenches, Phase A and Phase B, were discovered. Phase A was composed of three concentric construction trenches, the outermost having a diameter of 19.5m. The innermost construction trench had traces of post and plank walling. This phase was cut by Phase B which was composed of two concentric construction slots which had an entrance gap on the east side. Flanking the entrance into the Phase B structure were two inhumation burials. Portions of the ring ditch surrounding the Phase A and B structures were also excavated (Figure 4).

At Site B a complex series of structures was identified. Phase 1 consisted of a few subsoil cutting features filled by Neolithic material and Phase 2 was an episode of cultivation shown by traces of plough marks in the subsoil. Phase 3 (Figure 5a) was complex and was subdivided into three parts: 3(i), 3(ii) and 3(iii). Phase 3(i) was composed of a ditch, 46m in diameter, surrounding Site B. The ditch was up to 5.5m wide and 1.2m deep and had an entrance causeway on its east side. Concentric with this ditch were a series of elongated pits set back from the inner ditch edge. Phase 3(ii) was composed of three sets of ring-slot enclosures to the south of Site B and four sets to the north. Two of the sets to the south and north joined to form figure-of-eight structures. All of the ring slot enclosures have entrances pointing approximately to the east. Four lines of palisade trenches running up to the ring-slot enclosures in the north of Site B are the probable remains of an avenue leading to the entrances of these ring-slots. Phase 3(iii) was composed of three concentric ring-slots, the largest 13.6 m in diameter, cutting through both the northern and southern parts of phase 3(ii). These ring-slots had two entrances at the north-east and south-west diametrically opposed to each other.

Phase 4 at Site B (Figure 5b) marked a complete architectural departure with the construction of a large multi-ring timber structure, approximately 37m in diameter. This structure was composed of four concentric lines of posts, around a larger central post, which were surrounded by a series of large post-pits linked by horizontal split timbers in a shallow construction trench. The four concentric circles of internal posts were interrupted by a double line of posts running in parallel from the central post to the perimeter of the structure. There is no indication that this was ever inhabited as no attempt was made to create a level floor for the structure which was built directly on top of the Phase 3 structures. It is uncertain if Phase 4 was actually roofed

although there was considerable evidence for pressure exerted on structural posts at the perimeter of the structure, suggesting that some sort of superstructure was supported by the timber circles.

A short time after the construction of Phase 4 the timber structure was encased in a composite mound, Phase 5 (Figure 5c), consisting of a limestone cairn and an earthen mound above it. The limestone cairn was built around and upon the Phase 4 building while it was still standing, voids of the posts of the Phase 4 building having been visible in the cairn during excavation. The limestone boulders varied in size up to 60 cm in diameter, with the largest stones at the bottom of the cairn. Few of the stones looked freshly quarried. The upper surface of the cairn was deliberately laid out in radial divisions caused by kerbs, depressions and raised areas.

Close to or after the completion of the limestone cairn the wooden wall of the Phase 4 building, and presumably any superstructure, was burned. The evidence for burning was greatest where a portion of the cairn collapsed, sealing a portion of the burning wall of the Phase 4 structure. In other areas the evidence of burning was scant but combustion may have been very complete leaving only the burnt clays which were found around the edge of the building and tiny charcoal fragments. After the burning an earthen mound was erected over the limestone cairn. It was composed of 21 different types of soil which probably implies that soils were imported from surrounding areas. The mound appears to have been constructed in a single continuous operation (Waterman & Lynn, 1997).

An excavation of a portion of the ditch at Navan Fort was undertaken by Professor Jim Mallory of the School of Archaeology and Palaeoecology, Queens University Belfast, in 1998. It showed the ditch to be 4.5m deep. An oak timber found at the base of the ditch was dated by dendrochronolgy to 95 BC, contemporary with the central timber from the 40 m timber structure, Phase 4, at Site B. A fragment of a wooden bowl was also found (Mallory 2000).

In 1994 and 1995 geophysical surveys were undertaken by the Department of Archaeology, Boston University, and the Department of Geological Sciences at California State University, Long Beach. The work was undertaken under the sponsorship of the Navan Research Group, The Environment and Heritage Service, the Department of Archaeology, Queens University Belfast, and the Navan Centre. These surveys revealed a circular feature composed of two lines of magnetic anomaly with an exterior diameter of circa 30 m. A further linear anomaly heading approximately south was also shown. The circular anomaly was subsequently named Site C (Kvamme 1996: Ambos, Larson. Kvamme, Conway and Cibbarelli 1996).

In 1999 an excavation was directed by Dr. Chris Lynn, Environment and Heritage Service: Built Heritage, to investigate the 30 m diameter, circular anomaly (Site C) discovered during the geophysical surveys. The excavation revealed two concentric slots, 0.5 m wide, 0.6 m deep and spaced 1.0 m apart. The upper fill of the slots consisted of burnt soil, ash and charcoal and - where fully excavated - the remains of closely set posts were found in the bases of the slots. Traces of an intermediate slot with a much cleaner fill were found between the two slots. The area of intersection of Site A and Site C was also investigated. However, considerable animal disturbance made it impossible to establish the exact relationship between Site A and Site C, although it was possible to ascertain that Site C predated the bank of Site A. An additional trench investigated the area of intersection of one of the palisades ,Z, running from the Phase 3ii: Northern Ring-Slot Enclosures to the east. It showed that Site A cut through the palisade. Radiocarbon dates from the excavation provided a calibrated date range of 400 BC to 26 AD (Lynn 2001).

Further excavations by Dr. Chris Lynn in 2000 confirmed the existence of the third intermediate slot at Site A. It also showed that the outer slot of Site A was contemporary with the outer slot of Site C, forming a single figure-of-eight building. The inner slot was shown to have held a post and plank wall, which had burned down, and had deposits of burnt animal bones of cattle, pig and sheep at its inner edge (*ibid*).

A series of trenches were opened at Site C during Lynn's 2001 excavation season (Figure 6). The north side of the east gap with the possible palisade slot running towards the east was investigated, as was the western junction of Sites A and C which included palisade/slots A2, A1,A3, Ci. Cm and Co (Figure 1). The excavations showed that the features that comprise the triple ring-slot enclosure at Site C and Site A join to form what would have been a contemporary figure-of-eight structure. A series of 'V' shaped terminals are present where the ring-slots from the Site A and C enclosures meet to form the bend in the '8' but do not converge into a single feature, and they maintain a degree of separation. The 2001 excavations investigated these 'V' shaped curves in the slot trenches, together with a narrow trench that contained post-sockets running at right angles from the end of the outer slot 'Co' towards the east (*ibid*).

2.7. Archiving

A copy of this report has been deposited with the Environment and Heritage Service: Built Heritage, DOE NI. All site records, finds and samples are temporarily archived with the Centre for Archaeological Fieldwork, within the School of Archaeology and Palaeoecology, Queens University Belfast.

2.8. Credits and Acknowledgements

The excavation was directed by Dr. Chris Lynn of the Environment and Heritage Service: Built Heritage. Cormac McSparron and Peter Moore were the assistant directors.

Assistance during the course of the excavation and the preparation of this report was kindly provided by: Dr. Colm Donnelly, Janet Bell, Catherine Boner, Lucy Chapman, James McKee, (Centre for Archaeological Fieldwork), Billy Dunlop, Ken Pullin, Harry Welsh and John Moore.

The illustrations in this report were prepared by Bronagh Murray and Ruth Logue of the Centre for Archaeological Fieldwork, Queens University Belfast.

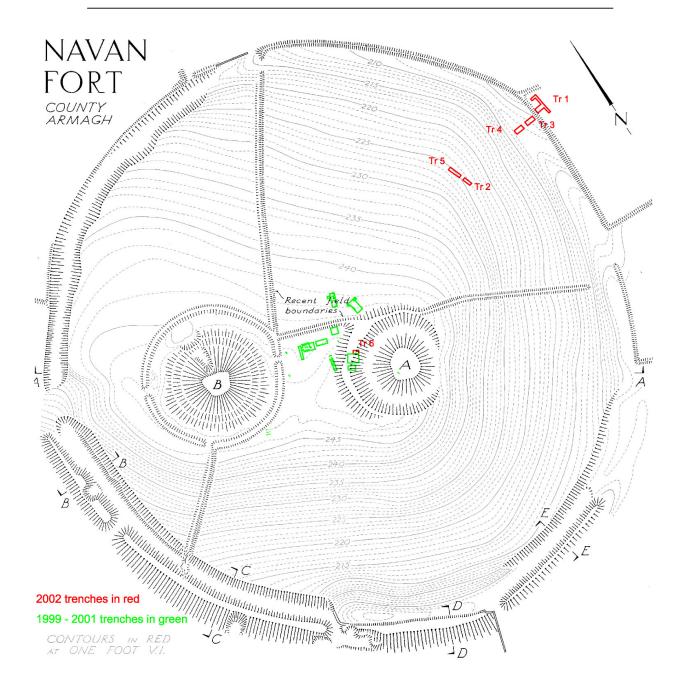
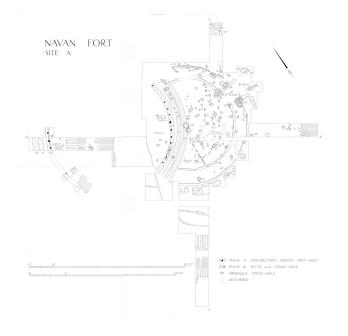
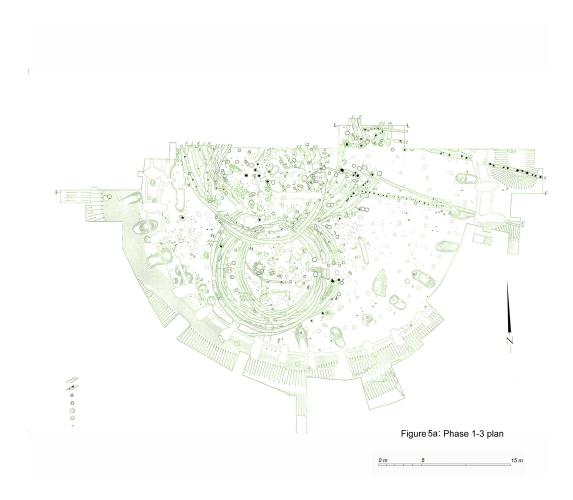
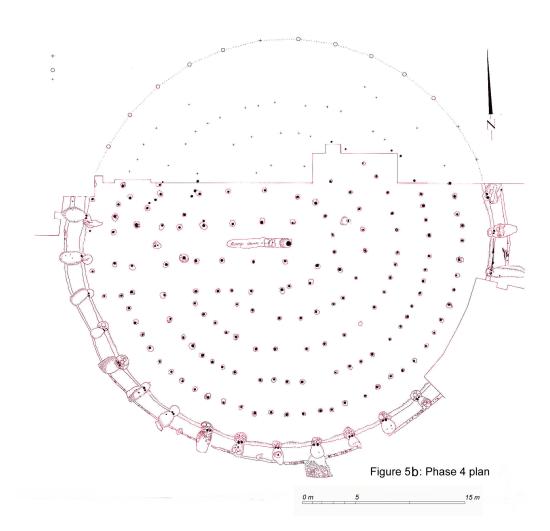
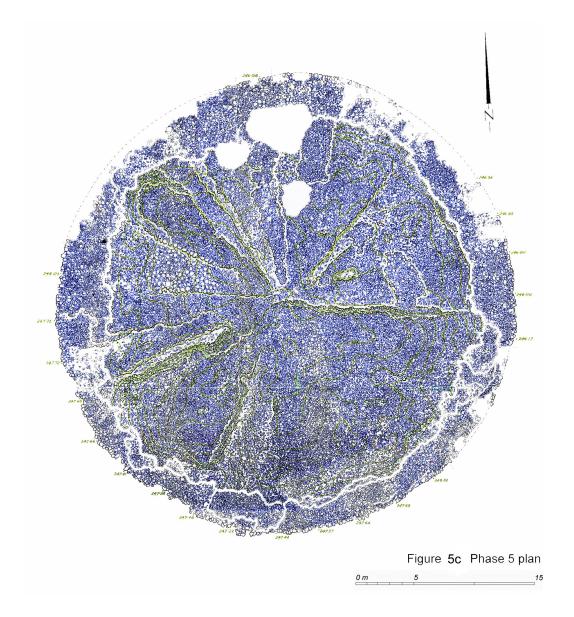


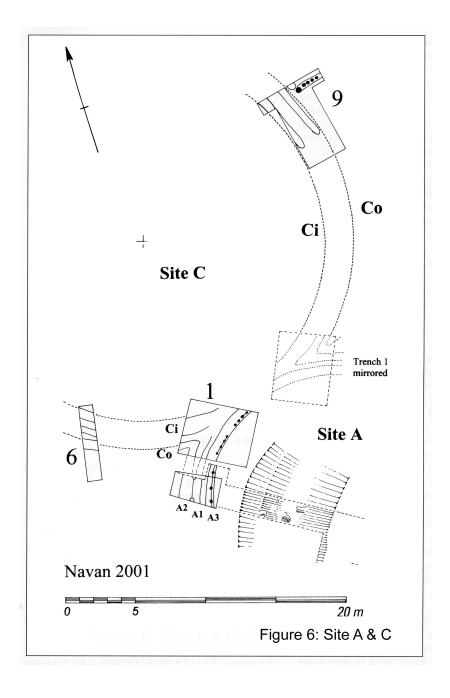
Figure3: Plan of Navan Fort showing recent trenches

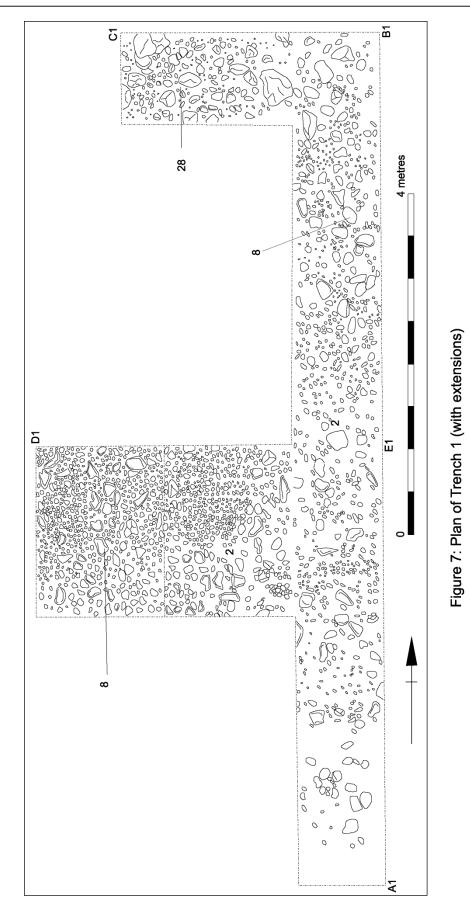


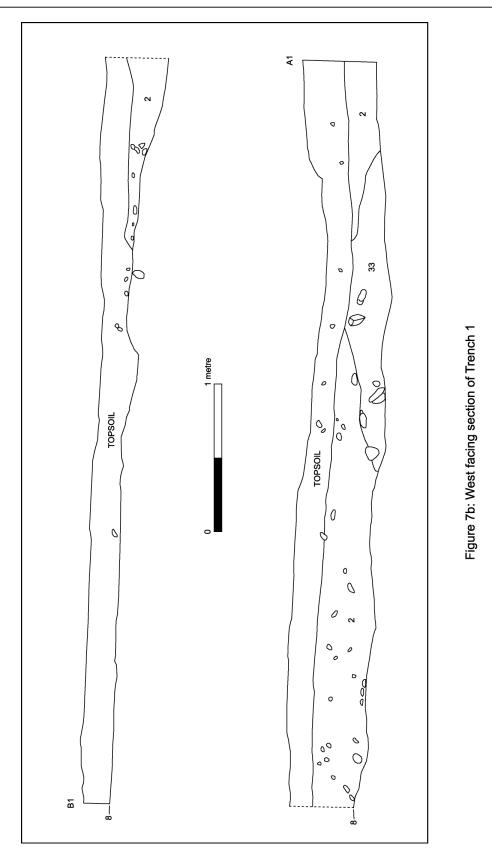


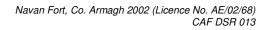












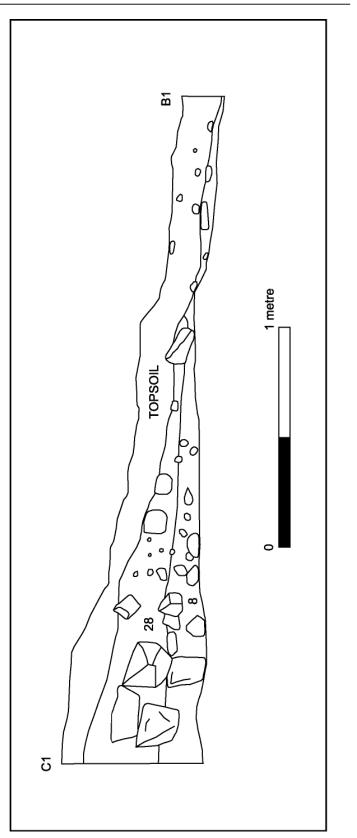


Figure 7c: Trench 1, Gap A, South facing section taking in extension

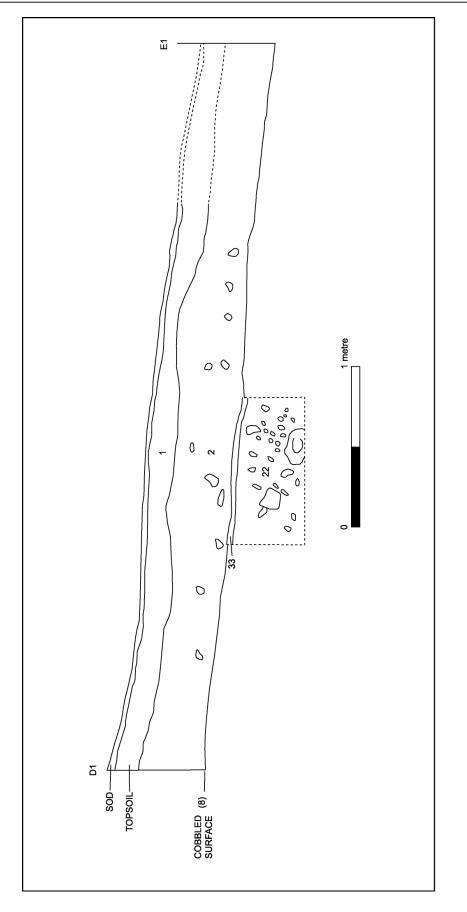
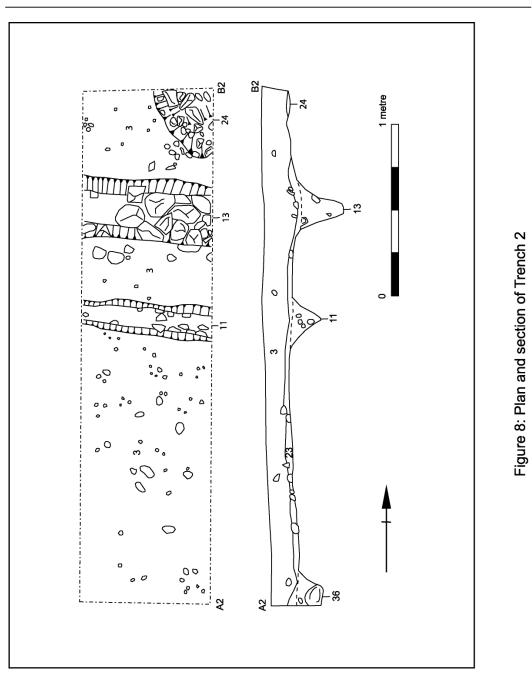


Figure 7d: Gap A, South facing section of extension



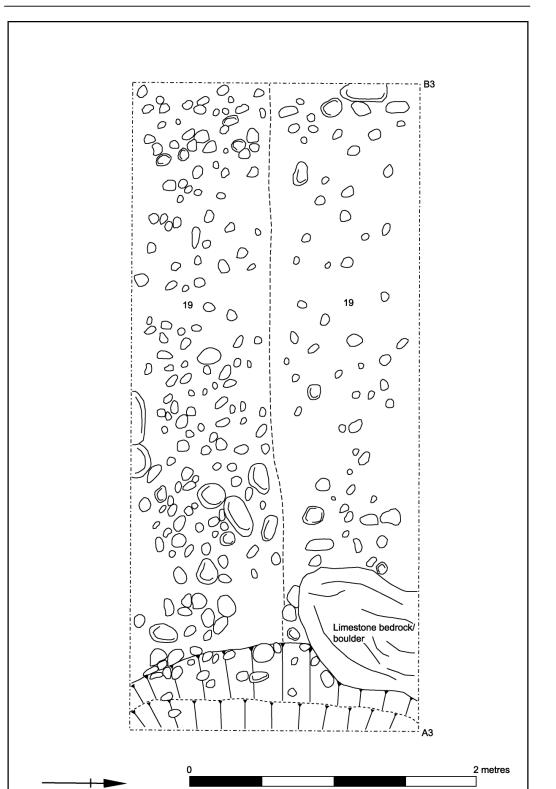
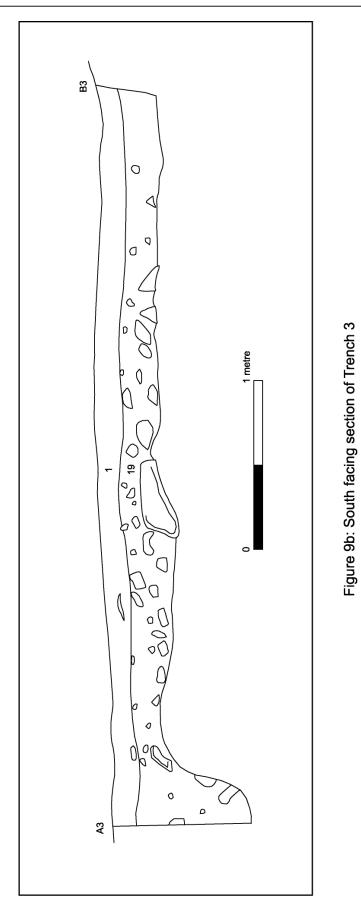


Figure 9: Plan of Trench 3



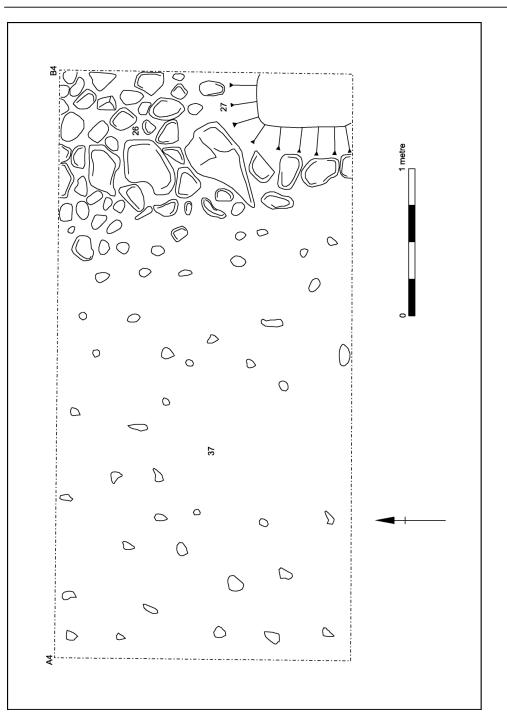
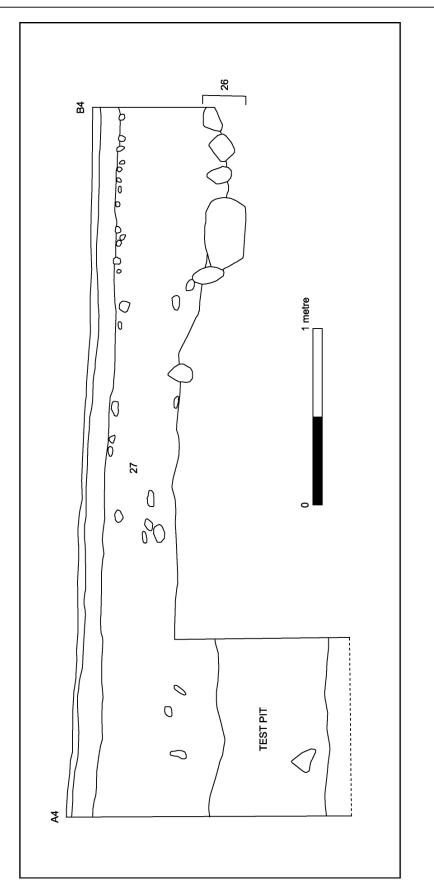


Figure 10: Plan of Trench 4



27

Figure 10b: South facing section of Trench 4

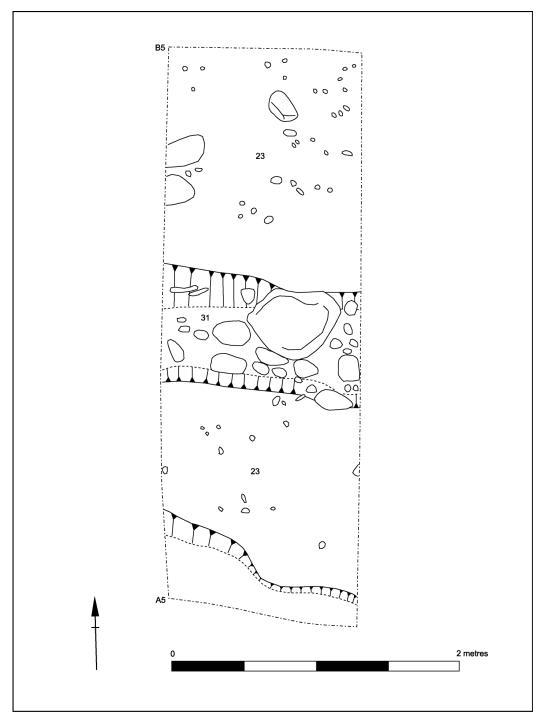
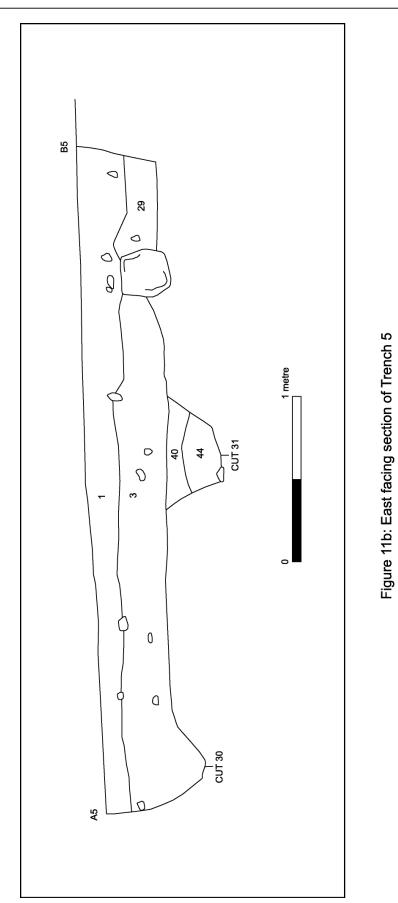


Figure 11: Plan of Trench 5



29

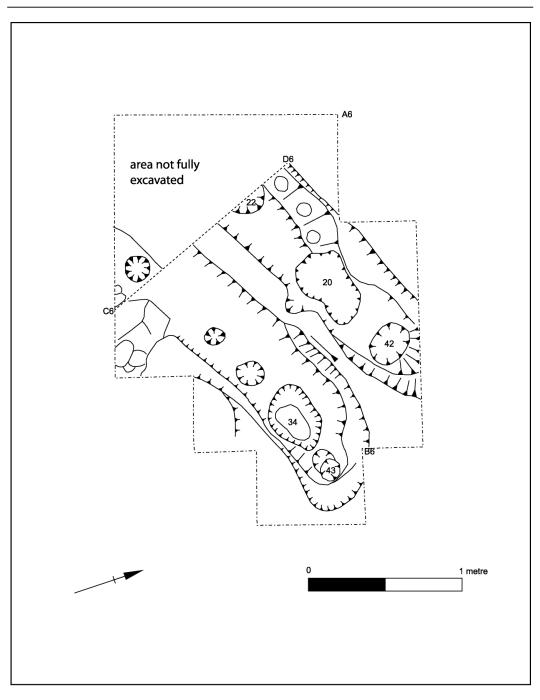
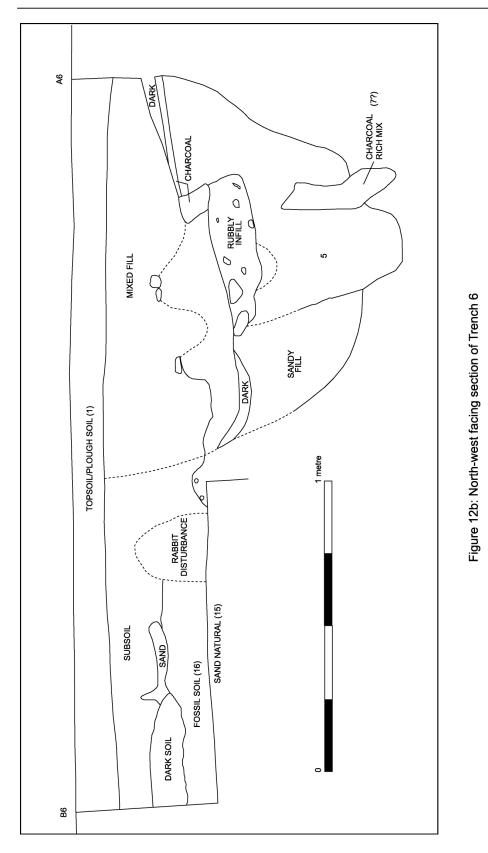


Figure 12: Plan of part of Trench 6 (reopened)



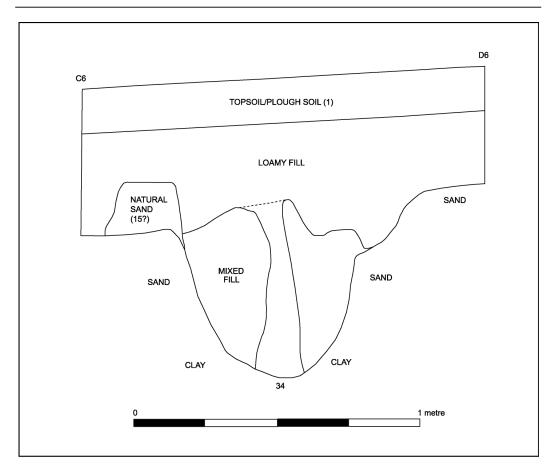


Figure 12c: East facing section of Trench 6

3. Excavation

3.1. Methodology

Navan Fort is a scheduled monument. Prior to the commencement of the 2002 season of excavation, Scheduled Monument Consent was sought and approved. The programme of work involved the archaeological investigations of (i) a possible entrance to Navan Fort, hypothesised to be located towards the eastern extremity of the site, (ii) a hollow located on the east slope of the drumlin, speculated to be a sunken access to the hilltop, and (iii) a set of triple ring-slots associated with a figure-of-eight structure at 'Site C'.

The excavations were undertaken by hand and the context record for the site was created using the standard context recording method. Individual features and deposits were photographed prior to and after excavation. Overall plans of each trench, and the features they contained, and sections were drawn using either 1:10 or 1:20 scales. For details of the photographic record see Appendix Three; for details of field illustrations see Appendix Four. In addition to the records noted above, the site records also consisted of a small finds register (Appendix Five) and a soil sample log (Appendix Six). Following the completion of the archaeological investigations each trench was backfilled and the turf layer replaced.

A full assessment of the health and safety aspects of the work was undertaken, with no conceivable hazards to personal safety identified.

3.2. Account Of The Excavations

For ease of reading a trench-by-trench account is given below for the excavations that took place at Navan Fort in 2002. It is recommended that the Harris Matrix (Appendix Two) for each trench is referred to when reading the excavation account.

3.3. Trench One (Figure 7, 7b & 7c)

Speculation about the possible location of an original entrance has focused on the downhill, eastern sector of the enclosure where several likely candidates have been identified by Lynn.

Trench 1 was located towards the eastern extremity of the site, outside and to the east of the perimeter hedgerow. Initially, a trench 10 metres (north – south) by 1 metre (east – west) was opened. After the removal of the turf layer topsoil was encountered (Context 1), a brown/black friable loam containing marine shell

together with modern ceramic and agricultural artefacts (see Appendix Five). Located beneath the topsoil layer was Context 2, a yellow/red friable loam with frequent stone inclusions. It was within this context that an extensive layer of closely packed stones was uncovered (Context 8: Figure 7). Within the south section a layer underlying Context 8 was visible, a very loose slightly loamy gravel (Context 33). Trench 1 was located where the earthwork had undergone much levelling. It was unfortunate that a stratigraphic relationship between the stone surface and the bank and/or pre-bank surface could not be established.

Two extensions were added to Trench 1 running towards the west to investigate whether this stone layer continued towards the perimeter hedgerow. These extensions were placed at the north and south ends of the trench, each measuring 1 metre (north - south) by 2 metres (east - west). Within the northern extension, after the removal of topsoil, a similar stone layer to Context 8 was encountered, renumbered Context 28. However, this layer contained more loose gravel and the stones were not as densely packed as had been previously recorded for Context 8. Within the southern extension, after the removal of topsoil, an orange/brown friable sandy loam was uncovered that contained infrequent small stone inclusions (Context 9). Located beneath this was Context 10, a brown/orange compact sandy clay with infrequent small stone inclusions. A further extension to Trench 1 was added, 4.6 metres from the north and running towards the perimeter hedgerow (west). This extension measured 2 metres (north - south) by 3 metres (east - west). Although initially a separate box trench, the baulk was subsequently removed to join Trench 1 with this extension. The stratigraphic sequence within this extension was identical to the initial trench, with the continuation of Context 8 observed. A single clay-pipe stem was recovered from Context 8 (Appendix Five).

3.4. Trench Two (Figure 8)

Trench 2 was positioned on the eastern slope of the drumlin and was designed to investigate the hollow (aligned east – west on the hillside) that could possibly have been a sunken access or processional avenue leading to the top of the drumlin. A series of slot-like features had been detected by geophysics (*GeoQuest*, 2000). In addition, an apparent gap in the east side of 'Ring C'

revealed that this was a true entrance and that it was flanked on the north by a slot running to the east. The possibility existed that these slots could continue to run down the east side of the drumlin. New trenches (Trench 2; and later Trench 5) were therefore opened to investigate this possibility.

After the removal of the turf layer, a topsoil of brown/black friable loam with occasional small stone inclusions (Context 1) was uncovered. Situated beneath this was Context 3, a fairly compact orange slightly sandy loam. Context 23 a browny orange, slightly loamy clay, was situated beneath Context 3 and its removal revealed several cut features. Context 11 was a linear feature running in an east - west alignment that was 37cm in width (north - south) and, at its greatest extent, 42cm in depth. This feature was filled by Context 12, a dark brown friable, slightly sandy loam, with occasional charcoal flecking and small stone inclusions. This 'slot' was similar to Context 13, also aligned east - west, which was filled by Context 4, a dark brown loose sandy loam with occasional charcoal and small stone inclusions. Several other archaeological features were also observed within the trench. Context 24 was a circular cut located in the north-east corner of the trench, 56cm in diameter and at its greatest extent 30cm in depth. This was filled by Context 25, a dark brown, soft loamy clay with charcoal flecking. A third linear feature in an east – west alignment was also observed (Context 36), 28cm in width and 36cm in depth. This was filled by Context 38, a brown/grey fairly compact clay, that appeared to be mixed in places with a fine gravel which formed the base of the cut. The trench was then excavated down to Context 45 (subsoil).

Artefacts were frequently recovered during the excavation of Trench 2. For example, clay pipe stems were found at the interface between Context 1 and Context 3. However, samples of burnt bone were the only artefacts recovered from any of the base contexts, such as Context 4.

3.5. Trench Three (Figure 9 & 9b)

Trench 3 was situated to the immediate west of the perimeter hedgerow and in alignment with Trench 1. It was located in this position to ascertain whether the compact layer of stones (Context 8) recorded in Trench 1 continued on the inside of the site. The trench was the same width (2 metres north – south) as the extension to Trench 1 and ran in an east – west alignment for 4 metres.

After the removal of the turf layer, a black/brown friable loam with occasional stone inclusions (Context 1: topsoil) was uncovered. Located immediately beneath this was Context 19, a layer of loosely packed stones (c.10 - 13cm) in a sandy loam. These stones were not as densely packed as Context 8 and are unlikely to represent a continuation of this context to the monument's interior. Located against the western baulk of the trench were the edges of a cut (Context 46). Although not fully excavated, the edge was investigated to ascertain whether it was the main ditch of the monument or some other archaeological feature. It appeared that the feature was

cut into subsoil, and was filled by Context 27, a grey soft silty sand. Significantly, this cut appears to be narrower than the ditch at any other point, with the outside edge some 5 metres inside the perimeter hedge rather than butting against it.

A bronze or copper spherical object with a pin on one side *c*.2.5 cm in diameter was recovered from the interface between Contexts 1 and 19, together with modern ceramic material. Several pieces of flint (possibly with retouched edges) were recovered from Context 19.

3.6. Trench Four (Figure 10 & 10b)

Trench 4 was located on the same alignment as Trenches 1 and 3 but two metres further to the west within the monument's interior. Trench 4 was designed to investigate whether the stone surface (Contexts 8 and 19) continued further into the monument interior, and also to investigate the possibility that the cut feature (Context 46) recorded in Trench 3 was part of the ditch surrounding Navan Fort.

After the removal of the turf layer and topsoil (Context 1), Context 26 was observed, which represented a series of large stones towards the east end of the trench in a north – south alignment. Excavation revealed that these stones formed part of a large drain feature that was cut into Context 27, a grey soft silty sand with occasional small stone inclusions, hypothesised to be the ditch fill. A small box section was excavated in the north–west corner of Trench 4 to further verify that Context 27 was ditch fill. Several core samples were taken for laboratory analysis from this box section. Wood and burnt bone fragments were also recovered. The box section was excavated down to Context 37, a brown/orange slightly sandy clay with occasional small stone inclusions. Significantly, this layer would indicate that the ditch cut is somewhat shallower at this point in the east perimeter than elsewhere surrounding the site.

3.7. Trench Five (Figure 11 & 11b)

Trench 5 was located two metres north of trench 2 on the east side of the drumlin and placed on top of the sunken hollow's second ridge. Its purpose was to locate the second palisade or slot trench indicated by the geophysics running down the side of the drumlin in an east – west alignment.

After the turf and topsoil (Context 1) was removed, a loose brown/orange loamy clay with occasional small stone inclusions (Context 29) was recorded, together with an orange fairly compact sandy loam (Context 3) that had been recorded in Trench 2.

Within this were several cut features similar to the ones uncovered during the excavation of Trench 2. Context 30 was a linear cut in an east – west alignment situated in the south – west corner of Trench 5 measuring 42cm (north – south) and at its greatest extent 24cm in depth. This was filled by Context 39 a brown/yellow compact clay together with frequent large stones. Context 31 was a linear cut, also in an east-west alignment, filled by a brown loose gravel (Context 40), together with large stones. This feature was cut by Context 32; a layer of stones comprising a field drain running east – west. All of the archaeological features contained a similar base fill (Context 44) a reddish brown loose gravel. After the investigation and recording of the features the trench was excavated to Context 45 and 23 (subsoil).

Artefact material was recovered from Trench 5 including several clay pipe stems and modern ceramics from the topsoil layer, a single piece of flint and black pottery together with fragments of burnt bone were recovered from the interface of Context 3 and 29. A dark blue barrel shaped bead was recovered from Context 3 probably dating to the Early Christian period.

3.8. Trench 6 (Figure 12, 12b & 12c)

This trench was opened to continue the investigation first undertaken in 1999 towards the top of the drumlin at the site of the figure-of-eight structures, first noted by the geophysical survey undertaken in 1994 and 1995. The trench was designed to locate the converging ring-slots of Sites A and C.

After the removal of the turf and topsoil (Context 1), a yellowish sandy loam fill (Context 5) was recorded. It appeared that all archaeological features were below and within this context. Two lenses of dark loam with charcoal inclusions (Contexts 6 and 7) together with a circular ring of dark loam (Context 17), were observed. Context 18, a sandy clay material was situated in a slight depression seemingly enclosed within Context 17. A fossil soil (Context 16), was located towards the north–west of the trench, which was in part buried under the bank of Site A. Further excavation revealed - as had been anticipated - two slot trenches (A1 and Ci) were uncovered, each containing post-holes. Slot trench A1 contained four post-holes (Contexts 34, 35, 41 and 43 and their respective fills: Appendix Two). Slot trench Ci also contained four post-holes (Contexts 20, 21, 22 and 42 and their respective fills). Lining the edge of trench Ci was Context 14, a red/black clay consistent with burning or fire hardening. These slot trenches ended by shelving steeply upwards. The terminals of the slots were 80cm apart, centre to centre, with the packing of the slots merging along the zone of contact to form a single deposit. The lower archaeological features

appeared to be situated on top of a clean yellow sand (Context 15). It was unfortunate that, in some instances, rabbit burrows had been dug into this soft archaeological deposit.

Finds recovered form this trench included bone fragments derived from many of the contexts (see Appendix Five). Perhaps of most significance was a single pot sherd from the fill of A1, and a cylindrical piece of lignite from the upper fill of Ci. Other finds included a fragment of copper alloy binding and an iron pin shank or awl. Although these latter finds were from contexts that had been disturbed by animal burrowing, they are probably of Iron-Age date.

4. Discussion

4.1. Background

The location of the 2002 trenches was designed to uncover a possible formal entrance to Navan Fort, which is thought to be situated towards the eastern side of the monument. Comparisons between Navan, Knockaulin and Tara (*Ráith na Rí*), suggest that any formal entrance would have been located towards this side; indeed these monuments share many similarities. However, it is important to note that at these two other sites there is no 'grand' entrance, instead there is a rather plain break in the bank and ditch; the focus for attention must have been the monuments/mounds themselves rather than the entrance and access route to them. Previous excavation at Site C combined with geophysical survey results also suggested that had Navan had a formal entrance, it would be located towards the east side. The palisade found at Site C appeared to continue down the drumlin side, running in an east – west alignment and the geophysical results confirmed the presence of several anomalous features that required investigation.

4.2. Trench One (Figure 7, 7b & 7c)

Trench 1 was located outside the current perimeter hedge (which marks the area kept for visitor access, as well as the position of the bank in many places). Initially a 10×1 metre trench was opened, however three extensions were added, two of which were positioned at the northern and southern ends of the initial trench, measuring 1×2 metres and the third measuring 2×3 metres, (each of these extensions ran westwards towards the perimeter hedgerow). Situated in the layer beneath the topsoil (Context 2) was a layer of densely packed stones that formed a cobbled or metalled surface. Within the northern extension this layer was also recorded, but the stones were less densely packed and they were situated in a gravely subsoil layer. This rougher cobbling rose with the topography to give the surface a flat base approximately 2 metres wide with sloped sides to give an overall width of 6 metres.

The only dating evidence came from a clay pipe stem which was found lying directly on Context 8 (the cobbled surface). However, given the finds recovered from the base of topsoil, which included modern glass and ceramics, it is not unreasonable to suggest that this stem could have been intrusive; therefore this surface cannot be said to be securely dated, (unfortunately no stratigraphic relationship could be established between the cobbling and the bank or pre-bank surface). On balance it is unlikely that this cobbled surface represents anything related to an original entranceway and probably dates to the 17th or 18th centuries with an agricultural function the most plausible explanation.

4.3. Trench Two (Figure 8)

Trench 2 was positioned over a ridge on the eastern slope of the drumlin that appeared to relate to a hollow on the drumlin side. It was here that a series of slot-like features were detected by geophysics. Several linear features were recorded running in an east – west alignment, (they ran with the direction of the downward slope). Two linear features (Contexts 11 and 13) were filled by slightly sandy loams with charcoal flecking. The third linear feature (Context 36) was filled with a brown/grey clay. Unfortunately these slots contained no diagnostic finds, and ascribing a date to them would be purely speculative. They did not contain post-holes of voids either within their fills or at their base, there was also no sign of any burning activity. It is feasible that they could represent a gully-like feature that could have flanked a route towards the drumlin or mound top, it is also possible that they would have contained some form of kerbing (now robbed out) for the same purpose. However, it is also possible that these linear gullies simply represent a drain.

The only find[s] recovered from Trench 2 was a burnt bone sample, obtained from the fill (Context 4), of the east – west aligned linear cut (Context 13).

4.4. Trench Three (Figure 9 & 9b)

Trench 3 was positioned to the immediate west of Trench 1, within the perimeter hedgerow. It was intended that the trench would uncover a continuation of the cobbled surface recorded in Trench 1 that it was thought could run into the monument's interior. Located immediately beneath a thin layer of topsoil was a layer of very loosely packed stones, this Context (19), was not as densely packed as Context 8 in Trench 1 and is unlikely to represent a continuation of the metalled surface, rather the possibility that the stones gathered here as a result of hill-wash or some other natural process has to be considered as the more plausible explanation for their presence. A cut located against the west baulk was recorded, and the possibility that it was the Navan ditch had to be investigated. Although not fully excavated the feature was cut into subsoil and filled by a soft grey silty sand, characteristic of the ditch fill at Navan. It was concluded that this cut feature did indeed represent the Navan ditch, however, significantly the cut appears to be narrower than at any other point surrounding the monument, with the outside edge some 5 metres within the perimeter hedgerow rather than butting against it.

4.5. Trench Four (Figure 10 & 10b)

Trench 4 was designed to further verify that the cut located in Trench 3 was the Navan ditch. Beneath the topsoil layer a stone field drain was encountered, constructed using stones of substantial size, this drain was cut into what appeared to be upper ditch fill deposits. A small box section was excavated in the north-west corner of the trench, with several core samples taken of what appeared to be ditch fill positioned under a harder sandy material, probably hill wash.

4.6. Trench Five (Figure 11 & 11b)

Trench 5 was located two metres north of Trench Two and over the sunken hollow's second ridge and was designed to locate a possible second palisade slot indicated by geophysical survey. Beneath the topsoil layer two loam layers were encountered Context 3 and Context 29. Cut into these contexts several linear cut features, similar to those recorded in Trench Two, were uncovered. As with the linear features in Trench Two, none of the archaeological cuts recorded in Trench Five exhibited any signs of burning or post-holes / voiding within their fills, therefore a similar interpretation as either original gully's to the side of any avenue to the top of the monument, or some sort of drain system must be placed upon them. However, although modern ceramics and glass was found with several clay pipe stems, a blue barrel shaped bead was recovered from Context 3, and probably dates to the Early Christian period. The presence of this bead could indicate that, some of the linear features at least, could date to the Early Christian period. If this is the case then it is not unreasonable to assume that the similar features within Trench Two could also date to this period. However this still indicates that they are not contemporary with the monument's construction.

4.7. Trench Six (Figure 12, 12b & 12c)

In 1999, 2000 and 2001 a trench 5m by 4m (In the nomenclature of the 1999-2001 excavations Trench 1) was excavated in the area where the Site A construction slots A1, A2 & A3 appeared to join with the construction slots Co, Cm and Ci. The remains excavated in Trench 6 in 2002 give further confirmation to the fact that the construction slots A1, A2 and A3 from Site A and Slots Ci, Cm, and Co from Site C are contemporary. The termination of A3 and probable termination of Ci implies that there was a door or entrance way linking both parts of the structure. The finds found during the excavation of this trench are broadly compatible with an Iron Age date for the site and in agreement with C14 dates from the previous seasons excavations.

5.0 Recommendations for Further Work

Introduction: There are seven areas of recommendation for further work on the postexcavation programme for the Navan Fort excavations in 2002.

- It is suggested that the soil samples collected during the excavation be processed by wet sieving and flotation.
- It is proposed that a single C14 date be obtained for the east-west linear cut (Context 13) in Trench 2. Provision should be made for a possible further date if required.
- It is proposed that all burnt bone remains be examined by a specialist.
- It is proposed that all macro-flora from soil sample processing be examined and identified by a specialist.
- It is proposed that macro-faunal remains, such as shell recovered, during soil sample analysis be examined by a specialist.
- Formal identification of metal objects
- Provision should be made for examination of any unsuspected finds from soil sample processing.

Soil sample processing: It is suggested that all the soil samples taken at Navan Fort 2002 be sieved and floated. It is possible that much environmental, agricultural and dietary information will be obtained from soil sample processing and subsequent processing of the material recovered.

Radiocarbon dating programme: It is suggested that a C14 date be obtained for a sample of burnt bone in Context 4, the fill of the linear gully (Context 13) in Trench 2. This is one of a series of similar features running east-west in both Trench 2 and Trench 5. It is also suggested that provision be made for a second date if good datable material, i.e. not susceptible to the problems of old wood effects etc, is recovered from soil sample processing.

Burnt bone analysis: Fragments of burnt bone have already been collected during the excavation and soil sample processing will produce more. It may be possible to identify the species of some of these fragments of bone and it is suggested that analysis of the burnt bone is carried out by a specialist.

Macro-floral remains: It is possible that macro-floral remains will be found during soil sample processing. If these remains are found they will provide an excellent chance to obtain information about the environment and possibly agriculture of the immediate area in the Iron Age. It is proposed that, if found, the seeds and grains etc be analysed and identified by a specialist.

Macro-faunal remains: It is possible that macro-faunal remains will be found during soil sample processing, possible oyster shell has already been noticed in some samples. It is proposed that any faunal remains found during soil sample processing be examined by a specialist.

Copper Objects: The two fragments of copper found from good archaeological contexts should be identified by an expert in Iron Age metalwork.

Unsuspected finds: It is possible that other material not envisioned above will be recovered from soil sample processing. It is suggested that provision be made for analysis of such material should it be found.

Ambos, E.L, Larson, D.O., Kvamme, K., Conway, M. and Cibbarelli, S. 1996	Remote sensing surveys of Navan Fort, <i>Emania</i> 15, 15 - 32.
Flanagan, D., 1997	The identification of <i>Emain Macha</i> with Navan Fort in: Waterman D.W. 1997, <i>Excavations at Navan Fort</i> <i>1961 – 7,</i> 7 - 8.
Geoquest 2000	Geophysics Report, Navan Fort, Co. Armagh
Kvamme, K.L., 1996.	A proton magnetometer survey at Navan Fort
Lynn, C.J., 1992	The Iron Age mound in Navan Fort, Emania 10: 33 – 57
Mallory, J.P., 1997	Emain Macha and Navan Fort, in: Waterman D.W. 1997, <i>Excavations at Navan Fort 1961 – 71,</i> 197 - 207.
Mallory, J.P., 2000	Excavations of the Navan Ditch, Emania 18: 23 - 35
Mallory, J.P. & Lynn, C.J., 2001	Recent excavations and speculations on the Navan complex, Antiquity 73, 2001
Manager D. 1004	The Navan Complex, a new schedule of sites and
Warner, R., 1994	finds, <i>Emania</i> 18: 39 -44

6.0 Bibliography

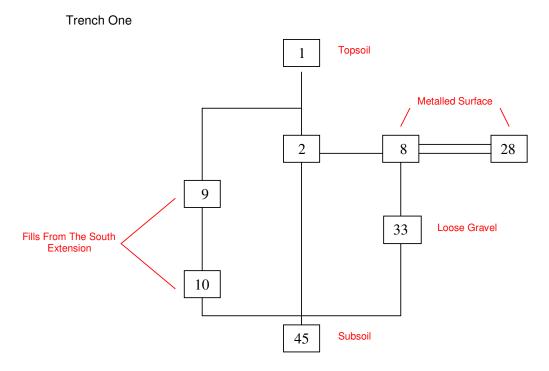
Appendix One: Context Log

Context 1	Friable brown/black loam (Topsoil) visible in all trenches
Context 2	Friable dark brown/red loam (Contains C. 8) Trench 1
Context 3	Compact orange sandy loam/clay. Trench 2
Context 4	Loose dark brown sandy loam with charcoal flecking (fill of C.13).
Context 5	Firm light yellow/orange sandy loam. Trench 6
Context 6	Dark loam with charcoal inclusions and bone fragments. Trench 6
Context 7	Dark charcoal rich loam (contained copper alloy pin). Trench 6
Context 8	Layer of closely packed stones within C. 2. Trench 1
Context 9	Friable orange/brown sandy loam. Trench 1
Context 10	Brown/orange compact clay with small stone inclusions. Trench 1
Context 11	Cut feature running east-west. Trench 2
Context 12	Friable dark brown sandy loam with charcoal inclusions, fill of C.11. Trench 2
Context 13	Cut feature running east-west (filled by C. 4) Trench 2
Context 14	Red/black burnt or fire-hardened clay lining palisade cut. Trench 6
Context 15	Yellow sand. Trench 6
Context 16	Fossil soil to the north-east of cut Ci. Trench 6
Context 17	Soft dark loam first observed as a circular soil variation. Trench 6
Context 18	Sandy clay seemingly enclosed by C. 17. Trench 6
Context 19	Stone layer. Trench 3
Context 20	Post-hole cut within palisade Ci. Trench 6
Context 20b	Fill of post-hole C. 20. Trench 6
Context 21	Post-hole cut within palisade Ci. Trench 6

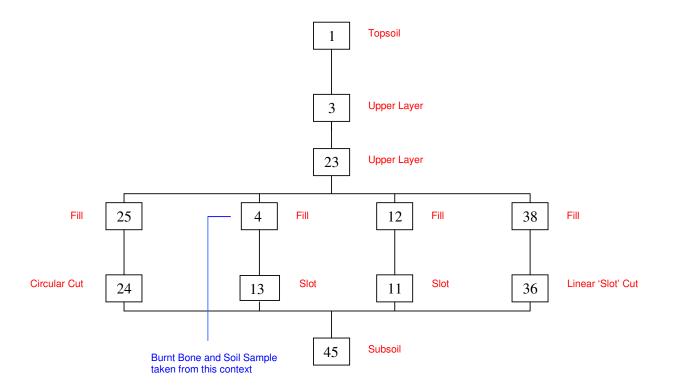
Context 21b	Fill of post-hole C. 21. Trench 6
Context 22	Post-hole cut within palisade Ci. Trench 6
Context 22b	Fill of post-hole C.22. Trench 6
Context 23	Orange/brown loamy clay. Trench 5
Context 24	Circular cut in the north-west corner of Trench 2
Context 25	Fill of C. 24, soft dark brown loamy clay with charcoal inclusions and frequent stone inclusions. Trench 2
Context 26	Stone drain feature in Trench 4
Context 27	Soft grey silty sand (probable ditch fill). Trench 4
Context 28	Stone layer similar to C. 8. Trench 1
Context 29	Brown/orange loamy sand. Trench 5
Context 30	Linear cut running east-west. Trench 5
Context 31	Circular cut against the east baulk. Trench 5
Context 32	Stone field drain running roughly east-west. Trench 5
Context 33	Very loose gravel beneath C. 8. Trench 1
Context 34	Post-hole in palisade slot Ai. Trench 6
Context 34b	Fill of post-hole C. 34. Trench 6
Context 35	Post-hole in palisade slot Ai. Trench 6
Context 35b	Fill of post-hole C. 35. Trench 6
Context 36	Cut feature. Trench 3
Context 37	Subsoil layer in Trench 4
Context 38	Brown/grey fairly compact clay, fill of C. 36. Trench 2
Context 39	Fill of cut feature C. 30. Trench 5
Context 40	Brown loose gravel. Trench 5
Context 41	Post-hole in palisade slot Ai. Trench 6
Context 41b	Fill of post-hole C. 41. Trench 6
Context 42	Post-hole in palisade slot Ci. Trench 6
Context 42b	Fill of post-hole C. 42. Trench 6

Context 43	Post-hole in palisade slot Ai. Trench 6
Context 43b	Fill of post-hole C. 43. Trench 6
Context 44	Gravel layer beneath stones and at the base of many of the features. Trenches 2 and 5
Context 45	Subsoil layer
Context 46	Ditch cut situated in Trench 4 and against the west baulk in Trench 3

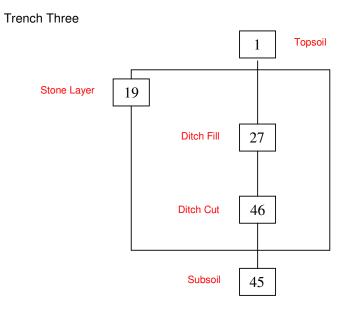
Appendix Two: Harris Matrix



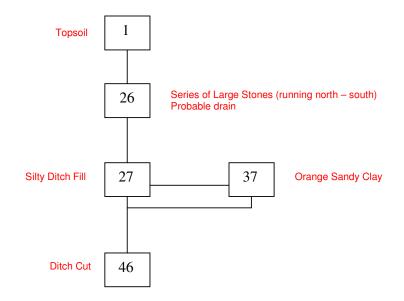
Trench Two



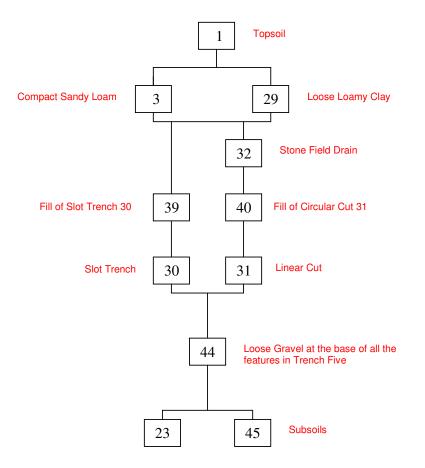
Appendix Two: Harris Matrix



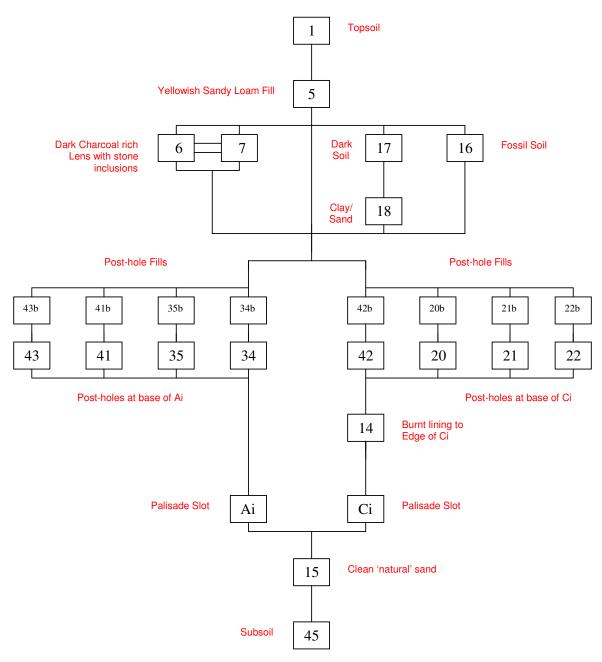
Trench Four



Trench Five



Trench six



Appendix Three: Photographic Record

Digital Archive Fuji Finepix A201

Photograph No.	Description
1	Trench One (main trench) looking North
2	Trench One (main trench) looking North
3	Trench One (main trench) looking South
4	Trench One (main trench) looking South
5	Trench One (main trench) looking North
6	Trench One (main trench) looking North
7	Trench One [extension] towards the West, showing the continuation of Context 8
8	Trench One, close-up detail of Context 8 in extension, before the baulk was removed
9	Detail of Context 8 in extension running West
10	Trench Five, large boulder fill of linear cut Context 30
11	As Above
12	Trench Five, circular cut against the East baulk (Context 31)
13	Trench Four looking east
14	Trench Four taken from the North (looking East)
15	Trench Four looking North

Slide Film *Fuji Chrome ASA 200*

Photograph No.	Description
1	Trench One showing Context 8 looking north
2	Trench One extension, showing Context 8 and position of clay-pipe stem (Small Find No. 2)
3	As Above (looking North)
4	Extension to trench One showing Context 8 looking South
5	Trench Four looking West
6	Southern most extension to Trench One looking East
7	Trench One (North extension) looking West
8	As Above
9	Trench One (main trench) looking North
10	As Above
11	Trench One (main trench) looking South
12	As Above
13	Northern extension of Trench One showing Context 28
14	Trench Five showing position of large [limestone?] boulder
15	Trench Two, South facing section
16	Trench Two slot trench with large boulder fill
17	Trench Two East facing section with labelled contexts
18	Trench Two showing section [shown in photograph No. 17] and the slot trench [shown in photograph No. 16] in the same shot
19	As Above looking South
20	Trench Five, South facing baulk
21	Trench Two [plastic covering] before the trench was backfilled
22	View to the East (looking towards the excavation area) from the top of the mound [Site B]

23	Trench Five, linear stone arrangement towards the South facing baulk
24	As Above, taken from the South
25	Stone filled slot trench within trench Five (Context 30)
26	As Above, taken looking South
27	Trench One showing Context 8
28	Trench One main extension showing the continuation of Context 8
29	Close-up of metalled surface (Context 8) in main Extension of Trench One
30	Trench One (North extension) showing Context 28
31	Trench Five showing Context 30 and 31
32	Trench One (North Extension) looking West
33	Trench One (main extension) box section taken down to subsoil layer
34	Trench One (main extension) showing Context 8 ` and
	position of clay-pipe stem (Small Find No. 2)
35	Trench Two looking West
36	As Above
37	Trench Three (looking West) fully excavated
38	Trench One (main extension) before removal of baulk
39	Trench Three looking east

Slide Film No. 2	
Photograph No.	Description
2	Beginning of excavation of Trench Six
4	Trench Four North facing section
5	Detail of linear stone feature (Trench Five)
5	As Above
6	Deleted
7	Trench Five linear stone feature
8	Trench Three looking East
9	Box Section in Trench Four being excavated
10	As Above
11	Coring in Trench Four [working shot]
12	As Above
13	Section Face of Trench Four showing ditch fill
14	As Above
15	Trench Four (B. Dunlop) excavating ditch fill [working shot]

Appendix Four: Field Drawing Register

D	raw Scale	Plan/Section	Description
1	1:20	Plan	Trench One showing contexts 2 and 8
2	1:20	Plan	Trench Six showing Contexts 5 / 6/ 7
3	1:20	Plan	Trench Six showing Contexts 6 / 7 / 14 / 15 16 and 17
4	1:10	Section	Trench Six (xx – yy)
5	1:10	Plan	Trench Six after preliminary excavation
6	1:20	Plan	Trench Six showing Contexts 5 / 14 / 20 / 21 and 22
7	1:20	Plan	Trench Six showing palisade slots A1 and Ci with post-holes/voiding at their base
8	1:20	Section	Trench Six showing Contexts 5 / 22 and animal activity
9	1:20	Plan	Trench Three showing possible metalled surface (Context 19)
10	0 1:20	Plan	Trench One showing Context 8 and the trench extensions
1	1 1:20	Plan	Trench Two showing Contexts 11 / 13 / 3 and 24
1:	2 1:10	Section	Trench Two east facing section showing Context 13
1:	3 1:10	Section	Trench Two west facing section showing Context 13
14	4 1:10	Section	Trench Two east facing section showing Context
1	5 1:10	Section	Trench Two south facing section showing Context 24
10	6 1:20	Plan	Trench Four plan of probable stone field drain
1	7 1:20	Plan	Trench One plan of box section through west extension
18	8 1:20	Section	Trench Five east facing section of west baulk showing Context 30
19	9 1:20	Section	Trench One south facing section
20	0 1:20	Plan	Trench One northern extension with the continuation of Context 8 / 28
2	1 1:20	Section	Trench Two east facing section of west baulk
2	2 1:20	Section	Trench Four south facing section showing test pit

an drain feature

23	1:20	Plan	Trench Three showing ditch cut (Context 46) and Context 19
24	1:20	Section	Trench Three south facing section
25	1:20	Section	Trench One west facing section and the extension to the north
26	1:20	Plan	Trench One subsoil beneath Context 8
27	1:20	Section	Trench One south facing section
28	1:20	Plan	Trench Five also showing Context 31
29	1:20	Section	Trench Five east facing section showing Context 31
30	1:20	Section	Trench Five west facing section also showing Context 31

Small Find No.	Description
1	A blue bead recovered from Trench 5 in the mottled Context 3 / 29. Approximately 1 cm in width and 1 cm in height the artifact is barrel shaped and would probably date to the 8^{th} Century and the Early Christian Period (Lynn, <i>pers comm</i>).
2	A fragment of clay pipe stem, at its greatest extent approximately 2.5 cm in length and 0.7 cm in width. Recovered from Trench 1 and situated on top of the cobbled/metalled surface (Context 8).
3	A small piece of orange/red flint. Originally thought in the field to have retouched edges, this now appears unlikely; rather small 'chips' have been taken off the sides by either glacial movement or agricultural practices.
4	A sherd of pottery recovered from Context 16 (Trench 6). One side is black in colour, with the reverse largely red-orange. The sherd measures approximately 3 cm in length and $c.1.1$ cm at its widest point.
5	A small fragment of lignite rod, tapering from 1cm in width to 0.6 cm. The round sides are smooth and appear to be polished. It is possible that the rod was tapering towards a point, however with such a small fragment this suggestion is purely speculative.
6	Bronze/Copper alloy disc with a bent hook that was probably at one time a straight pin on the reverse side. Probably a button or clothing pin.

Appendix Five 'B': Small Finds of Archaeological Significance

Appendix Six: Soil Sample Log

Sample No.	Trench No.	Description
1	Six	Soil sample taken of Context 22b (the fill of Context 22- a post-hole/void in palisade slot Ci)
2	Six	Soil sample taken of Context 21b (the fill of Context 21- a post-hole/void in palisade slot Ci)
3	Six	Soil sample taken of Context 35b (the fill of Context 35- a post-hole/void in palisade slot A1)
4	Six	Soil sample taken of Context 7 (dark charcoal rich loam containing a copper alloy pin)
5	Two	Soil sample taken of Context 4 (loose dark brown sandy loam with charcoal flecking)
5b	Two	Burnt bone sample form within Context 4
5c	Two	Soil sample taken of Context 7



Plate 1: View of Tr. 1 from south



Plate 2: View of Tr. 3 from the west



Plate 3: View to the west from Navan Summit