

BADENTOY WAY PORTLETHEN ABERDEENSHIRE



- Archaeological Evaluation -
Carried out 10th, 11th and 14th February 2011
by
Murray Archaeological Services Ltd



Report No: MAS 2011-6
by
H K Murray and J C Murray

H K Murray BA, PhD, MIFA, FSA Scot
J C Murray BA, MIFA, FSA Scot, FMA
Hill of Belnagoak, Methlick, Ellon, Aberdeenshire AB41 7JN
Telephone: (01651) 806394 e-mail: cmurray@btinternet.com

**BADENTOY WAY
PORTLETHEN
ABERDEENSHIRE
-Archaeological Evaluation-**

H K Murray and J C Murray

1. Background

1.1 A Planning Application (Ref No KM/APP/2010/1158) was submitted by Qserv Ltd, and approved for the formation of an open storage yard / employment land at Badentoy Way, Badentoy Industrial Estate, Portlethen.

An archaeological condition was applied to this application in the context of Scottish Planning Policy (SPP), Planning Advice Note 42 (PAN 42), and Scottish Historic Environment Policy (SHEP), which state that archaeological remains should be regarded as part of the environment to be protected and managed.

The condition required that a 7 – 10% archaeological evaluation of the area should be undertaken.

1.2 Murray Archaeological Services Ltd was commissioned by W A Fairhurst and Partners on behalf of Dreelan Services Ltd to undertake the work; the field element of which was carried out on 10th, 11th and 14th February 2011.

2. Desk-top survey

2.1 A search was carried out in the Sites and Monuments Record, Archaeology Service, Aberdeenshire Council and in the Sites and Monuments Records of the Royal Commission for Ancient and Historic Monuments in Scotland (RCAHMS) through Canmore and Pastmap.

2.2 Immediately to the south and bordering the development area, the Sites and Monuments Record documents the remains of a probable Iron Age hut circle and a scatter of at least 15 field clearance cairns and stony banks on the lower east facing side of Cairnwell Hill, slightly northeast of Cairnwell Farm (NMRS No: NO99NW 23; Aberdeenshire SMR: NO99NW0023).

The sites that were recorded in 1983 have subsequently been much obscured by gorse and the hut circle could not be identified. Five clearance cairns within the development site are probably the northern extent of this settlement.

On slightly higher ground on Cairnwell Hill (NMRS No: NO99NW 24 and NO89NE24; Aberdeenshire SMR: NO99NW0024 and NO89NE0037) there are the remains of a field system including banks, plots, clearance cairns and a possible part of a hollow way. These lie west and south of the present site but could also be a part of the same settlement.

A Bronze Age stone circle/ ring cairn (NMRS No: NO99NW4; Aberdeenshire SMR NO99NW0004) was excavated to the east of the site at NO9071 9734 in 1995.

3. The Site

- 3.1 The proposed site is located to the south of the Badentoy Industrial estate, Portlethen and extends to c 4 hectares.

NGR: NO 9054 9720 (centre of site). Parish: Banchory-Devenick



Illus 1 General view of Area 1 of the site showing tree stumps and brash



Illus 2 Site location (red= site outline). Ordnance Survey © Crown copyright (2002) All rights reserved. Licence number (100049810). Note the area to the north of the site has been built up since the date of this map.

3.2 The site can be divided into four areas (Illus 3).

Area 1: The northern area comprising approximately half of the total area was felled woodland, with stumps of trees c 40 years old at spacings of as little as 2-4m in places. This has been felled in the recent past and piles of brash are lying on site and there are deep tracks from forestry vehicles. As the root masses of the trees extend generally to over 4m in diameter, most of this area is damaged in terms of potential archaeology.

Area 2: Much of Area 2 was low lying and boggy with considerable gorse cover. It has been grazed up to the present and is deeply poached both by cattle and by farm vehicles. However, the western end was slightly higher and there were several clearance cairns visible. The gorse was cleared by machine to reveal any other remaining features.

Area 3: All of Area 3 was low lying and boggy with considerable areas of lying water and soft rush and patches of gorse cover. It has been grazed up to the present and is deeply poached.

Area 4: This was improved pasture with some stone filled drains.



Illus 3 Key plan to show differences in site ground cover.

4. Methodology

- 4.1 Fourteen evaluation trenches were excavated (Illus 14). Topsoil was removed using a full slew machine with a 2m wide toothless ditching bucket with the exception of trenches 2-9 where, due to the quantity of tree stumps a 1.5m toothed bucket had to be used.
- 4.2 All mapping was done with a Magellan Mobile Mapper CX.
- 4.2 Five possible clearance cairns were noted within the development area. As the whole area was to be fully stripped prior to development, a strategy of excavation and recording of these features was agreed by telephone with Moira Greig, Aberdeenshire Council Archaeologist, on 10th February. Each of these cairns was sectioned by machine, hand cleaned and recorded.

5. The evaluation trenches.

Trench 1

Orientation: ENE/WSW

GPS E end: 390468, 797254 W end: 390361, 797215

Length: 110m Width: 2m

Stratigraphy: Between 100mm and 300mm of very peaty soil over natural boulder clay with frequent rocks and large boulders.



Illus 4 Trench 1 looking east

Trench 2

Orientation: NE/SW

GPS NE end: 390485, 797228 SW end: 390476, 797212

Length: 17m Width: 1.5m

Stratigraphy: 200mm of very peaty soil over natural boulder clay with frequent rocks and large boulders.

Trench 3

Orientation: E/W

GPS E end: 390530, 797221 W end: 390516, 797222

Length: 14m Width: 1.5m

Stratigraphy: 200- 300mm of very peaty soil over natural boulder clay with frequent rocks and large boulders.

Trench 4

Orientation: WNW/ESE

GPS W end: 390577, 797242 E end: 390591, 797240

Length: 15m Width: 1.5m

Stratigraphy: 200mm of very peaty soil over natural boulder clay with frequent rocks and large boulders.

Trench 5

Orientation: NNW/SSE

GPS N end: 390609, 797242 S end: 390614, 797225

Length: 17m Width: 1.5m

Stratigraphy: 200-300mm of very peaty soil over natural boulder clay with frequent rocks and large boulders.

Tumbled dyke (D5) at S end.

Trench 6

Orientation: NNE/SSW

GPS NE end: 390675, 797220 SW end: 390666, 797203

Length: 17m Width: 1.5m

Stratigraphy: 200mm of very peaty soil over natural boulder clay with frequent rocks and large boulders.

Trench 7

Orientation: NW/SE

GPS NW end: 390643, 797229 SE end: 390659, 797220

Length: 17m Width: 1.5m

Stratigraphy: 200mm of very peaty soil over natural boulder clay with frequent rocks and large boulders.

Trench 8

Orientation: NE/SW

GPS NE end: 390479, 797204 SW end: 390467, 797186

Length: 20m Width: 1.5m

Stratigraphy: 200-300mm of very peaty soil over natural boulder clay with frequent rocks and large boulders.

Trench 9

Orientation: ENE/WSW

GPS ENE end: 390468,797193 WSW end: 390406,797180

Length: 63m Width: 1.5m

Stratigraphy: 200-300mm of very peaty soil over natural boulder clay with frequent rocks and large boulders.

Crosses possible dyke (D6) but this is not visible on surface.

Trench 10

Orientation: E/W

GPS E end: 390654,797173 W end: 390549,797182

Length: 105m Width: 2m

Stratigraphy: 200mm of very peaty, boggy and waterlogged soil over natural boulder clay with frequent rocks and large boulders.

Trench 11

Orientation: ENE/WSW

GPS ENE end: 390505, 797176 WSW end: 390383, 797145

Length: 125m Width: 2m

Stratigraphy: 200mm of very peaty, waterlogged soil over natural boulder clay with frequent rocks and large boulders.

25m from W end crosses over drainage ditch (A) which borders the higher ground.

Trench 12

Orientation: NE/SW

GPS NE end: 390442, 797127 SW end: 390383, 797114

Length: 61m Width: 2m

Stratigraphy: 200mm of very peaty, waterlogged soil over natural boulder clay with frequent rocks and large boulders.

57m from W end crosses over drainage ditch (A) which borders the higher ground.

Crossed F1- a sump c 5m in diameter and 1m to 1.2m deep filled with very large stones and boulders. This appears to be a 19th/20th C attempt at drainage.

Trench 13

Orientation: NE/SW

GPS NE end: 390485, 797150 SW end: 390401, 797135

Length: 86m Width: 2m

Stratigraphy: 200mm of very peaty, waterlogged soil over natural boulder clay with frequent rocks and large boulders.

18m from W end crosses over drainage ditch (A) which borders the higher ground.

Trench 14

Orientation: E/W

GPS E end: 390658, 797163 W end: 390544, 797161

Length: 115m Width: 2m

Stratigraphy: 200mm of very peaty, waterlogged soil over natural boulder clay with frequent rocks. This crossed part of the area of improved grassland (Illus 3: Area 4) and there were several small stone-filled field drains (not planned).

6 Features and visible archaeology

A desk based study and walkover survey had been undertaken in February 2010 by AOC Archaeology (*Badentoy Way, Portlethen, Aberdeenshire: Archaeological and Cultural Heritage: AOC Project 21543*). This was consulted on the Aberdeenshire planning website. The AOC survey did not include the clearance cairns (Cairns 1-5) within the development site but did note the drystone dykes and drainage ditch A. In the following account of these features, the AOC reference numbers will be put in square brackets.

Cairns

A total of five clearance cairns were identified within the development site (C1-C5 : Illus 5-12; plan Illus 14). These were all on the higher ground in the southwestern part of the site around 100m OD. All were sectioned and recorded. The section of cairn C5 could not be drawn as it quickly became flooded and cairn C3 was not drawn as it was little more than a single layer of stones. Cairns 1, 2 and 4 (Illus 12) were all built on patches of buried soil – these were hand excavated. Only below cairn C2 was there charcoal within the buried soil and a single large flint pebble flake was found on the surface of the buried soil below the cairn. With the exception of cairn C4 the cairns

formed a rough line and may indicate the edge of an area of cultivation related to the documented (although not found) hut circle to the south outside the development site. The relationship of the cairns to a buried soil, their morphology and the flint below cairn C2 all suggest a late prehistoric date. Their position in the landscape and proximity to a hut circle site support this conclusion. Although charcoal was present in the buried soil below cairn C2 uncertainty regarding the mechanisms of deposition of the charcoal and the duration between its deposition and the gathering of the cairn material mean that there would be little gain in radiocarbon dating the charcoal as any date would be at best a *post quem* date.



Illus 5 Cairn C1 before excavation



Illus 6 Cairn C1 sectioned



Illus 7 Cairn C2 sectioned. Green tag shows position of flint



Illus 8 Cairn C3 sectioned



Illus 9 Cairn C4 before excavation

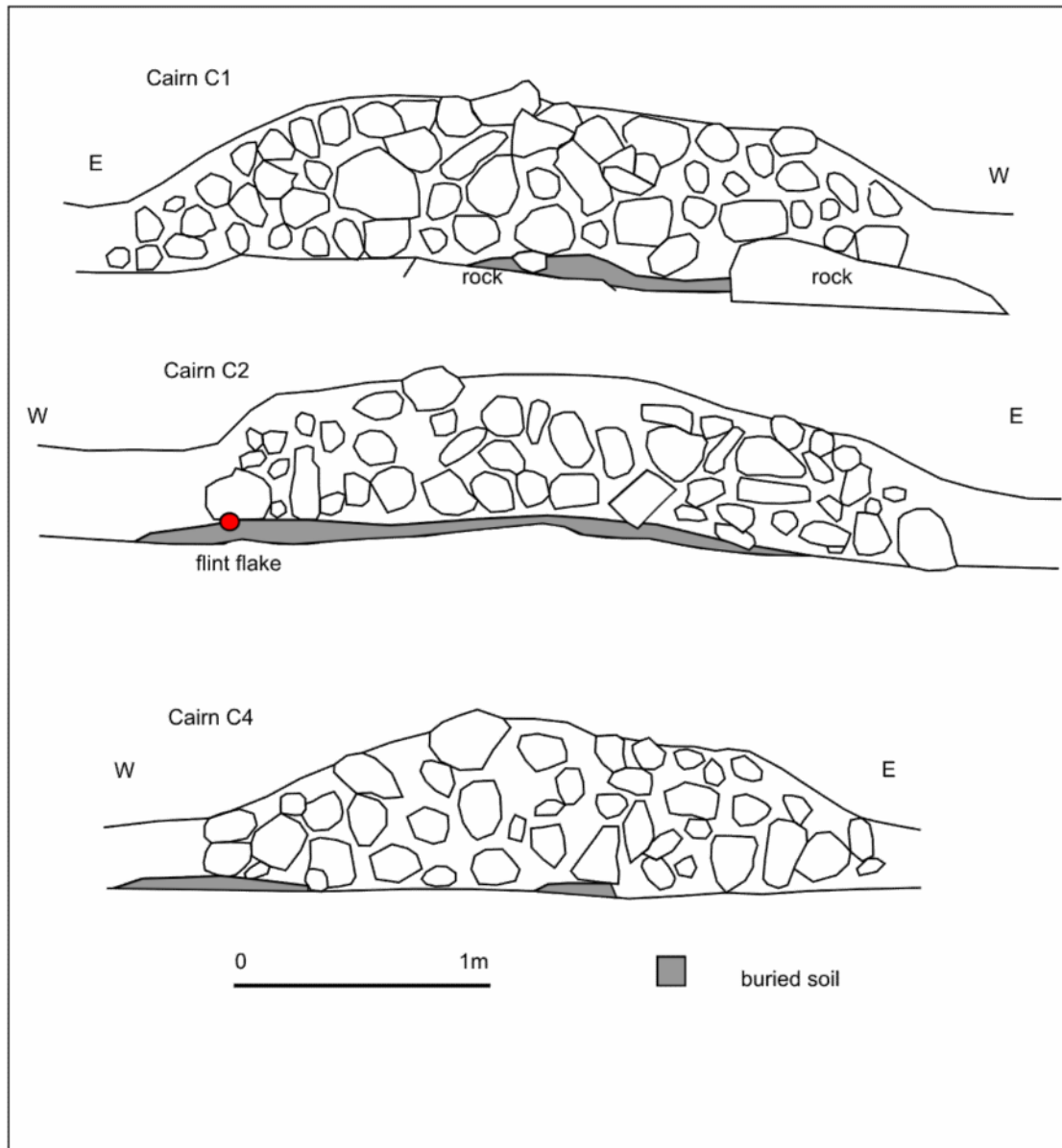


Illus 10 Cairn C4 sectioned



Illus 11 Cairn C5 sectioned

Cairn	GPS	Diameter	Maximum height	Presence of buried soil below cairn	Associated finds
C1	390382,797138	3.2m	650mm	small patch between two natural rock outcrops	
C2	390385,797135	2.9m	600mm	below much of cairn, grey clay with charcoal inclusions	large flint pebble flake L:40mm W:22mm
C3	390378,797143	1.8m	200mm	-	
C4	390369,797109	3m	700mm	trace only	
C5	390390,797119	3m	600mm	-	



Illus 12 Sections of Cairns 1, 2 and 4

Dykes

A number of drystone dykes and remnants of drystone dykes were observed and plotted (Illus 14). Just at the southern perimeter of the site, outside the development boundary dyke D1 has been noted as this well built estate dyke is the only one that can confidently be identified on the 1st OS map of 1865 (pub 1868. Kincardine sheet VIII.5 Banchory Devenick); by 1865 the area to the south was partly enclosed and improved while in the area of the development site most of the ground was unimproved rough ground with woodland to the west. The line of D1 which continues

northeast as D2 across the development site is a far rougher construction and is likely to be late 19th/early 20th C construction when more of the ground was enclosed. Remnant dykes D2-D5 [AOC walkover survey features 41] and the possible dyke fragment D6 were all in a collapsed condition (Illus 13). They may be the southern limit of some small rather irregular enclosures shown on the 1st OS map of 1865 at the northern edge of the site.



Illus 13 Dykes D2 and D3

Water channels

Two water channels have been marked on the plan (Illus 14).

Channel A [AOC walkover survey features 44] curves from the northwest corner of the site following the base of slope around the higher ground around the 100m contour. It has the appearance of a ditch with the dug material thrown up to form a bank, predominantly on the western side. It is 1.5-2m wide and of varying depth. It appears to pre-date the tree planting of Area A but may well, as suggested in the AOC walkover report, have been a boundary to the 19th C woodland shown on the 1865 map – it would have been effective as a stock boundary. However other similar drainage dykes can be seen within that area of woodland west of the development site. Channel B which partly crosses the development area runs alongside the track from Cairnwell farm steading. While there may have been an earlier drainage ditch on this

line, the present ditch appears to have been cut or widened by machine within the last few years. There is a considerable width of upcast earth and stone to a width of 3-4m on either side which could potentially have covered or destroyed features.

Other features

Two other features have been recorded.

F1 was a sump c 5m in diameter and 1m to 1.2m deep filled with very large stones and boulders. This appears to be a 19th/20th C attempt at drainage.

F2 was an irregular dump of stones c 5 x 4m in the boggy ground at the southeastern end of the site beside a farm access track. It appears unlikely that this is an early feature and it may be modern clearance from the track.

7. Interpretation

Prehistoric

The five cairns (C1-C5) on the slightly higher and drier ground at the southwestern side of the site appear to be of late prehistoric date and are likely to have been the edge of an area of cultivation associated with the documented hut circle (NMRS No: NO99NW 23; Aberdeenshire SMR: NO99NW0023) and possibly with the field systems higher on the hill to the west on Cairnwell Hill (NMRS No: NO99NW 24 and NO89NE24; Aberdeenshire SMR: NO99NW0024 and NO89NE0037).

No further evidence of prehistoric activity was found in any of the evaluation trenches.

19th century-20th century

The drystone dykes are of mid 19th- 20th century construction and document the gradual enclosure of the land.

8. Impacts and Mitigations

Impacts None

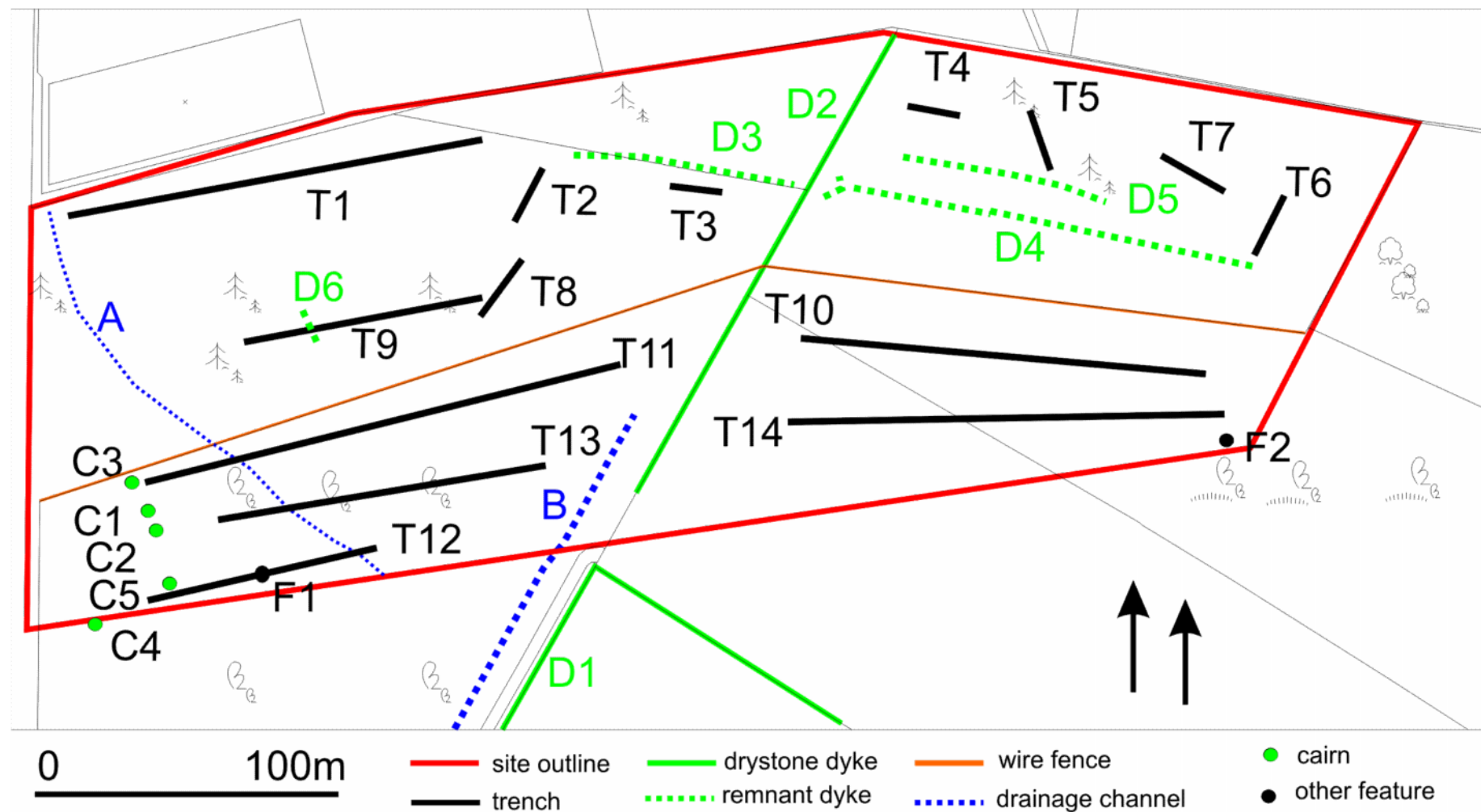
Mitigations None

This does not preclude the possibility of chance finds or archaeological discoveries outwith the evaluation trenches. Should such chance finds occur, then the

Archaeology Service, Aberdeenshire Council, or Murray Archaeological Services Ltd, must be informed immediately so that an appropriate archaeological response can be formulated and agreed by all parties concerned

Photographs supplied to archive on CD

Photographic catalogue	
Digital frame no	Content
1-3	General view across site, looking NW
4-5	Drainage channel, looking SE
6-7	Felled woodland area, looking NW
8-13	T8, looking NE and E
14-15	T9, looking N
16-25	N end of D2 and junction with D3, looking N
26-30	T1, looking E
31-33	C1 and C2, looking W
34	C1, looking W
35-36	C1,C2 and C3, looking W
37	C3, looking W
38-40	C4, looking NW
41-43	C5, looking W
44-47	C2 section, looking N
48-51	T11, looking E
52-58	C1 section, looking N and NE
59-61	D1, looking NE
62-65	S end of D2, looking NW
68-73	C3 section. Looking N
74-77	C5 section, looking E
78-82	C4 section, looking N



Illus 14 Plan of trenches and features. (Ordnance Survey ©CrownCopyright 2011. Ref No 1003761)