FINAL REPORT
ARCHAEOLOGICAL EXCAVATION
OF POSSIBLE NEOLITHIC SITE
WITH STRUCTURES,
HEARTH AND PITS
AT LISSENHALL LITTLE, SITE 2
AIRPORT BALBRIGGAN BYPASS,
Co. DUBLIN
01E1074





Valerie J Keeley Ltd Archaeological Consultancy June 2004 FINAL REPORT
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Project Director: Valerie J Keeley Ltd

Site Director: Fiona Reilly

Summary

This report details the excavation of Site 2, which was found during the monitoring of topsoil striping (00E954ext.) for the Airport Balbriggan Bypass Co. Dublin. The identified site was subsequently excavated under archaeological licence 01E1074 by Fiona Reilly for Valerie J. Keeley Ltd. for Fingal County Council and the National Roads Authority with European Union assisted funding.

The site consisted of two possible structures, pits and a hearth. Finds of lithics and Western Neolithic pottery sherds were recovered from the area. It is of possible Early Neolithic date, however as the lithics indicate a later prehistoric date this date will be verified or discounted after radiocarbon dating is finalised.

The report presents all specialist information available to date.

TABLE OF CONTENTS

Appendix 6 Flint Assemblage, Ann Clarke

	Page Number
List of Figures	1
List of Plates	1
Introduction	2
Location	2
Methodology	2
Stratigraphic Report	3
Discussion	8
Bibliography	13
Appendix 1 Context Catalogue	
Appendix 2 Prehistoric Pottery, Anna Brindley	
Appendix 3 Plant Remains, Penny Johnston	
Appendix 4 Wood Species Identification Ellen O'Carroll	
Appendix 5 Post Medieval Pottery Sarah Gormley	

Figures

Fig. 1	Location of Site 2
Fig. 2	Neolithic and Possible Neolithic Sites within Radius of 12KM of Site 2 $$
Fig. 3	Pre excavation plan Site 2
Fig. 4	Post excavation plan Site 2
Fig. 5	Section of C45 and Profile of C10
Fig. 6	Profile of C62, C100, C97, C66, C87, C72 and Section of C95
Fig. 7	Profile of C6, C36, C81 and C69

Plates

Pl.1	Looking north west at the site.
Pl. 2	Eastern part of the site during the trowel back, looking north.
Pl. 3	Eastern part of the site during the trowel back, looking south.
Pl. 4	Looking north west at C29 and C28.
Pl. 5	Looking south at the unexcavated pit fills C47 and C61 in pits C45 and
	C10.
Pl. 6	Looking south at the excavated pits C45 and C10.
Pl. 7	Looking south at C95 with a central baulk section left in place.
Pl. 8	Looking north at the excavated post-hole C98. Note the pebble base.
Pl. 9	Looking south at the excavated post-hole C62.
Pl. 10	Looking north at the excavated pit C90.
Pl. 11	Looking north at the fill of pit C69, C59, it was truncated on its
	southern side by machinery.
Pl. 12	Early Neolithic pottery in-situ.

INTRODUCTION

This site was found during the monitoring of topsoil stripping under licence no. 00E954ext at 319123/249204. Prior to excavation the land to the north, east and south had been cut away as part of construction work, leaving the site perched on top of a peninsula of land at least 6m high (pl. 1). The site itself measured 20m on its southern side, 34m on its eastern, 9m on its northern and 36m on its western (fig. 3 and pls 2+3). All features cut natural subsoil C2 that was light grey sand on the north, south and eastern sides and orangey brown clay on the western side. The topsoil C1 had been removed by machine. Radiocarbon dates and the clay pie report are pending. An appendix and further comments will be included when available.

LOCATION

The site was located 2km north of Swords, Co. Dublin (fig.1). Fig. 2 gives an idea of the Neolithic landscape it was part of. Since it was not possible to distinguish between cairns and mounds of different periods in the SMR record all of these two categories were included on the map. More accurate representation of the surrounding Neolithic landscape may be possible in the final report. The modern landscape was fairly flat pasture with a high point of 176m approximately 10km to the north at Knockbrack where a hillfort is located. The Irish Sea was 6km to the east and the Broad Meadow River approximately 1km to the south west. The site was therefore positioned in a diverse landscape in terms of food sources.

METHODOLOGY

The area was divided into six grid squares and trowelled back to reveal any archaeological features. Artefacts found during this procedure were assigned grid numbers and co-ordinates taken where appropriate. These were possible Mediaeval pottery sherds, a clay pipe fragment, post-medieval pottery sherds and flint nodules some of which had been struck. Each context was labelled, individually excavated and

recorded by plan and section or profile depending on which was more appropriate, photography and on context sheets. Soil samples were taken of appropriate fills.

STRATIGRAPHIC REPORT

For ease of discussion contexts have been divided into four spatial groups (fig. 3 & 4). The first in the north east, the second in the north west, the third in the centre and finally group 4 in the south east. Since there was no strategraphic relationship between most of the contexts it is presumed that they are all contemporary. Medieval and Post-medieval pottery sherds were found in the topsoil. These included probably imported Creamware and Pearlware. The Medieval sherds and the Red Earthenware were probably locally produced (Gormley, appendix 5). They were probably deposited on site by the spreading of manure. 93% of the flints came from the topsoil these included 12 flakes, 4 chunks, 5 cores and 1 nodule. 3 flakes, 2 chunks and 1 core were found in the topsoil interface C40 (Clarke, appendix 6).

Group 1

This group included C7, 46, 25, 44, 9, 68, 27, 53, 26, 80, 28, 77, 29 and 73. C27 was a shallow linear cut, roughly north south, with two deeper sections, 4.48m long and 0.57m wide. The southern section was 2.30m long and 5cm deep while the northern part was 0.90m long and 10cm deep. The fill C53, a loose, light brown sandy clay with an orange hue was found in the deeper sections and the very shallow part between them. C26 was an oval cut truncating and to the south east of the northern deeper section of C27. It was filled with redeposited natural C26. Two flint pebbles were found in the fill.

C29 was a linear cut 1.20m to the south of C26 (pl. 4). It was orientated north east, south west, 1.60m long by 0.25m wide and 3cm deep. It was filled with C73 which was similar to C53 in the linear cut C27. C28 was a small circular pit 10cm north west

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of the northern end of C29. It was approximately 0.30m in diameter by 4cm deep with a regular base (pl. 4). Its fill C77 was a brown, orange hued silty sand with small

pebbles. C68, C7 and C25 were found in an arc to the north west of the northern end of C27. The first C68 was 1m due west of C27. It was an irregular crescent shaped depression with an irregular base, 1.57m north south by 0.53m east west and 0.21m deep. It was filled with a mid-brown, sandy clay with a moderate amount of charcoal. A flint flake 01E1074:2 was found in it. C7 was 0.90m north east of C68. It was a small oval depression 0.34m north south by 0.26m east west and 9cm deep. Its fill C46 was a light grey, medium sand. The final contexts in this group were C25 and its fill C44. C25 was 1.10m east of C7. It was 0.27m by 0.10m and 0.12m deep. C44 was light grey, silty sand.

Interpretation

What this group of contexts represents is not obvious. If the linear features C27 and C29 are ignored and the remaining probably contemporary features examined it is seen that they form a circle approximately 2m in diameter. There was no regularity to the individual features but they did form an individual grouping. It can be suggested that they were part of a larger, unseen feature that continued to the east outside the bounds of the site or held some kind of structure for a platform.

Group 2

This group is located 6m to the west of group 1 (fig. 3 & 4). It consisted of two shallow pits, C45 and C10 and their fills C61, C47 and C11 (pl. 5+6). C10 was the bigger 0.50m east west by 0.60m north south with 0.12m maximum depth. It was subcircular with a concave base and concave sides (bowl shaped) (fig.5.2). It was filled with C61 a grey to black silty clay with small pebbles and frequent charcoal. The charcoal has been identified as oak (OCarroll, appendix 4). A carbonised hazel nut fragment was also found in this fill (Johnston, appendix 3). It became more compact towards the base. Hazelnuts are a good source of protein and were a valuable nutritional source in prehistoric Ireland (Johnston, appendix 3).

The second pit C45 was 0.70m west of C10. It was oval, 0.39m by 0.36m and 0.10m deep and had straight sloping to concave sides and a concave base (bowl shaped)

(fig.5.1). It had two fills C11 and C47. The primary fill, C11, was dark brown, silty sand with occasional small pebbles and charcoal flecks. It was 7cm deep. C47, the secondary fill, was a dark charcoal stained fill with inclusions of small sub-angular pebbles.

Interpretation

Two pits which are unlikely to be for storage, waste or fire.

Group 3

This group was centrally located and concentrated around the remains of a fire pit C95. It included the contexts C108, 109, 110, 95, 94, 102, 101, 92, 98, 99, 96, 97, 90, 91, 88, 89, 84, 85, 3, 66, 4, 62, 72, 42, 32, 75, 30, 78, 5, 63, 40, 93, 100, 79, 87, 67 and 74 (fig. 3 & 4)...

C95 was an irregular shaped depression 1.93m north south by 2.19m east west and 0.34m deep (Fig. 6.4 and pl. 7). It had a very irregular base and mostly gradual sides except in the north east, north and south east where they were steep. The base of the feature was burnt red especially in the southern and western areas, this scorching was 8cm deep on the western side. The feature was filled with three deposits, C110, C109 and C108. C110 was the primary fill, it was light yellow ash with a moderate amount of charcoal was confined to a northern depression in the C95. Above this was C109, a dark brown silty clay with frequent flecks and lumps of charcoal. It was 1.93m north south by 2.19m east west. The final context to be found in the cut C95 was C108. It was a light brown silty sand with frequent charcoal in the north east. 2 flint flakes 01E1074:27 and 01E1074:28, one of which was burnt, was found in the hearth. Charcoal found in this feature was identified as oak (OCarroll, appendix 4).

Eleven post-holes and possible post-holes were found to the west, south and east of the fire-pit C95. They may have formed a windbreak or rough shelter around the firepit. On the western side C62/4 (fig. 6.1 and pl. 9), C66/3 (fig.6.5), C87/79 (fig. 6.6 and C84/85 formed a line, 7.70m long, running north-north-east. 8.50m in length

C84/85, C99/98 and C42/74 were located along the southern side and C32/75 and C42/74 along the eastern, 6.20m long. C99/98 (pl. 8) was a particularly good example of a post-hole. It had a regular shape and was straight sided with small rounded pebbles compacted into the base. The pebbles were probably used to give the base of the post a firm standing surface. Outlying features included C96/97 (fig. 6.3) to the north east of C62/4, C89/88 and C91/90 to the south east of C84/85 and C30/78 to the east of C72/67 (fig.6.7). C90 was a roughly circular pit 0.76m by 0.64m and 0.15m in depth (pl. 10). Its fill, C91, was mostly dark brown tinged light red on the eastern edge suggesting that it had been burnt, some pieces of burnt stone were also found in it. C89 was 'C' shaped 0.60m by 0.39m and 0.12m deep. Its fill C88 contained occasional charcoal and burnt sandstone. It may have been a pit truncated at some stage. The deeper north eastern end looked like it may have been a disturbed stakehole. C78 was a steep sided cut 0.27m by 0.26m and 0.15m deep 5m to the east of C72. Its fill C30 was a mid-brown silty sand and contained some small sub-angular stones. Nothing was found in the fill to allow greater interpretation of the feature other than of a possible post-hole or small pit. C97 was 2.5m to the north west of C62. It was an oval cut 0.23m by 0.19m and had a maximum depth of 0.17m. Its vertical sides suggest that it was a post-hole probably associated with the line of posts on the western side of the fire-pit C95 discussed above. Between C100 and C72 was C5 a sub-oval pit 0.20m by 0.13m and 8cm deep with a flat base and smooth vertical sides. Its fill C63 was rich in charcoal and had some burnt stone.

Two deposits (C102 and C92) were found in shallow depressions (C94 and C101) to the north of the fire-pit C95. C92 was the most northerly of the two. They both had flecks of charcoal, patches of higher concentrations of charcoal were found in C102 while the bottom half centimetre C92 had a lower concentration of charcoal than the rest of the fill. Between these two deposits was a stake-hole C100 (fig. 6.2)It was 0.16m by 0.12m and 0.11m deep and cut the southern end of the deposit C92. It was filled with C93 a loose, mid-grey, sandy silt. Charcoal found in these depressions was identified as hazel (OCarroll, appendix 4).

Interpretation

C95 was a large fire-pit which had such an irregular base and shape on its eastern side that it must have been used and recut many times. No evidence was found for any spit structure around the fire-pit. None of the post- or stake-holes were substantial or deep being between 0.16m and 6cm in depth though truncation probably occurred by ploughing. This suggests that a light, temporary structure was erected around the fire and possibly acted as a windbreak measuring 9m by 5m. The stakes were probably inserted much deeper into the ground than the evidence suggests but ploughing and machine stripping subsequently truncated them. It can be suggested that hazel was used in the construction probably as wattle walling.

Group 4

Group 4 was located in the south eastern corner of the site. It included contexts 69, 59, 33, 82, 34, 83, 56, 64, 35, 81, 36, 65, 71, 54, 70, 52, 38, 86, 76 and 57. C69 was the largest and most northerly feature of the group (fig. 7.4 and pl. 11). It was truncated by machinery on its southern side and probably its upper section prior to excavation. It can be projected that the original cut was circular in shape. The surviving section of the concave cut was 0.80m by 0.90m and 0.10m deep. It was filled with C59 a light brown sandy clay with flecks of charcoal.

To the south of C69 was a group of post- or stake-holes, C82, 83, 56 (fig.7.1), 71, 70 and 86 (cut numbers) which formed a rough line 5.8m in length and was orientated in a north western direction. With the exception of C70 and C71 they varied in dimensions from 0.11m by 0.15m and 9cm deep (C82) to 0.24m by 0.15m and 9cm depth. C70 and C71 were 0.10m by 0.10m and 3cm in depth were found closer together than the others. They may represent two slender rods that were used together instead of thicker single ones. Two more small stake-holes C36 (fig. 7.2) and C81 (fig. 7.3) were found 0.45m to the south west of C83 and C56.

C76 was found 1m to the south of the line of post- or stake-holes discussed above and was not fully excavated as it ran into the southern baulk. The excavated section was an irregular shaped pit 0.37m by 0.37m and 0.15m deep. It was filled with C57 a mid

FINAL REPORT ARCHAEOLOGICAL EXCAVATION OF POSSIBLE NEOLITHIC SITE WITH STRUCTURES, HEARTH AND PHS AT LISSENHALL LIFTLE, SITE 2 AIRPORT BALBRIGGAN BYPASS Co. DUBLIN 01E1074

grey brown sandy clay with ash and charcoal and can be interpreted as the remains of a fire pit.

Interpretation

This collection of post- and stake-holes may be all that remains of a wind-break to the northeast of a hearth or the north eastern side of a light construction associated with the hearth. Since the prevailing wind is from the south west it is likely that a similar line of post- and stake-holes also existed on that side of the hearth. Again it can be considered that the structure was temporary due to its light nature.

DISCUSSION

Evidence for two light, temporary structures, one definite fire-pit, a possible fire-pit and four pits were discovered on this site. Since individual features did not have strategraphical relationships with each other, they were cut into natural boulder clay, it is presumed at this point that they are contemporary. A substantial quantity of flint was found during the clean back, mostly nodules probably from the glacial tills but also some struck pieces and flakes. More flint can be assigned to particular contexts. Other artefacts found in the topsoil included post-mediaeval and mediaeval pottery sherds and a clay pipe fragment. 5.5m to the north of the fire pit C95 a small quantity of crushed pottery was found on the ground surface immediately below C1, the material removed by the machinery (pl. 12). It has been identified as belonging to an early stage in the Western Neolithic Tradition, which appeared in Ireland circa 5000BP (Brindley appendix 2). From this evidence the entire site has been tentatively dated to the Early Neolithic. The flint assemblage from site consisted of flakes and flake cores. There was no evidence of retouched tools or blade reduction as would be expected in an Early Neolithic assemblage. It is therefore likely that the assemblage belongs to a later date in pre-history (Clarke, appendix 6) Radiocarbon dates may clarify this contradiction in dating evidence.

There is not much definite Neolithic activity within the 12km radius shown on fig. 2. The sources for this map were the SMR, excavated sites on the Airport/Balbriggan

FINAL REPORT ARCHAEOLOGIC AL EXCAVATION OF POSSIBLE NEOLITHIC SITE WITH STRUCTURES, HEARTH AND PITS AT LISSENHALL LITTLE, SITE 2 AIRPORT BALBRIGGAN BYPASS Co. DUBLIN 01E1074

By-pass and *Excavations*. There is a portal tomb in Howth, a Late Neolithic pit (site 5) was excavated to the north of this site on the same project and arrow heads were found on site 8. There are 30 mounds, 7 cairns, 2 middens and an axe production site within this area. It was not possible to determine which of these sites date to the Neolithic from the SMR.

The most convincing group of contexts on the site was the centrally located Group 3. The contexts were; post-holes, possible post-holes and a shallow pit grouped around the fire pit C95. The group has been interpreted as a structure (9m by 5-6m) around the fire-pit. Most of the post- and stake-holes were shallow and narrow but there were some more substantial ones for example C62 and C98 (pls 8+9). The shallow linear features C101 and C94 on the north western side may have been caused by people gaining access to the structure and wearing the surface down at that point. The hazel found in these hollows may have been from a collapsed wattle wall of the structure.

A second structure (Group 4) might have been in the south eastern area of the site, much lighter and probably more temporary than Group 3 above. If it was a structure only the northeastern side was excavated as the remainder would have been located outside the site boundary and was destroyed my machinery before excavation commenced.

Group 1 might represent a circle of post-holes that held a structure aloft, perhaps for food or grain storage.

Evidence from at least 14 rectangular and 20 circular buildings from the Neolithic Period show there was diversity in style and building technique. Grogan has identified rectangular plank built houses (Tankardstown 1) and post-framed ones (Grogan 1996 in Cooney 2000, 58). Stone was used on occasion such as at Lough Gur. The plank structures were built of upright split planks of oak. There are single and double post-framed examples where the area between the posts probably had wattle screening while the double walled structures would have had extra insulation stuffed between the walls. Roofs were thatched with either vertical gables or hipped. Doors were generally located to the right at the end of a long wall (Cooney 200, 59). It seems that

FINAL REPORT ARCHAEOLOGICAL EXCAVATION OF POSSIBLE NEOLITHIC SELE WITH STRUCTURES, HEARTH AND PITS AT LISSENHALL LITTLE, SITE 2 AIRPORT BALBRIGGAN BYPASS Co. DUBLIN 01E1074

the entrance in the Lissenhall Little example was on the right hand side of the northern wall. There was also possibly a wind block on the western side of the door represented by post-holes C62 and C97. This would have sheltered the entrance from the prevailing winds. The fire was therefore located slightly off centre in the space away from the doorway. Hearths tend to be located in the centre of houses at this time e.g. Lough Gur, House A. Further discussion on the structures will ensue in the appendix when results of C14 dating are available.

There were four pits excavated on site. Two 8m north of the structure represented by Group 3, one 3m south of the same structure and finally one 1m north of the possible structure represented by Group 4. The first two pits were filled with material which had charcoal flecks. The fill of C90 had evidence of burning and the fill of C69 had flecks of charcoal. All were bowl shaped and shallow C10 to 0.15m deep and ranged in diameter from to 0.46 to 0.90m.

These pits are unlikely to be either fire pits, since there was no evidence of insitu burning, food storage pits due to their size and shape or waste disposal pits because three had homogenous fills and one only two fills. A gradual building up of fills would be expected if they were for waste disposal. They are also small and it is unlikely that people would go to the trouble of digging a pit to dispose rubbish in when it would be much easier to dump rubbish in a large heap on the ground away from the site.

These pits are characteristic of Neolithic pits being small and shallow (Thomas 1991). Small, shallow bowl shaped pits are unsuitable for food storage. Experiments with reconstructed Iron Age pits by Reynolds has shown that the mouth of the pit needs to be sealed with clay or dung and that the best results are achieved when the angle between the seal and the pit sides is not acute. A beehive shaped pit is therefore the most effective (in Thomas 1991, 60). The pits found in Lissenhall little, even if truncated by ploughing, are too small and their sides too sloped to be storage pits.

Neolithic pits are also notable by their fills, often homogenous and burnt with unburnt artefacts. Their sides are often fresh with no sign of weathering or subsidence (Calkin

1947, 30;Smith and Simpson 1964, 82 in Thomas 1991). This indicates that the pits were quickly backfilled. Pit C10 had a single fill which was rich in charcoal. Pit C45 had two fills both of which contained charcoal. Pits C69 and C90 also contained single fills that had evidence of burning. There was no evidence that any of them had been recut. If these pits had been used for food storage it would be expected that they would contain more fills and evidence of recutting. Even if carbonised domesticated cereal grain is found in the samples from the pits during specialist analysis this will not necessary indicate that grain was stored in the pits and burned as part of a sterilisation process. If they had been used for waste disposal several fills would be expected.

Neolithic pits in Britain have been found to contain animal bone, human bone, broken pottery, fine flint artefacts and stones axes. Animal bone assemblages found in the pits are usually made up of meat rich parts of animals or have a peculiarity such as the assemblage found in a pit at King Barrow Ridge near Stonehenge which was made up of pig foot bones (Thomas 1991, 62). Human skull fragments and other human parts were found in these pits with stone axes, pottery, flint tools and animal bones. The flint tools are often finely flaked complete pieces with a high ratio of tools to waste. In one case a scraper had been broken in two and half placed in two separate pits. The pottery is often of rare and highly decorated types (Thomas 1991, 62). These finds do not seem to represent domestic refuse. Flint was found in two of the pits on this site C10 and C69 but was not identified as having been worked. Only a small fragment of burnt bone was found on site and not in a pit. So why were they dug? Thomas has suggested that the attitude to what we view as waste was different in the pre-historic period. That objects and material were deposited in pits as part of a complex relationship with the objects themselves and the habitation area. An Irish example is that of Goodlands, Co. Antrim where sherds, flints and charcoal were buried in pits. Case has interpreted this as activity as representing a fertility ritual where 'the scraped-up debris of settlement sites' was deposited in pits on the site (Case in Thomas 1991, 59). A similar situation (though Late Neolithic) to this site was at Coolfore 1 on the Northern Motorway some Late Neolithic pits were excavated close to two houses. Burnt material, flint and some pottery were found in some of the pits (C. O'Driscoll pers. comm.).

FINAL REPORT ARCHAFOLOGICAL EXCAVATION OF POSSIBLE NEOLITHIC SITE WITH STRUCTURES, HEARTH AND PITS AT LISSENHALL LITTLE. SITE 2 AIRPORT BALBRIGGAN BYPASS Co. DUBLIN 01E1074

The distribution of flints on site was predominantly over groups 3 and 4 i.e. the 2 structures. The high percentage of cores on site indicate that flakes were produced on or near the site and were probably removed to be used elsewhere (Clarke, appendix 6).

The pottery found on Site 2 at Lissenhall Little suggests that it was Early Neolithic though the flint assemblage suggests a later date. Evidence for a structure surrounding a hearth, a possible structure and four pits were excavated. Results from radiocarbon dating are pending.

BIBLIOGRAPHY

COONEY, G. (2000) *Landscapes of Neolithic Ireland*. London and New York: Routledge.

GROGAN, E. (1996) 'Neolithic Houses in Ireland', in T. Darvil and J. Thomas (eds), *Neolithic Houses in Northwest Europe and Beyond*, 41-60, Oxford:Oxbow, Monograph 57.

THOMAS, J. (1991) Rethinking the Neolithic. Cambridge: Cambridge University Press.

Appendix 1

Context Catalogue

CONTEXT LIST

Context	Grid	Description
1	All	Topsoil removed during topsoil stripping.
2	All	Natural boulder clay
3	5	Moderately loose, light to mid grey brown, clayey silt with occasional small sub-angular pebbles. Fill of C66.
4	5	Moderately loose, light to mid grey brown, clayey silt with occasional small sub-angular pebbles. Fill of C62.
5	5	Sub-oval, cut, 0.20m by 0.13m and 8cm deep with smooth, vertical sides and a flat base. Orientated east west. Probably a small pit with fill C63.
7	3	Oval cut, 0.34m by 0.26m and 9cm deep. The eastern side was gradual while the others steep. The base was irregular. Probably naturally occuring depression filled with C46. Orientated north south.
9	3	Moderately compact, mid-brown, sandy clay with a moderate amount of charcoal inclusions. 1.24m by 0.53m. Fill of C68.
10	6	A sub-circular pit 0.50m by 0.70m and a maximum depth of 0.12m. Smooth sides with a concave base on the northern side and flat elsewhere.
11	6	Friable, mid to dark brown, silty sand with occasional small sub-angular stones. 8cm deep. Primary fill of cut C45.
25	3	Oval cut, 0.27m by 0.10m and 0.12m deep. Possible post-hole.
26	3	Irregular rectangular, cut with rounded corners and an irregular base that dips at its northern end. Orientated roughly north south.
27	3	Long, linear cut with rounded corners. 4.48m by 0.57m but in two sections, the central section is not preceptible. The sides of the western section were steeper than the eastern. Possible remains of a plough furrow.
28	2	Moderately loose, brown, silty sand with an orange hue, inclusions of small rounded stones. 0.29m by 0.33m and 4cm deep. Fill of C77.
29	2	Linear cut with rounded corners. 1.60m by 0.25m and 3cm deep. Orienated in a northeasterly direction. The sides of the northeastern are more gradual than the south western end.
30	2	Friable, mid to light brown with some orange flecks, silty sand with inclusions of small sub-angular stones. 0.30m by 0.34m and 7cm deep. Fill of C78.
32	1	Loose, mid red, silty sand with occasional small sub-angular stone inclusions. Fill of cut C75.
33	1	Loose, brown, sandy clay with occasional charcoal flecks. 0.15m by 0.11m and 9cm deep. Fill of cut C82.
34	1	Firm, reddish brown, sandy clay with occasional charcoal flecks and small stones. 0.17m by 0.11m and 3cm deep. Fill of cut C83.
35	1	Loose, mid brown, silty sand with a moderate amount of small fragments of charcoal and occasional small stones. 0.46m by 0.16m maximum and 0.10m deep. Fill of C81.
36	1	Circular cut, 0.20m by 0.15m and 0.17m in depth. Vertical sides with a tapered, blunt pointed base. Post- or stake-hole.
38	1	Loose, light brown, sandy clay with charcoal flecks. 0.25m by 0.12m and 4cm deep. Fill of cut C86.

FINAL REPORT ARCHAFOLOGICAL EXCAVATION OF POSSIBLE NEOLITHIC SITE WITH STRUCTURES, HEARTH AND PITS AT LISSENHALL LITTLE, SHE 2 AIRPORT BALBRIGGAN BYPASS, Co. DUBLIN 01F1074

40	4+5	Loose, midgrey, sandy silt with frequent charcoal flecks and moderate burnt sandstone and occasional burnt bone.4.50m north south by 5m east west.
41	2	Non archaeological
42	1	Loose, midbrown, sandy clay with occasional flecks of charcoal. 0.23m east west by 0.16m north south (truncated on southern side). Fill of C74
44	3	Friable, light grey silty sand with some orange flecks. 0.27m by 0.10m and 0.12m deep. Fill of cut C25.
45	6	An oval cut 0.39m by 0.36m and 0.10m deep with vertical sides and a flat base.
46	3	Soft, light grey, medium sand with occasional stone fragments. 0.34m by 0.26m and 9cm deep. The fill was slightly more compacted towards the base of the cut. Fill of C7.
47	6	Friable, black, clayey silt and charcoal fill with inclusions of small sub-angular stones. 0.16m in diameter and 7cm deep. Secondary fill of cut C45.
52	1	Moderately loose, mid-grey mixed with dark grey, sandy clay with charcoal flecks. 0.10m by 8cm and 2cm in depth. Fill of C70.
53	3	Moderately loose, light brown sandy clay with an orange hue. 4.48m by 0.57m. Maximum depth was 0.10m. Fill of cut C27.
54	1	Moderately, loose, light grey, sandy clay with charcoal flecks. 0.10m by 7cm and 2cm deep. Fill of cut C71.
56	1	Sub-circular, cut, 0.24m by 0.15m maximum width tapering to 9cm on its eastern side and 0.12m on its western. Sides conceve on the northern side and convex on the southern. Base sloped from east to the centre. Possibly a shallow pit or truncated stake-hole.
57	1	Moderately compact, mid-grey brown sandy clay and charcoal and possibly ash with inclusions of small stones. 0.40m by 0.20m and 7cm maximum depth. Runs into the southern baulk so not completely excavated. Fill of C76.
59	1	Soft, light brown, sandy clay with inclusions of rounded and sub-rounded, small stones and pebbles and flecks of charcoal. 0.80m by 0.90m and 0.10m in depth. Truncated on the southern side.
61	6	Moderately compact, grey to black, silty clay with moderate inclusions of small pebbles and frequent charcoal. 0.45m by 0.70m and 0.12m deep. Fill of oval pit C10. The fill became more compact towards the bottom, some burnt stones were also found at the base. Two pieces of flint were found in the fill.
62	5	Oval cut, 0.28m by 0.26m and 0.14m deep. Steep side on the east, almost vertical, and slightly sloped on the west. Rounded base. Post-hole cut.
63	5	Firm, brown, silty sand with inclusions of occasional burnt stone and small pebbles and frequent charcoal flecks. 0.20m by 0.13m and 8cm deep. Fill of C5. May have been a post-hole or small pit.
64	1	Loose, brown, silty sand with a pink hue and occasional inclusions of small pebbles and charcoal flecks. 0.24m by 0.15m maximum width tapering to 9cm on its eastern side and 0.12m on its western. 7cm deep decreasing in depth on the edges. Fill of cut C56.
65	1	Loose, light brown grey, silty sand with occasional charcoal flecks. 0.20m by 0.15m at its widest. Fill of C36.
66	5	Sub-oval, cut with sharp sides on the west and gradual on the east. The south western side was stepped because of protrudingstones, uneven base. 0.30m by 0.25m and 0.10m deep.
67	2	Firm, midgrey, silty sand found in possible post-hole C72.
68	3	Irregular, long oblong cut running north south with rounded corners. 1.57m by 0.53m and 0.21m. The northern and northwestern sides are gradual while the others are steep. The base was irregular but smooth.
69	1	Circular, cut, 0.80m by 0.90m and 0.10m deep. Concave sides with a sloping base. A pit which was truncated on its southern side by machinery.

FINAL REPORT ARCHAEOLOGICAL EXCAVATION OF POSSIBLE NEOLITHIC SITE WITH STRUCTURES, HEARTH AND PITS AT LISSENHALL LITTLE, SITE 2 AIRPORT BALBRIGGAN BYPASS. Co. DUBLIN 01E1074 O 10m in diameter and 3cm deep. Sides inpercentible. A stake-hole

70	1	Circular, cut 0.10m in diameter and 3cm deep. Sides inperceptible. A stake-hole probably truncated by machinery.
71	1	Circular, cut, 0.10m in diameter and 3cm deep with vertical sides and a tapered blunt point. Possible truncated stake-hole.
72	2	Oval cut, 0.20m diameter and 6cm deep, Vertical sides with a sharp flat base, possible post-hole.
73	2	Moderately loose, light brown, silty sand with several small rounded stones. 1.60m by 0.25m. Fill of C29.
74	1	Circular cut, truncated on southern side, 0.23m by 0.16m and 0.10m deep.Western and northern sides vertical and eastern gradual. Concave base.Possible post-hole
75	1	Oblong cut, pointed at the north with rounded corners and concave sides, 0.76m by 0.40m and 0.10m deep. Orientated north south.
76	1	An irregular cut with rounded corners, 0.37m by 0.37m and 0.15m deep. Runs into the southern baulk so full extent unknown. Eastern side of the feature has convex sides while the western has concave. Rounded base. Possible fire-pit.
77	2	Circular cut, 0.33m by 0.29m and 4cm deep maximum. The sides were near vertical, the base flat.
78	2	Oval cut, 0.27m by 0.26m and 0.15m deep. Sides sharply sloped on the south western side and almost vertical on the north eastern side. The base was concave and sloping on the south western part of the feature. Orientated in a north eastern direction. May have been a natural depression.
79	5	Light to medium grey brown, silty sand with frequent flecks of charcoal predominately in the southern half. Stones found at the base.
80	3	Moderately loose, light grey, sandy clay with very occasional charcoal inclusions. 0.47m by 0.22m. Fill of cut C26.
81	1	Irregular linear cut with rounded corners. 0.46m long by 9cm to 0.16m wide and 4-10cm deep deepest at it north western end. Convex sides with a sloping base from the southeast to the north west. The northwestern end was possibly a stake-hole.
82	1	Semi-circular cut 0.15m by 0.11m and 9cm in depth. Vertical sides and a tapered rounded point. A stake-hole, may have been truncated by machinery.
83	1	Oval, cut, 0.17m by 0.11m and 3cm deep. Vertical sides except the north side which is concave. A flat base, orientated east west. Possibly the remains of a truncated stakehole.
84	4	Moderately compact, midbrown, sandy clay with very occasional charcoal. Fill of stake-hole cut C85.
85	4	Circular cut, 9cm by 7cm and 10cm deep. Vertical sides, slightly under cut on one side. Tapered rounded point.
86	1	Irregular rectangular cut, 0.25m by 0.12m and 5cm in depth. Vertical sides except the northern which is gradual. A flat base. Orientated in a north westerly direction.
87	5	D' shaped cut with flat side on the north. 0.24m east west, 0.17m north south and 5cm deep. Vertical sides, irregular on the southern side. Base uneven and sloped downwards from west to east.
88	4	Very compact, brown, silty clay with inclusions of occasional charcoal and burnt sand stane. 0.39m by 0.60m and 0.12m deep. Fill of C89.
89	4	An irregular, 'C' shaped cut with rounded edges. 0.60m by 0.39m and 0.12m deep. Vertical sides on the north, northwest and west and gently sloping on the southern and eastern sides with a flat base. Orientated in a north eastern direction. May have been a truncated post-hole or pit.
90	4	Semi-circular cut, 0.76m by 0.64m and 0.15m deep. Concave sides except on the west which is vertical. The base slopes down from west to east. Orientated east west.
91	4	Loose, dark brown, sandy clay with inclusions of small stones. The eastern edge of the fill was light red. 0.76m by 0.64m and 0.15m deep. Fill of cut C90.

FINAL REPORT ARCHAEOLOGICAL EXCAVATION OF POSSIBLE NEOLITHIC SITE WITH STRUCTURES, HEARTH AND PITS AT LISSENHALL LITTLE. SITE 2 AIRPORT BALBRIGGAN BYPASS. Co. DUBLIN 01E1074

		En and the second of the secon
92	5	Firm, mid-brown, silty sand with occasional small round pebbles and moderate flecks of charcoal. Lowest 0.5cm had a lower concentration of charcoal. Maximum 2.70m by 1.20m, 5cm deep lensing to 1cm at the edges. Fill of C101.
93	5	Loose, midgrey, sandy silt, fill of stake-hole C100
94	5	Sub-oval cut, 0.90m by 1.75m and 0.15m deep with gentle sloping, smooth sides and a concave base at the centre. Orientated north south and filled with C102.
95	5	Irregular shaped cut, 1.93m by 2.19m and 0.34m deep. Gradual sides except northeast, north, southeast and east. Irregular base especially on the north, northeast, east and southeast. Orientated east west. A fire -pit with three fills C109, 110 and 95.
96	5	Soft, mid-brown, silty with inclusions of small rounded pebbles and flecks of charcoal. 0.23m by 0.19m and a maximum depth of 0.17m. Fill of post-hole C97.
97	5	Oval cut, 0.23m by 0.19m with a maximum depth of 0.17m. Vertical, concave sides with a tappered blunt point. A post-hole filled with C96.
98	4	Circular cut, approximately 0.20m in diameter with vertical sides and a flat base. Small rounded pebbles were found compacted at the base of the cut. Possible post-hole.
99	4	Loose, brown, silty clay with an orange hue. Occasional stone inclusions. 0.19m by 0.21m and 0.16m deep. Fill of cut C98.
100	5	Oval cut, 0.16m by 0.12m and 0.11m deep. Has almost vertical sides on the north and west and more sloping on the east and south. Base deeper on south side and pointed.
101	5	Linear, irregular cut, 2.70m by 1.20m and 1-5cm deep with concave sides and an uneven base. Orientated north south.
102	5	Moderate, mid-brown with a grey hue, silty sand with occasional small sub-angular pebbles and frequent charcoal inclusions and occasional pieces of flint. 0.90m by 1.75m and 0.15m deep. Charcoal found in higher concentrations in places. Fill of cut C94.
103	2	Non archaeological
108	5	Soft, light brown, silty sand. 1.93m by 2.19m. Upper layer of cut C95.
109	5	Firm, dark brown, silty clay with frequent amounts of flecks and lumps of charcoal inclusions. 1.93m by 2.19m.l Middle layer of the cut C95.
110	5	Friable, light yellow, sand or ash with a moderate inclusion of charcoal. 1.93m by 2.19m. Primary fill of C95.

Appendix 2

Prehistoric Pottery Report

Anna Brindley

PREHISTORIC POTTERY ANNA BRINDLEY LISSENHALL LITTLE 01E1074

A small quantity of pottery was recovered during an excavation carried out by F. Reilly on behalf of Valerie J. Keeley Ltd. This report was prepared in November 2002.

The pottery had not been cleaned and was encrusted with and embedded in soil. It consisted almost entirely of fragments and crumbs of pottery with several very small sherds. One small sherd was washed in tap water.

No features or decorated pieces were noted.

All the pottery is of one type. It has a dark brown-orange exterior and a black body and inside face. Th. 8 mm. No inclusions are visible but there are voids, small to very small, visible on many pieces. Some pieces also have charred matter adhering. Although many of the sherds are extremely small, most show some curvature.

This pottery can be identified as belonging to the Western Neolithic Tradition on the basis of the fabric and the general characteristics of the sherds (ie break pattern and curving surfaces). Early neolithic pottery of this type is round-based, shouldered, carinated or simple in profile and has a range of rim forms, including simple and outturned.

The Western Neolithic Tradition includes an assemblage of pottery with both simple and carinated/shouldered round based bowls which appeared in Ireland circa 5000 BP. The tradition evolved from an early assemblage of plain vessels with simple and unaccentuated rim (eg Feltrim Hill, Co. Dublin) and carination/shoulders to thicker vessels with accentuated heavy rims and large/massive shoulders with impressed decoration (eg Linkardstown/Ardcrony) by 4700 BP. This pottery is identified with the earlier neolithic period in Ireland. The pottery from Lissenhall probably belongs to an earlier rather than later stage within the tradition.

Please note: this report may not be altered without the written consent of the author.

A.L. Brindley M.A. 29 October 2002

Recommendations/notes

(Fiona, In the absence of any specific features, I don't feel that it is worth drawing any of this material for publication.)

Appendix 3

Environmental Analysis

Penny Johnston

ENVIRONMENTAL ANALYSIS PENNY JOHNSTON LISSENHALL LITTLE 01E1074

1 Introduction

1.1 Excavations by Fiona Reilly at Lissenhall Little, Co. Dublin were carried out on behalf of Valerie J. Keeley Ltd., as part of the Airport-Balbriggan road scheme. Three bulk soil samples were analysed for plant remains and the results are presented below.

2 Methodology

2.1 The bulk soil samples were were processed by flotation; the flots were collected in sieve meshes measuring 250 µm and retents were collected in meshes measuring 1mm. The processed samples were identified using a low-powered binocular microscope (magnification X4.8 to X56).

3 Lissenhall Little Samples

Three samples from the site were examined. These were from C59 (S7), C61 (S1) and C95 (S14). Only one of these samples, C61 (S1) contained the remains of charred seeds, and this was merely a hazel nut shell fragment. Hazel nuts provide a good source of essential fats and proteins and were a valuable nutritional source in prehistoric Ireland. They are one of the most commonly retrieved types of plant remains from Irish archaeolgoical sites and the environmental record demonstrates that they were readily available in prehistoric Ireland. The nut shell is waste and was probably frequently cast into the fire as the nut kernel was eaten, and thereby carbonised. In addition, it is hard and resistant to decay, factors that combine to ensure that fragments of hazelnut shells are commonly found in archaeobotanical assemblages.

FINAL REPORT ARCHAEOLOGICAL EXCAVATION OF POSSIBLE NEOLITHIC SITE WITH STRUCTURES, HEARTH AND PITS AT LISSENHALL HITLE, SHE 2 AIRPORT BALBRIGGAN BYPASS. Co. DUBLIN 01F1074

4 Summary

4.1 Only one sample from Lissenhall Little contained charred plant remains: the fragment of hazel nut shell came from a pit fill. The nut shell fragment was probably incorporated into the pit fill after the kernel of the nut was eaten and the shell waste was thrown into the fire. The ashes from the fire may have been scattered nearby, or into the pit.

Appendix 4

Wood Species Identification

Ellen O'Carroll

WOOD SPECIES IDENTIFICATION ELLEN OCARROLL LISSENHALL LITTLE 01E1074

INTRODUCTION

Four charcoal samples were submitted for identification from excavations carried out on a series of Neolithic structures. The charcoal was sampled from the fill of several pits and depressions. Western Neolithic pottery was uncovered from the site.

The charcoal was sent for species identification prior to ¹⁴C dating and also to give an indication of the range of tree species, which grew on or near the site. Charcoal analyses may also provide information on the utilization of certain species for various functions. Wood used for fuel at pre-historic sites were probably sourced from locations close to the site and therefore charcoal identifications will generally reflect the composition of the local woodlands.

METHODS

The process for identifying wood, whether it is charred, dried or waterlogged involves comparing the anatomical structure of wood samples with known comparative material or keys (e.g. Schweingruber 1990). The identification of charcoal material involves breaking the charcoal piece so as to obtain a clean section of the wood. This charcoal is then identified as to species under an Olympus SZ3060 x 80-zoom stereomicroscope. Sample no. 11, C92 was indeterminate. There were only residual charcoal remains in this sample and a full cross section of the wood could not be obtained for identification purposes.

RESULTS

Table 1: Results from Charcoal identifications

Site no. / Context no.	Site type	Sample no.	Species	Comment
01E1074/ C61	Fill of pit C45	1	Oak	
01E1074/ C95	Fill of fire pit	14	Oak	
	Fill of shallow depression	11	Indeterminate	Only tiny flecks of charcoal-mainly clay and too difficult to identify
	Fill of shallow depression	10	Hazel	Very small pieces of charcoal

The identifications yielded a total of two wood species (table 1). The dominant type was oak with hazel also used.

DISCUSSION

There are two species groups present in the charcoal remains (table 1). The samples represented above are indicative of only a small amount of the wood originally collected by the inhabitants for fuel or other functions. The range of species identified from the Lissenhall excavations includes large (oak) and smaller type (hazel) trees.

Oak was identified from the fill of the fire pits C95. Sessile oak (*Quercus petraea*) and pedunculate oak (*Quercus robur*) are both native and common to Ireland. The wood of these species can not be differentiated on the basis of its microstructure. Pedunculate oak is common on heavy clays and loams particularly where the soil is of alkaline pH. Sessile oak is common on acid soils often in pure stands and although it thrives on well-drained soils it is also tolerant of flooding (Beckett 1979, 40-41). Both species of oak grow to be very large trees (30-40m). The presence of the oak suggests that there was a supply of oak in the surrounding environment at Lissenhall Little. Throughout all periods of prehistory and history oak has been used as structural timbers. Oak has unique properties of durability and strength.

Hazel (*Corylus avellana*) was identified from the fill of the depression C94, which was a possible entrance features. It is a native species and was very common up to the end of the 17th century. McCracken (1971, 19) points out that "it was once widespread to a degree that is hard to imagine today". With the introduction of brick, steel and slate the crafts associated with hazel became obsolete, and today the woods that supplied hazel have diminished rapidly. Hazel is normally only about 3-5m in height and is often found as an understory tree in deciduous woods dominated by oak. It also occurs as pure copses on shallow soils over limestone, as in The Burren in Co. Clare, and survives for 30 to 50 years. Its main advantage is seen in the production of long flexible straight rods through the process known as coppicing.

CONCLUSIONS

There was no real evidence of species being selected for particular functions at this site. The oak may have been selected from mixed oak woodlands nearby to the sites. Hazel is sometimes found as an understorey in oak woodlands or alternatively the hazel could have been selected from hazel hedgerows close by to the site.

Radiocarbon dating

A minimum of 5 grammes of charcoal is needed for a ¹⁴C date but 25 grammes is the preferred amount. All the charcoal samples above represent the inner part of a tree of unknown age and it was not possible to tell from identification how much larger, if at all, the whole piece was. This is particularly true in the case of oak as it can grow to an age of 300 to 400 years. The samples identified could be of a more recent date than the rings represented on the sample. As a result the hazel from C94. is a preferential species for ¹⁴C dating.

REFERENCES

Beckett, J.K., 1979, *Planting Native Trees and Shrubs*. Jarrold & Sons Ltd, Norwich.

McCracken, E., 1971, *The Irish Woods Since Tudor Times*. Institute of Irish Studies, Belfast.

Nelson E.C., 1993 Trees of Ireland. The Lilliput Press, Dublin.

Warner, R.B., 1987, "A proposed adjustment for the « Old-Wood Effect »", in Mook, W. & Waterbolk, H. (eds) *Proc. 2nd Symp of 14C & Archaeology, Groningen 1987*, 29, 159-172.

Webb, D.A., 1977, An Irish Flora. Dundalgan Press Ltd, Dundalk.

Schweingruber, F.H. 1990. *Microscopic Wood Anatomy*. 3rd edition.Birmensdorf: Swiss Federal Institute for Forest, Snow and Landscape Research

Appendix 5

Medieval and Post Medieval Pottery

Sarah Gormley

MEDIEVAL AND POST MEDIEVAL POTTERY SARAH GORMLEY LISSENHALL LITTLE 01E1074

Introduction

A total of 15 Medieval and Post-Medieval pottery sherds were recovered from Site 2 in Lissenhall Little townland, on the Airport-Balbriggan road scheme, Co. Dublin (licence number 01E1074). The assemblage weighing a total 43.2g was recovered from topsoil derived contexts.

The pottery was visually identified, an where necessary, identified using a low-powered binocular microscope at a magnification of at least x15. The sherds can be grouped by 6 different pottery types, the majority Medieval (Fig.1). The fabrics are described below and a catalogue listing all of the sherds is included as appendix 1.

Fabric type	No. of sherds	Weight
Creamware	1	1.5
Glazed Red Earthenware	4	11.2
Medieval	7	27.1
Pearlware	1	0.4
Unidentified	1	2.3
Unidentified earthenware	1	0.7
Total	15	43.2g

Fig. 1 – Number and weight of sherds in each fabric group.

Composition and condition

This is a small assemblage of fragmented and abraded sherds. The majority (62% of the weight) of the assemblage is made up of small abraded Medieval body sherds. Post-Medieval wares are also present. All sherds would have been locally produced or if produced in England would have been readily available locally. The fabrics recovered during the course of the excavation at Lissenhall Little (site 2) are detailed below.

Medieval

Seven sherds of Medieval fabric were recovered, weighing a total 27.1g. The sherds are all small and undiagnostic. It has not been possible to estimate vessel type from them, although the exterior green lead glaze on five of the sherds may suggest that they came from jugs. All sherds are comparable with material which could have been produced locally and may be Fabric 002: Dublin Glazed Ware (5 sherds) and Fabric 001: Dublin Cooking Wares (1 sherd; terminology after Papazian 1989).

Creamware/Pearlware

A sherd of each of these pottery types was recovered. These tablewares were mass produced in the 18th and 19th centuries in England (and particularly the Staffordshire region), with Pearlwares following Creamwares. The fabric of the wares is similar, white or cream with no obvious inclusions. The glaze on the Creamwares appears cream in colour and often yellow in crevices while the addition of cobalt blue to the lead glaze on Pearlware produces a whiter finish. The Creamware sherd is plain and the sherd of Pearlware has blue paint adhering, although the sherd is too small to decipher the pattern.

Glazed Red Earthenware

Four sherds of this pottery type were recovered, weighing 11.2g. This pottery is likely to have been locally produced (McCutcheon, 1997, 94) and was made throughout the 17th and 18th centuries. The fabric is an orange-red and there are few obvious inclusions. The interior is glazed with a pale orange-brown lead glaze. Although the pottery usually takes the form of kitchen and tablewares it has not been possible to estimate vessel type for any of the sherds recovered from Lissenhall Little (site 2).

Distribution of the pottery

All of the pottery was recovered from context 1 (topsoil), except for one sherd which was found in context 40, a spread of material which is also thought to be topsoil derived. The material was recovered from 5 grid squares, with the majority (53%) coming from grid square 1.

Discussion

The small assemblage of pottery recovered from Lissenhall Little (site 2) dates to the Medieval and Post-Medieval period. The Medieval wares and the Red Earthenware sherds are likely to have been locally produced, however, the Creamware and Pearlware sherds may have come from further afield, most likely the Staffordshire region of England. The assemblage is fairly typical of one which is associated with manure spreading associated with agricultural practices, through the Medieval and Post-Medieval period in the area.

References

Papazian, C. (1989) The Medieval Pottery from Dublin Castle Excavations. MA Thesis, NUI.

McCutcheon, C. (1997) 'Pottery and roof tiles', in *Excavations at the North Gate, Cork, 1994*, ed. by Cleary, R.M., Cork Corporation.

Appendix 1: Pottery Catalogue

Abbreviations

No Unique number given to sherd by excavator

Ctxt Context number

Grid Section of the excavation grid from which the sherd was recovered

Fabric Fabric that the sherd is made of

Sherd Part of the vessel that the sherd comes from (e.g. rim, body)

Detail Any further remarks about the sherd

Th Thickness of the sherd (mm)

W Weight of the sherd (g)

FINAL REPORT ARCHAEOLOGICAL EXCAVATION OF POSSIBLE NEOLITHIC SITE WITH STRUCTURES, HEARTH AND PITS AT LISSENHALL LITTLE, SITE 2 AIRPORT BALBRIGGAN BYPASS, Co. DUBLIN 01E1074

No.	Ctxt	Grid	Fabric	Detail	Sherd	Th	W
11	I	1	Medieval	10% rounded quartz inclusions up to 0.5mm. Green glaze.	Rim/frag	9	3.7
13	1	2	Unidentifiable	Earthenware	Frag	7	0.7
14	1	5	Glazed Red Earthenware		Body	6	0.7
15	1	1	Medieval	20% quartz and mica up to 2mm. Unglazed.	Body	6	9.2
16	1	1	?Medieval	Green glazed. Few inclusions. Incompletely oxidised.	Body	5	2.7
17	1	1	Glazed Red Earthenware		Body	6	0.6
18	1	5	Medieval	10% rounded quartz inclusions up to 0.5mm.	Base	8	5.8
19	1	4	Medieval	10% rounded quartz inclusions up to 0.5mm. Green glaze.	Frag	4	1.7
20	1	3	Medieval	10% rounded quartz inclusions up to 0.5mm. Green glaze.	Rim/frag	7	2.9
21.1	1	1	Pearlware		Frag	3	0.4
21.2	1	1	Creamware		Frag	3	1.5
23	40	5	Medieval	10% rounded quartz inclusions up to 0.5mm. Green glaze.	Body	5	1.1
				Fired to almost stoneware - highly vitrified. Glaze runs over edge of fabric slightly, may be a		_	
24	1	1	Unidentified	waster due to over firing.	Frag	5	2.3
25	1	1	Glazed Red Earthenware		Body	6	2.6
26	1	5	Glazed Red Earthenware		Body	8	7.3

Appendix 6

Flint Assemblage

Ann Clarke

FLINT ASSEMBLAGE ANN CLARKE LISSENHALL LITTLE 01E1074

All flint, including natural flint was collected during excavation but this was reduced in cataloguing to just 31 pieces of struck flint (table 1). It is possible that some of those catalogued here as chunks are in fact naturally derived since chunks of flint from similar nodules of grey flint were also classified as natural. Perhaps these were fragments of just one original nodule that was reduced by frost or plough damage.

Most of the cores are small, single platform flake cores of translucent grey or light grey flint varying in length from 15mm to 31mm. A flaked chunk and a flaked nodule are also present. Evidence from two of the flakes indicates that bipolar reduction was also used though there are no surviving scalar cores. The small size of the cores, three of which have remnant cortex and the high percentage of cortical flakes (45%) are common to assemblages of flint derived from small pebble sources.

Artefact type/ Context	1	9	40	95
Flake	12	1	3	2
Chunk	4		2	
Core	5		1	
Nodule	1	- Available for the first firs		

Table 1: A/B site 2, flint type by context

The majority of the flints (93%) are derived from the ploughsoil (C.1) and ploughsoil interface (C.40). Two flakes, one of which was burnt, were found in the fill of C.95 a fire pit from group 3 and a flake was found in the fill of C.68. The ploughsoil distribution, by grid, indicates a diagonal spread NW/SE through the site over Group 3 and Group 4 features (table 2).

[6]	0	[3]	3
[5]	7	[2]	1
[4]	5	[1]	15

Table 2: distribution of flint across site by grid square []

With the exception of three flakes within pits there is no direct association of flints with features. The scatter itself is concentrated at the S end of the site over feature groups 3 and 4. The high percentage of cores at this site is notable (20%) and would indicate that flakes were certainly being produced on site or else nearby. Though flakes are present, the lack of products of knapping is significant raising the possibility that the flint artefacts in the ploughsoil were derived from elsewhere and brought in with soil movement. However, the correlation of the flint spread with the features of Group 3 and 4 would suggest that the flint is more or less *in situ* and that in fact the flakes were deliberately removed from the site to be used elsewhere.

At Lissenhall there is no evidence for blade reduction techniques. The use of small flint pebbles may prevent the development of a full blade technology because of the difficulty in manipulating the raw material, however, there is evidence for blade production at later local sites with similar raw material constraints such as Carrickmines Great and Carmanhall (see other reports here). At Ferreter's Cove in the SW of Ireland a site with a date of around 5000 BC blade technology is present despite the constraints of a pebble source of raw material (Woodman et al 1999).

This is an undistinguished assemblage comprising simply of flakes and flake cores. There are neither retouched tools nor any evidence for blade technology. Woodman has noted that the Early Neolithic flintwork of Ireland was almost identical to that of Britain (Woodman et al 1999, 149) and that includes the manufacture and common use of blades as oppose to just flakes. It would appear that at Lissenhall Little the lack of evidence for blade manufacture in this admittedly small assemblage would indicate that the flint assemblage was not formed during the Early Neolithic but at an indeterminate date later in prehistory.

References

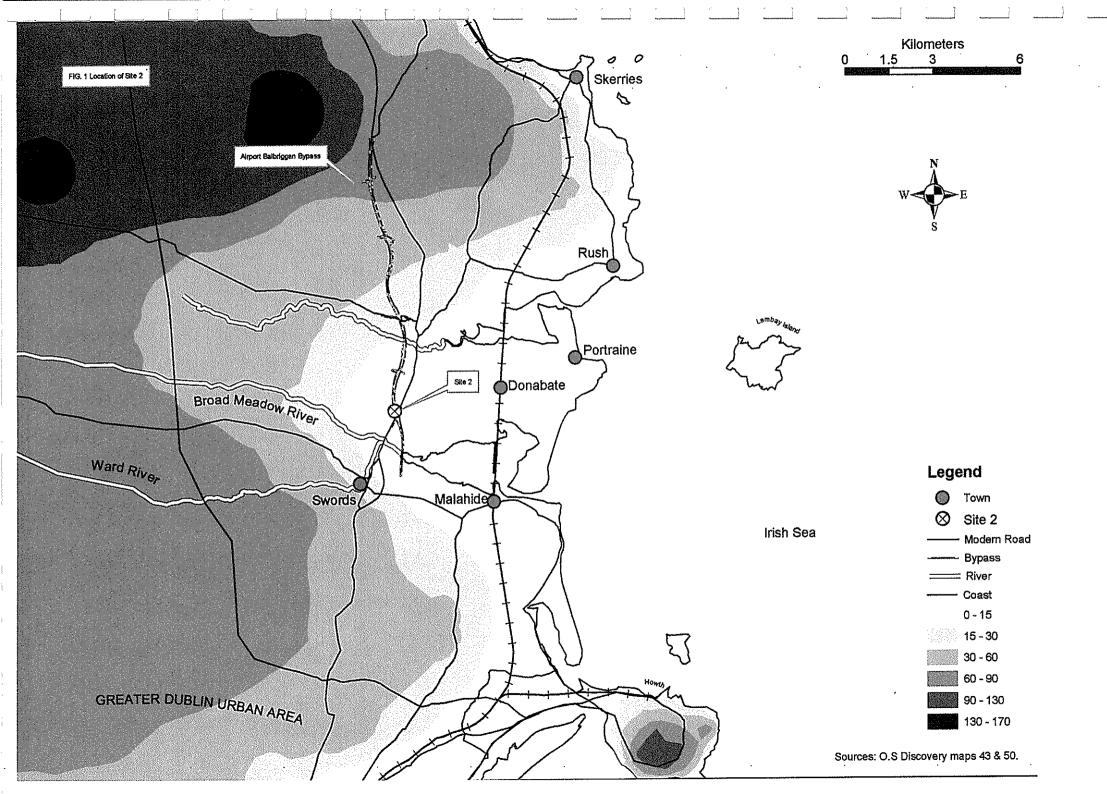
Cherry S 1990 'The finds from fulachta fiadh' in V Buckley Burnt Offerings: International Contributions to Burnt Mound Archaeology Wordwell Woodman PC, Anderson E, Finlay N 1999 Excavations at Ferriter's Cove 1983-95: last foragers and first farmers in the Dingle Peninsula Wordwell

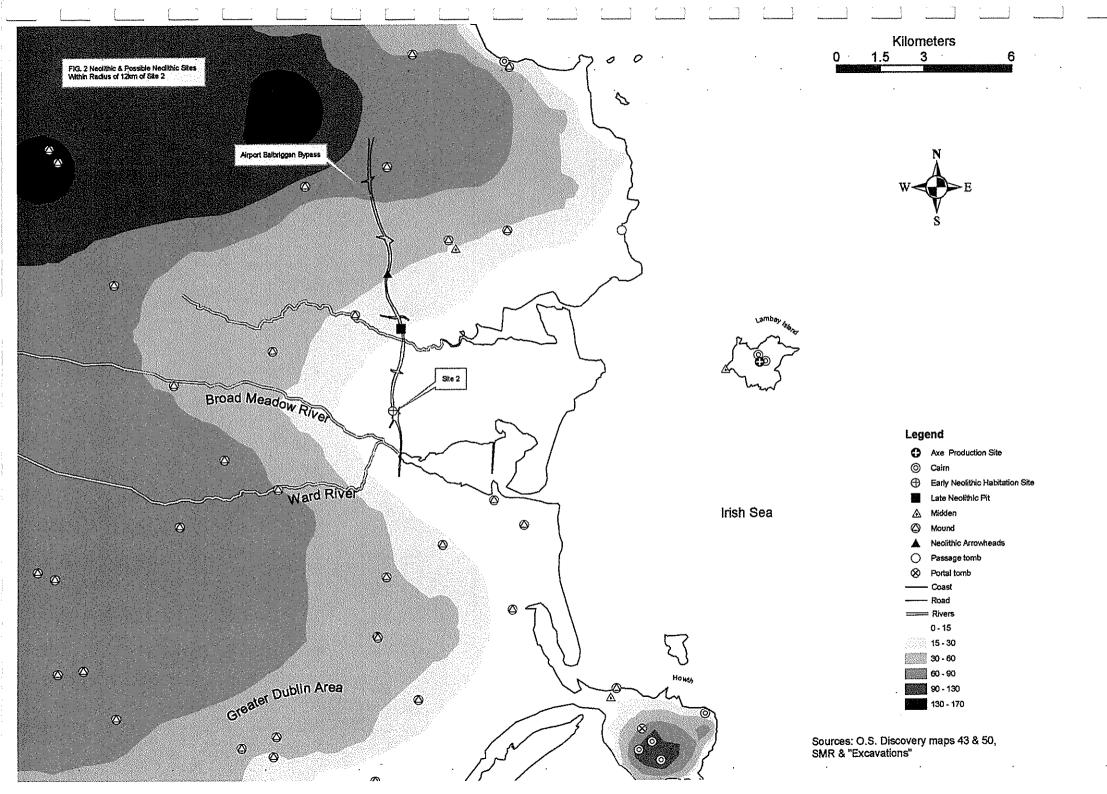
01E1074, Airport/Balbriggan, Site 2, Lissenhall Little, Co. Dublin Flint catalogue Ann Clarke, April 2003

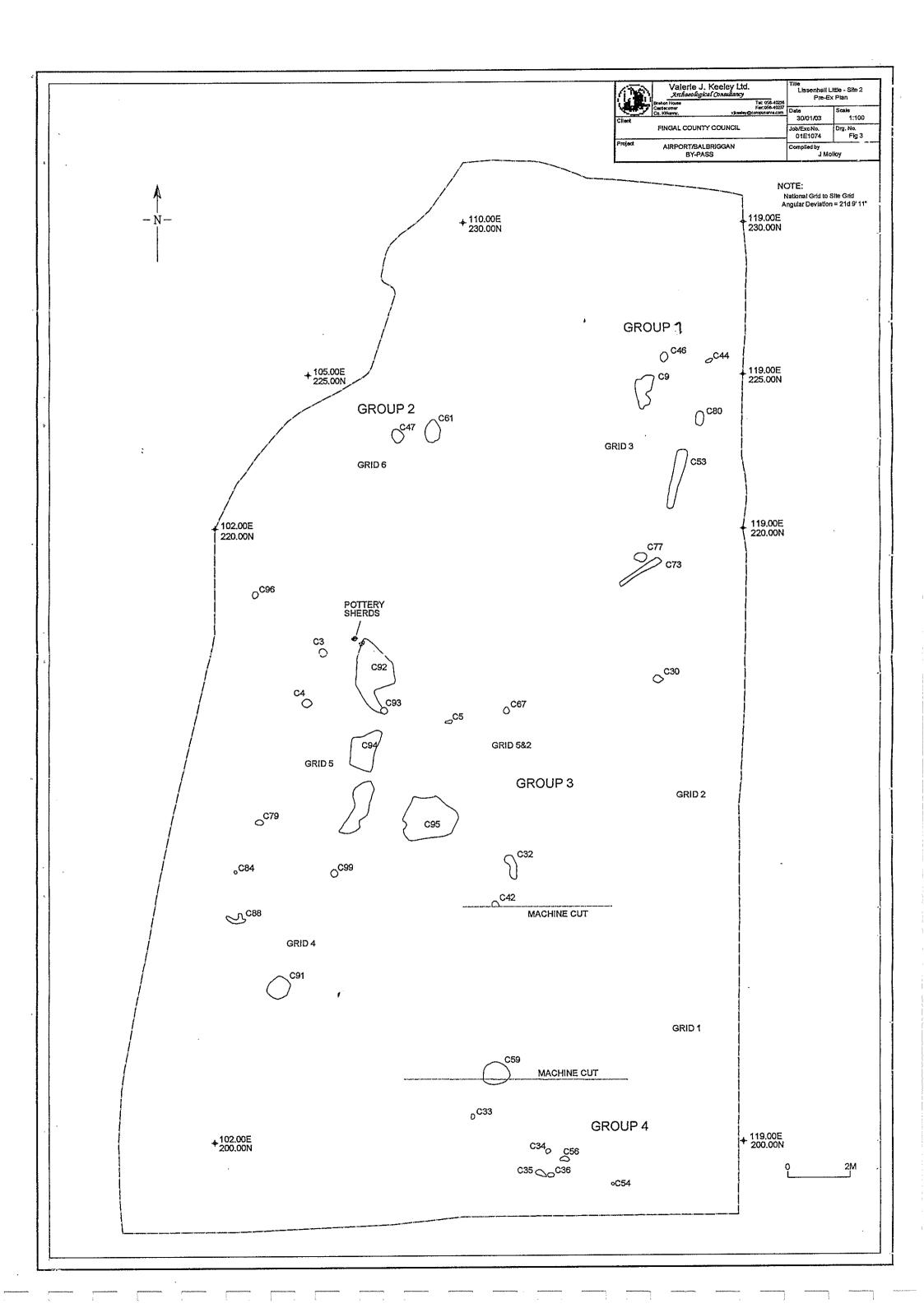
Grid	Context	Find No.	Туре	Sub-type	Class	ML	MW	MTh	Comments
4	40	ff2	Chunk	secondary					Light grey flint
4	40	ff3	Chunk	secondary					Translucent brown flint
2	1	ff11	Chunk	secondary					Translucent grey flint.
1	1	ff12	Chunk	secondary					Translucent brown flint
1	1	ff14	Chunk	inner					Grey flint.
1	1	ff16	Chunk	secondary					Translucent brown flint.
1		ff17	Chunk	inner					Grey flint.
4	40	ff1	Core	without cortex	single plat flake	27	20	15	Light grey flint
5	1	ff9	Core	with cortex	single plat flake	28	37	14	Translucent grey flint.
4	1	ff20	Core	without cortex	single plat flake	15	32	22	Translucent grey flint. Rolled?
1	1	ff10	Core fragment	with cortex	flaked chunk	29	24	24	Translucent grey flint.
1	1	ff13	Core fragment	without cortex	single plat flake	22	35	11	Grey flint.
4	1	ff29	Core fragment	with cortex	single plat flake	31	29		Mottled grey flint
1	1	ff4	Flake	inner		22	20	3	Translucent brown flint. Flat platform
4	40	ff5	Flake	secondary		42	30	7	Translucent brown flint. Flat platform
1	1	ff6	Flake	secondary		44	17	4	Grey flint.
1	1	ff7	Flake	secondary		22	13	5	Translucent brown. Cortical platform
5	1	ff8	Flake	primary		29	34	10	Black flint
1	1	ff15	Flake	inner		25	15	7	Grey flint.
5	1	ff18	Flake	secondary		29	22	9	Translucent grey flint. Scalar platform.
1	1	ff19	Flake	secondary		28	21	6	Matt flint. Hinge termination
3	1	ff21	Flake	secondary	core trimmer	40	25	12	Translucent brown flint.
5	95	27	Flake	secondary		15	18	4	Translucent brown flint.
3	9	2	Flake	inner		17	9	6	Translucent brown flint

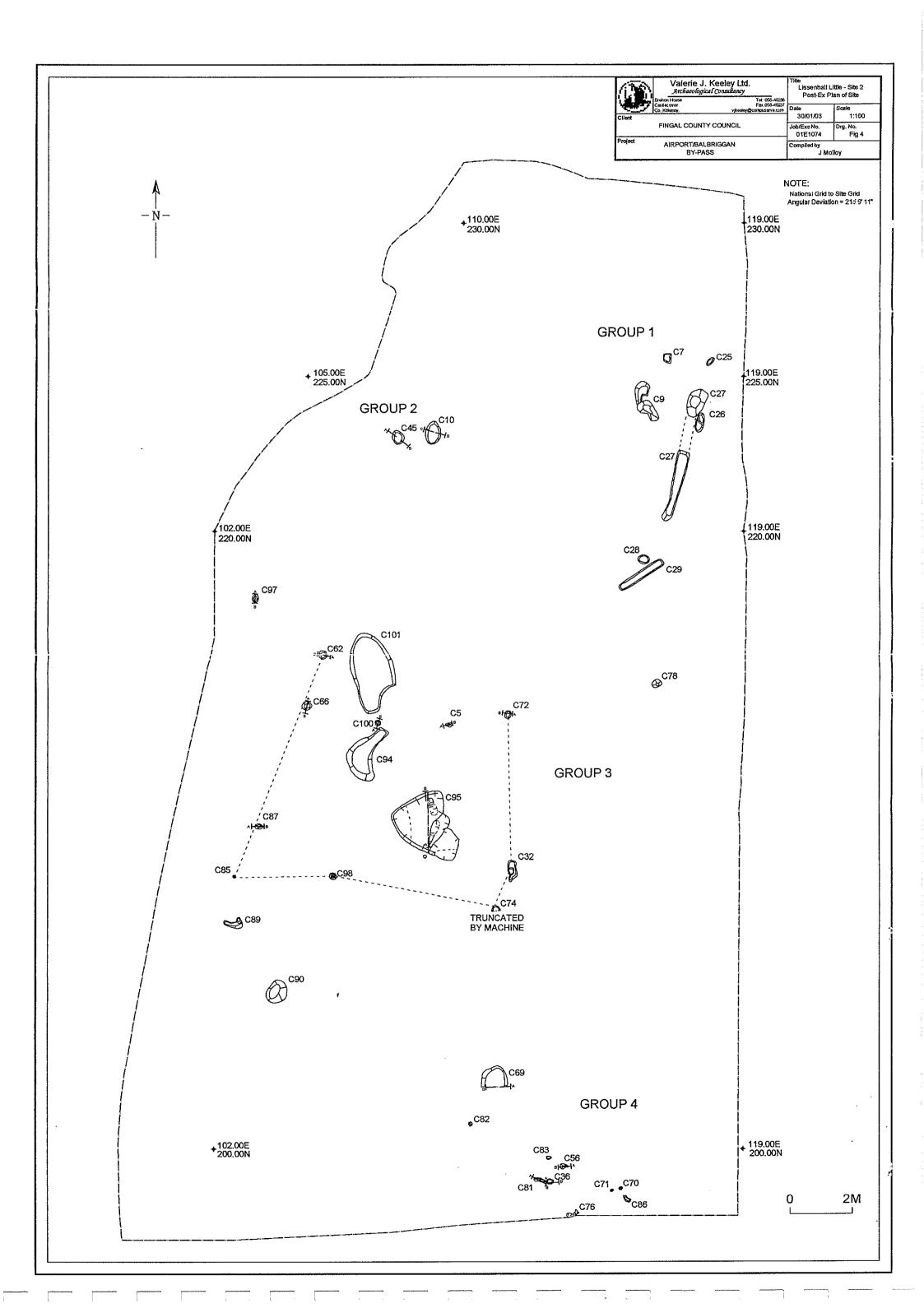
1	1	ff24	Flake	inner	19	11	7	Mottled grey flint. Scalar platform?
1	1	ff25	Flake	inner	35	21	6	Grey flint.
5	40	ff26	Flake	inner	17	10	2	Light brown flint
5	95	28	Flake frag	inner		27	6	Burnt flint
1	1	ff22	Flake frag	inner	20		4	Mottled grey flint.
5	40	ff27	Flake frag	inner			3	Grey flint.
3	1	ff28	Flake frag	inner		17	5	Burnt flint
1	1	ff23	Nodule	flaked	21	21	14	Translucent brown flint.

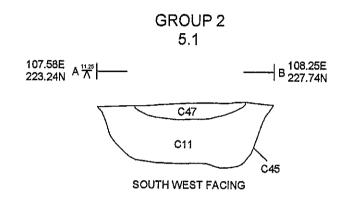
Figures and Plates

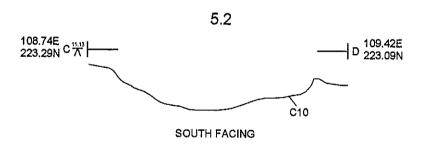








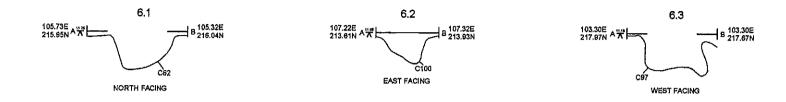


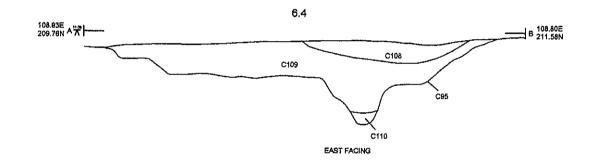


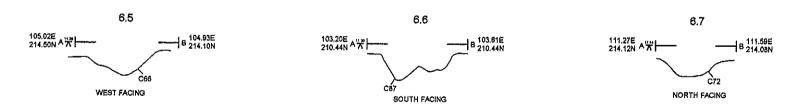
	Valerie Archaesi Broton Hasse Contacone	J. Keeley Ltd. Sglool Commissioncy Let 010-1020	Title Lissenhal Little - Ste 2 Section of F48 & Profile of C1		
Client	Co Killerry.	Fix: 056-30227 V Kreeley @computers a com	Date 30/01/03	Scale 1:10	
	FINGAL COUNTY COUNCIL		Job/Exc No. 01E1074	Drg. No. FIG. 5	
Project	AIRPORT/BALE BY-PAS		Compiled by J & Solicy		

0.5M

GROUP 3



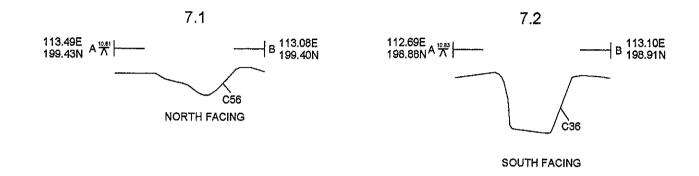


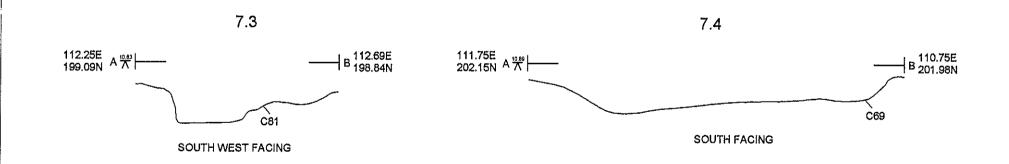


Brehon Fisual Caeliscope	rsterie J. Keeley Ltd. trehssokyleol Consultuncy 100 000-0000	Title Lissenhall Little - Ste 2 Profile of C82, 100, 97, 65, 67 4.72, Sec of C95		
Client	Y Justin Orden pages con	Dets 30/01/03	Scele 1:15	
	OUNTY COUNCIL	Job/Exc No. 01E1074	Drg. No. FIG. 6	
	tralbriggan Bypass	Compiled by J Molicy		

0.5M

GROUP 4





0.5M

	Valetie J. Keeley Lid. Archwelogiad Communicy 200000 Tel 505-0220	Title Liesenhei Little - Ste 2 Profile of CS, C36, C81 & C89		
Client	The state of the s	Date 30/01/03	Scele 1:10	
	FINGAL COUNTY COUNCIL	Job/Exc No. 01E1074	Drg. No. FIG. 7	
Project	AIRPORTÆALBRIGGAN BY-PASS		Compiled by J Motory	

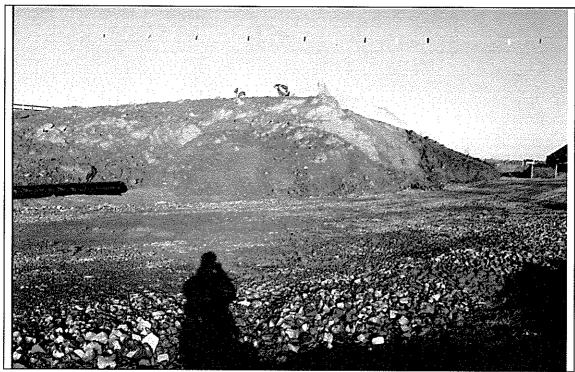


Plate 1 Looking north west towards site.



Plate 2 Eastern part of the site during the trowel back, looking north.



Plate 3 Eastern part of the site during trowel back, looking south.



Plate 4 Looking north west at C29 and C28.

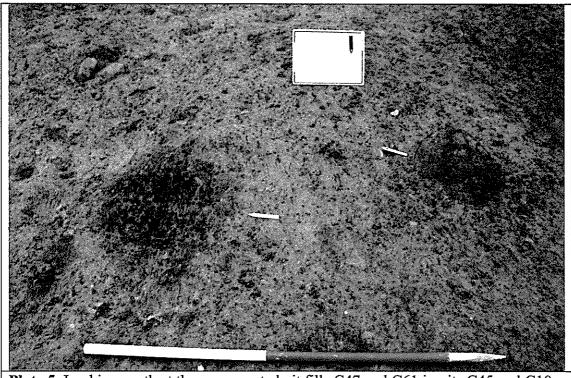


Plate 5 Looking south at the unexcavated pit fills C47 and C61 in pits C45 and C10.

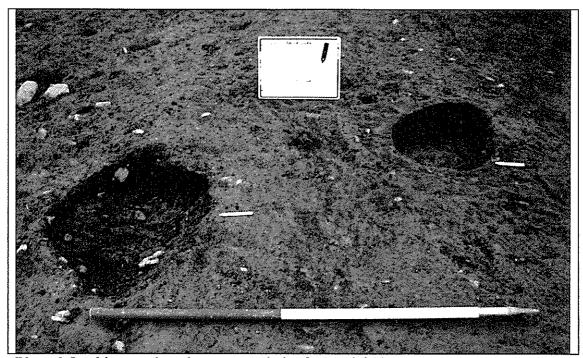


Plate 6 Looking south at the excavated pits C45 and C10.

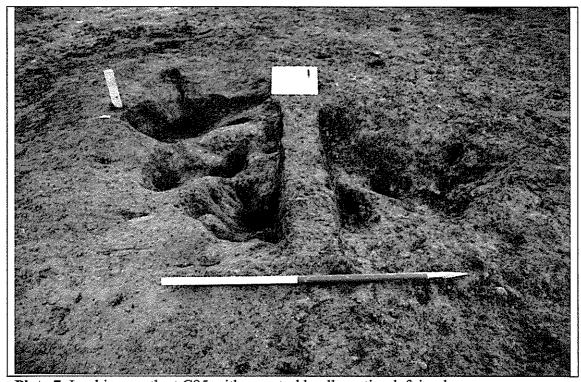


Plate 7 Looking south at C95 with a central baulk section left in place.

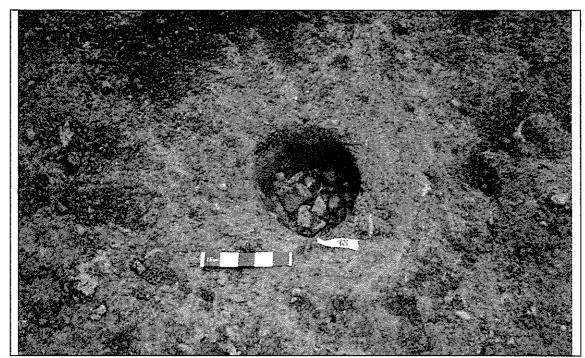


Plate 8 Looking north at the excavated post hole C98. Note the pebble base.

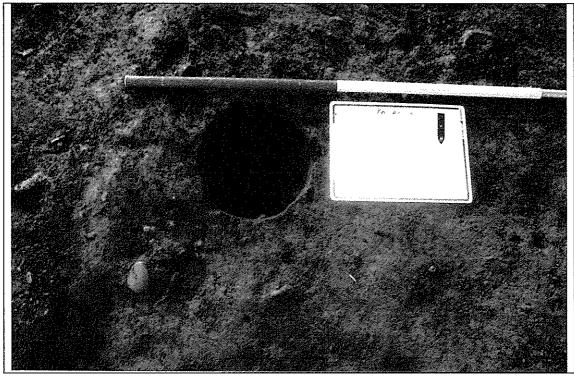


Plate 9 Looking south at the excavated post hole C62.

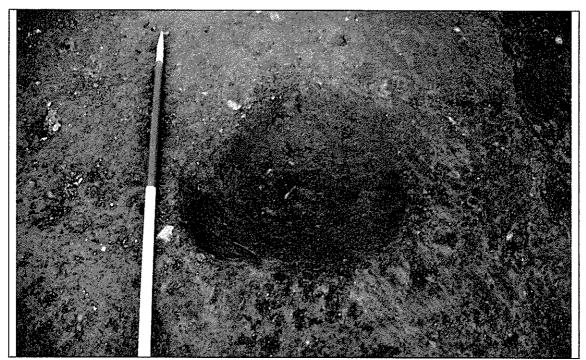


Plate 10 Looking north at the excavated pit C90.

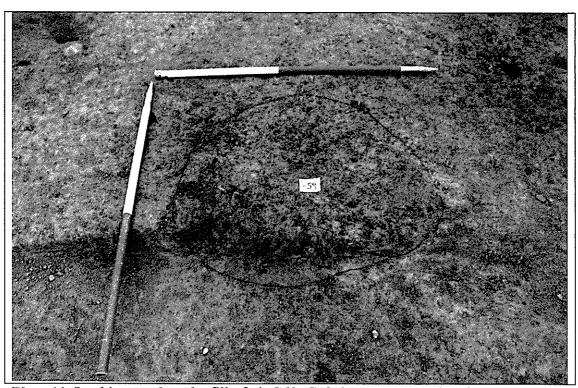


Plate 11 Looking north at the fill of pit C69, C59, it was truncated on its southern side by machinery.

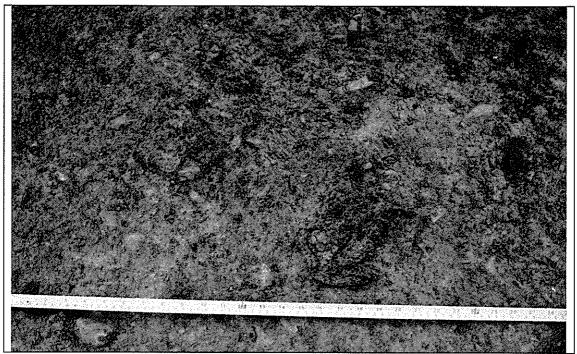


Plate 12 Early Neolithic pottery in situ.