

Archaeological Watching Brief and
Archive Assessment
One Wind Turbine,
South Elphinstone Farm, Tranent



Excavated wind turbine plinth and cable trench looking North (South Elphinstone Farm in background)



30th May 2013

Introduction (Illus 1)

This archaeological watching brief and archive assessment of the ground stripping for a single wind turbine and its cable trench was carried out for Mr John Peace to satisfy the archaeological condition on the planning consent for this development, as noted by East Lothian's Archaeological Service in their response to Planning Application 12/00664/P dated 8th November 2012. It was undertaken by the author on Wednesday 29th May 2013 (Site Code ELP01; OASIS reference derekhal1 151479), weather conditions were overcast with occasional rain showers.

Archive Assessment (Illus 2)

The area in close proximity to the proposed site of the new wind turbine and its cable trench was checked with reference to the local Historic Environment Record and the National Monuments Record. The following sites and monuments are recorded in both:

1. Elphinstone Tower (Medieval Tower house)

NGR NT 3903 6980

HER number MEL2

NMR number NT36NE 2

Scheduled Monument Number 6318

A scheduled monument, Elphinstone Tower was a 15th century rectangular tower of three storeys and was assumed to belong to the Elphinstone family who held the lands from the 13th century onwards (RCHAMS 1924; Tranter 1962). The tower was badly affected by mining subsidence and partially demolished in 1955 (McWilliam 1978).

2. Elphinstone enclosure (cropmark)

NGR NT 393 699

HER number MEL2580

NMR number NT36NE 96

A curving linear cropmark of unknown origin has been recorded on oblique aerial photographs (RCAHMSAP 1995) in the field to the S of Elphinstone Tower.

3. Elphinstone Tower cropmark

NGR NT 3935 6965

HER number MEL5

NMR number NT36NE 31

This circular enclosure, which has been recorded as cropmarks on oblique aerial photographs (RCAHMSAP 1977, 198 2, 1995), is probably a plantation bank.

4. Elphinstone graveyard and site of chapel

NGR NT 3952 6996

HER number MEL3

NMR number NT36NE 3

The remains of the chapel were still visible in the 19th century when it is recorded that 'Only the grass-covered foundations, about a foot high, remain of this chapel, which stood in the NW corner of the associated graveyard. It is locally thought that it was dependent on Tranent church, and became disused at the Reformation' (Ordnance Survey Name Book 1853; McNeil 1883, 181). In 1975 the graveyard was said to be

still in use.

5. Elphinstone settlement (cropmarks)

NGR NT 3960 6994

HER number MEL16

NMR number NT36NE 68

The cropmarks of a settlement in the vicinity of the graveyard and former chapel site (site number 4 above) have been recorded by the RCAHMS aerial survey in 1986 and 1995.

6. Bellyford Mine (site of)

NGR NT 4029 6947

HER number: MEL2502

NMR number NT46NW 79

From 1949-1962 the Bellyford Colliery stood on this site.

7. North Mains enclosure (cropmarks)

NGR NT 4085 7015

HER number MEL7723

NMR number NT47SW 154

What may be part of a curvilinear enclosure has been recorded as cropmarks on oblique aerial photography (RCAHMSAP 2000) lying on gently sloping ground about 330m W of North Mains. An arc of ditch, perhaps

defining the NW and SE of the enclosure has been recorded amongst a system of field drains.

Summary

The proposed location of the new turbine and its associated cable trench lie in close proximity to several cropmarks and the remains of a medieval towerhouse. Although no cropmarks or monuments are recorded in the vicinity of South Elphinstone a monitored strip for both the cable and turbine plinth is recommended to record the presence or absence of any archaeological remains.

Watching Brief (Illustration 3 to 16)

Cable Trench for Wind Turbine (numbers in brackets refer to Illus 3)

This cable trench, which was 0.50m wide, started at the farm steadings and then ran south across an access road before running parallel to the eastern boundary of the farm and then out into the field some 130m to the south. Beside the farm steadings (a) (Illus 4 and 5) the trench was 0.70m deep and had been dug through a grey brown silty clay containing stones and tile and brick fragments (1). At 7.5m along the trench (b) (Illus 7) a deposit of grey black sandy clay (2) 0.32m thick overlay a brown sandy clay (3) 0.33m thick to the base of the trench. The stone foundations for a former septic tank were located at 13m along the trench (c) (Illus 8). At 25m along the trench (d) (Illus 9) a brown silty clay with charcoal and stones (4) was located to the base of the trench at a depth of 0.80m. This deposit continued until 46m along the trench (e) (Illus 10 and 11) when natural yellow grey clay (5) was located a depth of 0.40m below a brown sandy clay, this sequence continued until the edge of the turbine plinth at a distance of 125m from the farm steadings (f) (Illus 12). Apart from the Post Medieval/Early Modern tile and brick fragments in the vicinity of the steading there were no other finds from the entire length of this trench.

Wind Turbine (Illustration 13 to 16)

The site of this wind turbine lies 130m S of South Elphinstone Farm at 113 metres above Ordnance Datum. The area of the turbine plinth, which measured 5m by 5m, was stripped of a soil which varied in depth between 0.30m and 0.45m. At the northern end of the plinth a black grey silty clay (ploughsoil) (6) 0.26m deep overlay a brown silty clay with occasional charcoal and stones (7) 0.19m deep which overlay a yellow grey clay and stones (5) which was of natural origin. At its southern end there was a similar sequence of soils to a depth of 0.40m. The course of a modern field drain was encountered cut into the natural clay there was no sign of any archaeological deposits or features.

Conclusions

Monitoring of the digging of the cable trench and turbine plinth at South Elphinstone Farm did not locate any archaeological deposits or features.

References

McNeill, P 1883 Tranent and its surroundings

Ordnance Survey Name Book 1853

RCAHMS. 1924. The Royal Commission on the Ancient and Historical Monuments and Constructions of Scotland. Eighth report with inventory of monuments and constructions in the county of East Lothian. 121-2, No.192. fig.164.

RCAHMSAP 1977, 1982, 1995 Elphinstone Tower cropmark

RCAHMSAP 1986 Elphinstone settlement

RCAHMSAP 1995 Elphinstone enclosure and settlement

RCAHMSAP 2000 North Mains enclosure

Tranter, N 1962-70 The fortified house in Scotland, Edinburgh

Tranter, N. 1962-70. 'The fortified house in Scotland'. Vol.1, 30.

McWilliam, C E. 1978a. Lothian except Edinburgh. 52, 120.

Acknowledgements

The author would like to thank John Peace and Brian for their help and interest during the watching brief.

Context List

Cable trench

1. grey brown silty clay containing stones and tile and brick fragments
2. grey black sandy clay
3. brown sandy clay
4. brown silty clay with charcoal and stones
5. natural yellow grey clay

Turbine Plinth

6. black grey silty clay (ploughsoil)
7. brown silty clay with occasional charcoal and stones

Illustration List

Illus 1 Site with location of turbine (red dot) (based on Ordnance Survey map Crown Copyright 2013. All Rights Reserved. Licence number 100049628)

Illustration 2 Location of turbine and recorded sites and monuments in the vicinity (based on Ordnance Survey map Crown Copyright 2013. All Rights Reserved. Licence number 100049628)

Illustration 3 Turbine plinth and cable trench shown in relation to South Elphinstone Farm, letters refer to text description of cable trench

Illustration 4 Cable trench adjacent to farm steadings looking north east

Illustration 5 West facing section of cable trench in vicinity of farm steadings, broken tile and brick visible in section

Illustration 6 Cable trench looking south towards site of turbine plinth, eastern boundary fence around farm on right

Illustration 7 East Facing section of cable trench at point b on illustration 3

Illustration 8 Former septic tank in East facing section of cable trench at point c on illustration 3 looking north

Illustration 9 East facing section of cable trench at point d on illustration 3

Illustration 10 General view of cable trench looking north west at entrance to field at point E on illustration 3

Illustration 11 Detail of East facing section of cable trench at point E on illustration 3

Illustration 12 East facing section of cable trench showing ploughsoil above natural clay at point f on illustration 3

Illustration 13 Turbine plinth under excavation looking west showing surface of natural clay below ploughsoil, red arrows indicate course of field drain

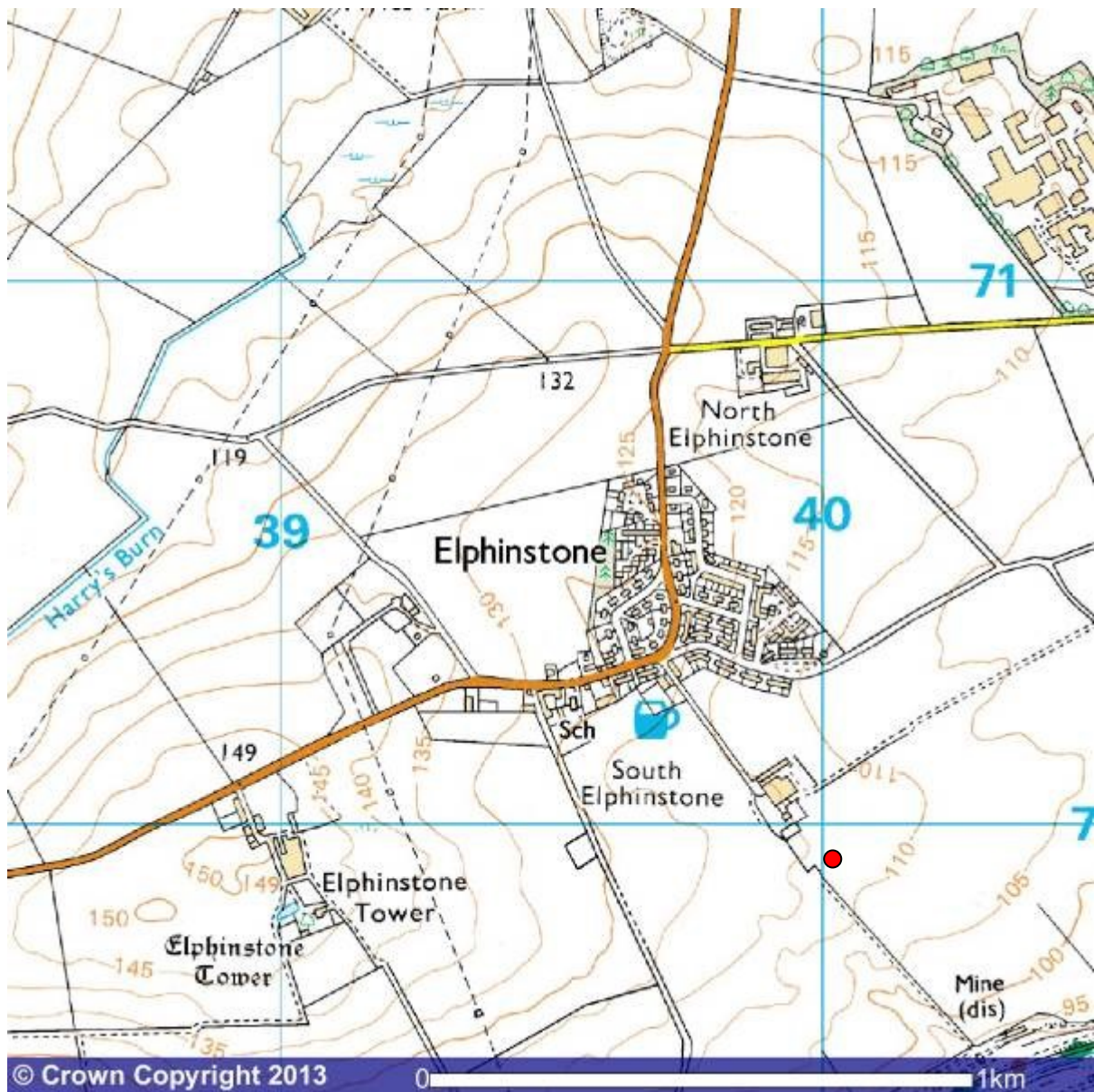
Illustration 14 General view of excavated turbine plinth and cable trench looking north showing natural clay

Illustration 15 Detail view of north eastern corner of turbine plinth showing ploughsoil above natural clay

Illustration 16 General view of south eastern corner of turbine plinth showing ploughsoil above natural clay

Discovery & Excavation in Scotland Entry

LOCAL AUTHORITY:	East Lothian
PROJECT TITLE/SITE NAME:	One wind turbine at South Elphinstone Farm, Tranent
PROJECT CODE:	ELP01
PARISH:	Tranent
NAME OF CONTRIBUTOR(S):	Derek Hall
NAME OF ORGANISATION:	Derek Hall, archaeologist and ceramic specialist
TYPE(S) OF PROJECT:	Watching Brief and Archive Assessment
NMRS NO(S):	N/A
SITE/MONUMENT TYPE(S):	None
SIGNIFICANT FINDS:	None
NGR (2 letters, 6 figures)	NT 400 698
START DATE	29th May 2013
END DATE	29th May 2013
PREVIOUS WORK (incl. <i>DES</i> ref.)	None
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	A watching brief and archive assessment was carried out on the excavation of a cable trench and plinth for a single wind turbine. No archaeological deposits or features were located.
PROPOSED FUTURE WORK:	None
SPONSOR OR FUNDING BODY:	Mr John Peace
CAPTIONS FOR ILLUSTRS	N/A
ADDRESS OF MAIN CONTRIBUTOR:	34 Glenfarg Terrace, Perth, PH2 0AP
ARCHIVE LOCATION (intended)	NMRS
EMAIL ADDRESS:	Derek.hall1@blueyonder.co.uk



Illus 1 Site with location of turbine (red dot) (based on Ordnance Survey map Crown Copyright 2013. All Rights Reserved. Licence number 100049628)

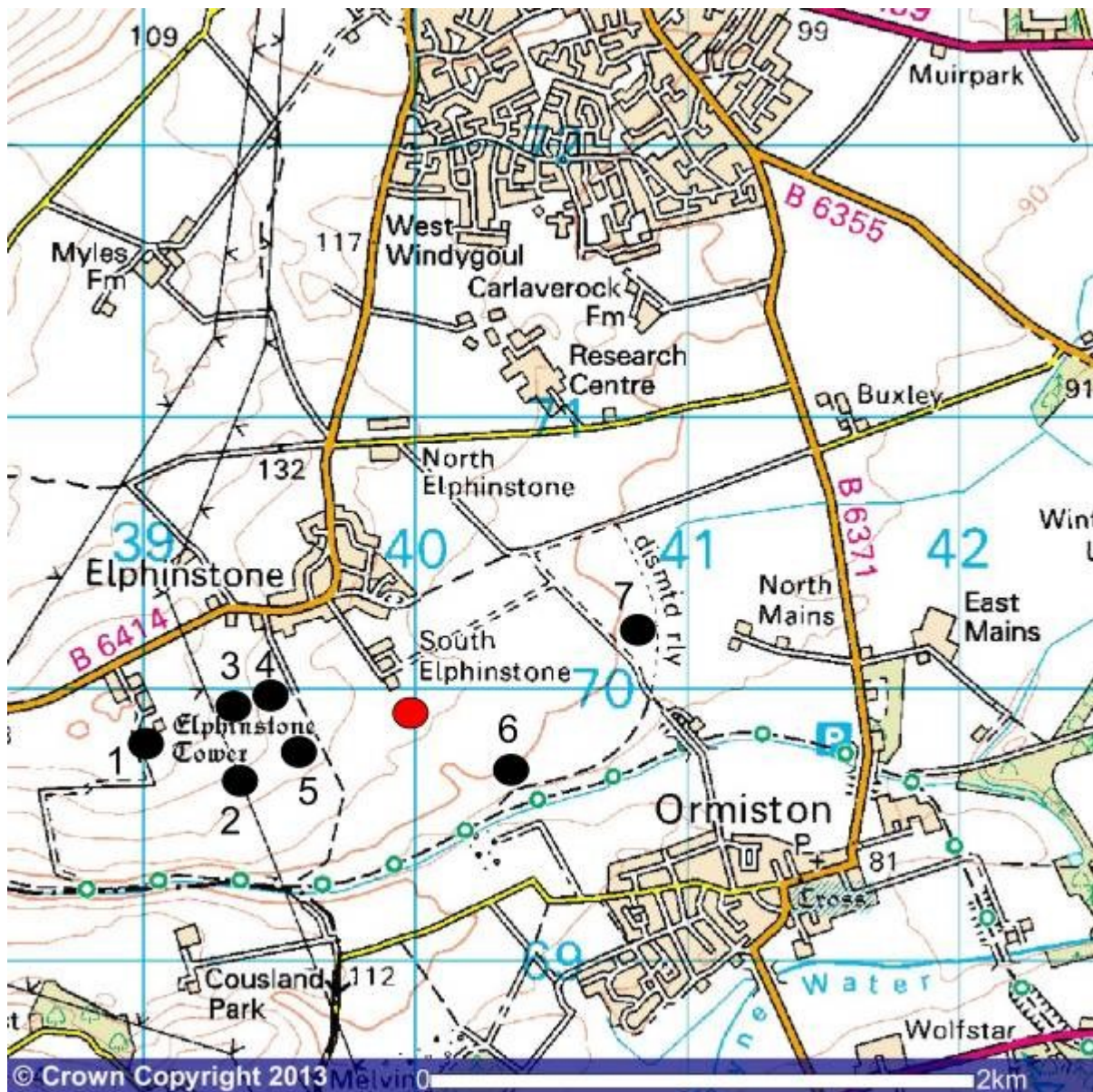
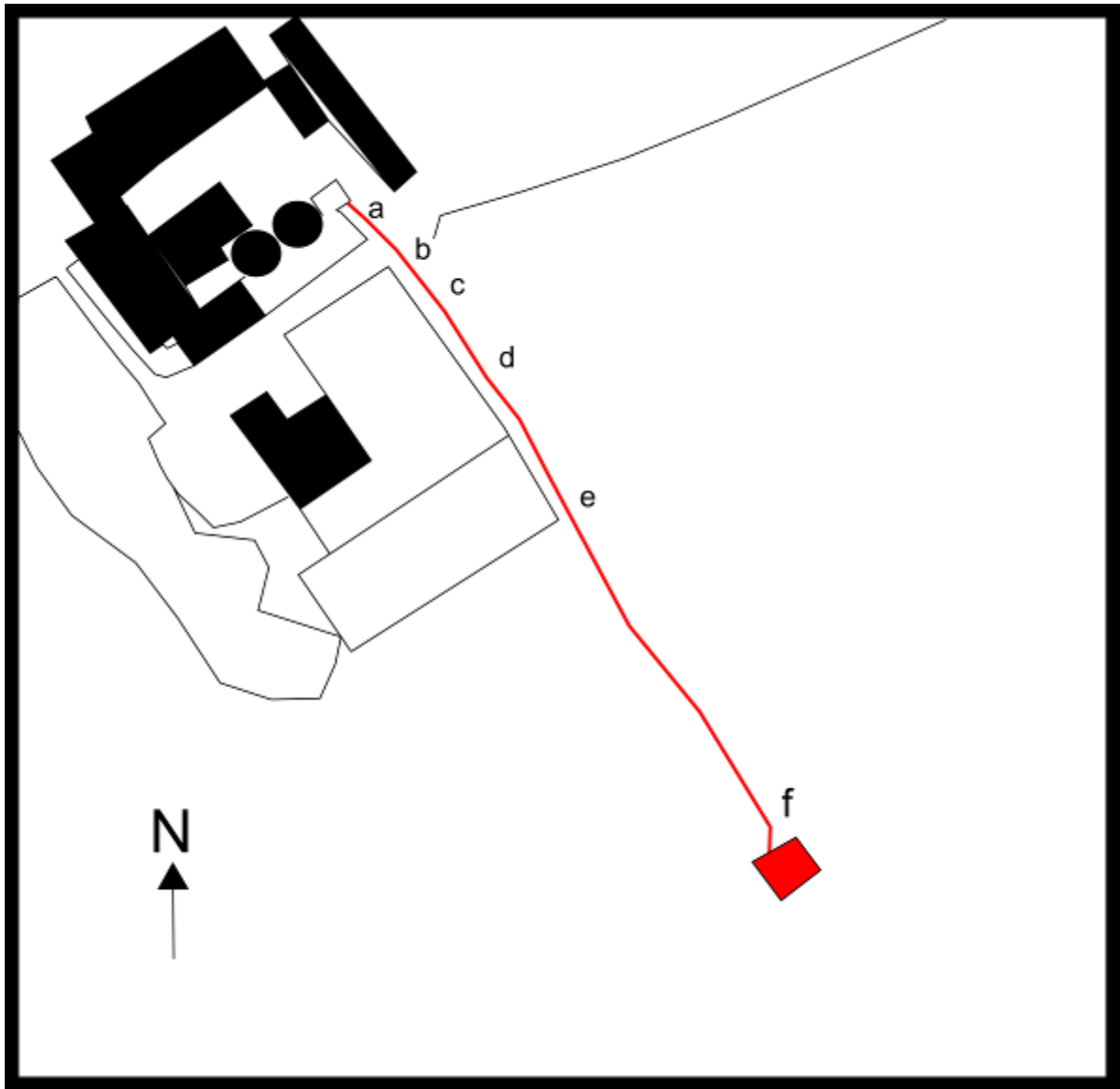


Illustration 2 Location of turbine and recorded sites and monuments in the vicinity (based on Ordnance Survey map Crown Copyright 2013. All Rights Reserved. Licence number 100049628)



Illus 3 Turbine plinth and cable trench shown in relation to South Elphinstone Farm, letters refer to text description of cable trench



Illustration 4 Cable trench adjacent to farm steadings looking north east



Illustration 5 West facing section of cable trench in vicinity of farm steadings, broken tile and brick visible in section



Illustration 6 Cable trench looking south towards site of turbine plinth, eastern boundary fence around farm on right



Illustration 7 East Facing section of cable trench at point b on illustration 3



Illustration 8 Former septic tank in East facing section of cable trench at point c on illustration 3 looking north



Illustration 9 East facing section of cable trench at point d on illustration 3



Illustration 10 General view of cable trench looking north west at entrance to field at point E on illustration 3



Illustration 11 Detail of East facing section of cable trench at point E on illustration 3



Illustration 12 East facing section of cable trench showing ploughsoil above natural clay at point f on illustration 3



Illustration 13 Turbine plinth under excavation looking west showing surface of natural clay below ploughsoil, red arrows indicate course of field drain



Illustration 14 General view of excavated turbine plinth and cable trench looking north showing natural clay



Illustration 15 Detail view of north eastern corner of turbine plinth showing ploughsoil above natural clay



Illustration 16 General view of south eastern corner of turbine plinth showing ploughsoil above natural clay