

**Site Code: SBW02**  
**Date: March 2007**  
**Client: Falck/RDC Scotland Ltd**

**Kilbraur Wind Farm, Strath Brora, Sutherland**  
**Results of an archaeological excavation of three clearance cairns**  
**and landscape survey of adjacent prehistoric settlement remains**

Sarah-Jane Haston

## PROJECT SUMMARY SHEET (SBW02)

<b>Client</b>	Falck/RDC Scotland Ltd
<b>National Grid Reference</b>	
Excavation	NC 7700 0700 (Site centred)
Field Survey	
<b>Project Manager</b>	Chris Lowe
<b>Text</b>	Sarah-Jane Haston
<b>Illustrations</b>	Mike Middleton, Craig Williams
<b>Excavation</b>	Sarah-Jane Haston, Nick Moignard Kirsty Owen, Katie Sludden, Alastair Robertson.
<b>Field Survey</b>	Colin Hewat, Ross Murray
<b>Environmental Assessment</b>	Scott Timpany & David Masson
<b>Schedule</b>	
Excavation	22 <sup>nd</sup> January–06 <sup>th</sup> February 2007
Field Survey	28 <sup>th</sup> February–02 <sup>nd</sup> March 2007
Report	March 2007

### Summary

*This report presents the findings of an archaeological programme of works for the construction of the Kibraur Wind Farm, Strath Brora. The fieldwork was undertaken between January and March 2007 and comprised (i) an archaeological excavation undertaken on the site of the proposed on-site borrow-pit and (ii) a field survey of the adjacent prehistoric settlement remains including a possible burnt mound, Site 3, immediately to the west and the settlement and field systems, Sites 4 and 5, immediately to the east of the borrow-pit area.*

*The area excavation was commissioned following an evaluation in December 2006 that identified the remains of two stone cairns. During the excavation a further round cairn and a curvilinear stone clearance heap were identified below the peat on the surface-water gleyed horizon. All stone features were fully excavated and recorded. The excavation of the cairns revealed them to be simple clearance cairns, associated with the settlement and field systems to the east.*

*No other archaeological features were identified in the surfaces preserved beneath the clearance cairns.*

*In addition to the full excavation of the cairns a detailed instrument survey of Sites 3 to 5 was undertaken.*

**KILBRAUR WIND FARM, STRATH BRORA, SUTHERLAND**

CONTENTS

1. INTRODUCTION
2. SITE LOCATION AND DESCRIPTION
3. OBJECTIVES
4. METHODS
5. RESULTS
6. ENVIRONMENTAL ASSESSMENT
7. DISCUSSION
8. ACKNOWLEDGEMENT
9. BIBLIOGRAPHY

APPENDIX 1: SITE REGISTERS

- 1.1 Context Register
- 1.2 Sample Register
- 1.3 Drawing Register
- 1.4 Photographic Register

APPENDIX 2: WRITTEN SCHEME OF INVESTIGATION

Figure 1: SBW02: Location of site and distribution of archaeological monuments

Figure 2: SBW02- Clearance Cairn 01 – plans and sections

Figure 3: SBW02: Clearance Cairn 02 – plans and sections

Figure 4: SBW02: Clearance Cairn 03 – plans and sections

Figure 5: SBW02: Section of curvilinear stone clearance heap

## 1. INTRODUCTION

Headland Archaeology Ltd was commissioned by Falck/RDC Scotland Ltd. to undertake an ongoing programme of archaeological work during the construction of the Kilbraur Wind Farm, Strath Brora. This report presents the results of a phase of these works, which comprised (i) an archaeological area excavation on the site of the proposed on-site borrow pit; (ii) a field survey of the adjacent prehistoric settlement remains (Sites 3 to 5) immediately to the east and west of the borrow-pit area.

The excavation was undertaken between the 22<sup>nd</sup> January and the 6<sup>th</sup> February 2007 in very cold and varying dry, showery and snowy weather conditions. The field survey was undertaken between the 28<sup>th</sup> February and the 2<sup>nd</sup> March 2007 in very cold but dry weather conditions.

The project was undertaken in accordance with a specification prepared by the Highland Council Planning and Development Service, Archaeology Unit, and followed a method statement for the area excavation (Lowe 2007). This report follows detailed reporting of the cultural heritage within the area of the wind farm (Dalland & Lowe 2005; Geddes 2006; Hatherley 2006; Robertson 2006; Haston 2007).

## 2. SITE LOCATION AND DESCRIPTION

### *Borrow-pit Excavation*

The area of the excavation was situated within the south-eastern margins of the proposed on-site borrow-pit (Figure 1). The borrow-pit lies in an area of archaeological potential, with a possible burnt mound (Site 3) immediately to the west and a large old settlement area marked by hut circles and cultivation remains principally in the form of small field clearance cairns (Sites 4 & 5) along the eastern margins.

The findings of an earlier trial trench evaluation within the borrow-pit area (Haston 2007) identified the remains of two stone cairns. These were situated on the upper slopes of the borrow-pit area in proximity to the visible distribution of above-ground features relating to the old settlement area (Sites 4 & 5) immediately to the east.

The upper slopes were characterised by short dry heather and the peat had an average depth of 0.30m while the lower ground to the N and NW became wetter and steeper and less suitable for cultivation with peat depths of over 1m recorded within the evaluation trenches.

### *Field Survey (Sites 3 to 5)*

Site 3, a possible burnt mound, is situated on flat boggy ground adjacent to the small burn, Allt Clais a Chait. The site lies between the on-site borrow-pit and the access track, which is found 90m to the NNW.

Sites 4 and 5 are situated on gentle sloping ground on a south-west and north-west aspect. The sites are found between 210 and 234m OD between the proposed on-site borrow-pit and a line of electricity pylons. The ground is colonised by short dry heather moorland. The sites together comprise a number of hut circles and cultivation remains, principally in the form of small field clearance cairns.

Sites 3 to 5 were previously roughly located using a handheld GPS in August 2005 (Dalland & Lowe 2005).

### 3. OBJECTIVES

#### *Borrow-pit Excavation*

Following the evaluation, options for the full excavation of the site were agreed with Highland Council Archaeology Service and these options are summarised in an earlier document; *Kilbraur Wind Farm, Strath Brora, Highland: Archaeological excavation of clearance cairns & related features adjacent to prehistoric settlement remains* (Lowe 2007).

The main objectives of the area excavation were to preserve by record the two cairns previously identified during the evaluation; to ascertain whether there were further cairns or other stone features in the vicinity, and whether cut features (such as cultivation marks, pits or post-holes) survive below the gleyed horizon on which the stone features sit. A further objective was to clarify whether the identified cairns were simply piles of field clearance stones, removed and gathered during the course of cultivation, or whether any had a burial or ritual function.

#### *Field Survey*

An outline survey of Sites 3 to 5 was previously undertaken using a handheld GPS in August 2005. The objectives of re-surveying the area were to provide a more detailed instrument survey of the area; to obtain accurate dimensions of all the above-ground features, and to view the sites in their landscape setting in relation to the cairns excavated below.

### 4. METHODS

#### *Borrow-pit Excavation*

The roughly 75 by 40m area situated in the south-eastern margins of the proposed borrow pit (Figure 1) was marked out with canes. A 360° tracked excavator equipped with a 2m wide flat bladed ditching bucket was used to initially remove the upper organic soil horizon under direct archaeological supervision. The removal of the peat exposed the top of the gleyed mineral soil, which was then cleaned by hand to clarify the nature and extent of any features. All identified stone features located on the surface-water gleyed horizon were cleaned by hand; the overlying peaty soil and loose stones were then removed to reveal the surviving elements of the cairns in their entirety. The cairns were recorded and investigated by opposing quadrants to ascertain their character and form, and subsequently fully excavated. The gleyed horizon was then removed by machine, under archaeological supervision, exposing the subsoil and any negative features cut into it.

The recording was by Headland Archaeology Ltd standard method. All contexts and environmental samples were given unique numbers. Colour transparencies and colour print photographs were taken. An overall site plan was recorded at 1:2000 relative to the National Grid. Features were planned at a scale of 1:20 and sections were drawn at 1:10. All recording was undertaken on *pro forma* record cards. Survey recording of all feature locations was related to the Ordnance Survey grid; sections were accurately related to Ordnance Datum.

Bulk samples were taken for wet sieving and flotation. Kubiena samples were taken from important deposit boundaries. The non-waterlogged samples were processed in laboratory

conditions using a standard flotation method (cf. Kenward *et al*, 1980). Sediment samples of 500ml were sub-sampled from the waterlogged samples through water displacement and then sieved through meshes of 1mm and 500µm in order to remove plant macrofossils for dating. All plant macrofossil samples were analysed using a stereomicroscope at magnifications of x10 and up to x100 where necessary to aid identification. Identifications were confirmed using modern reference material and seed atlases including Cappers *et al* (2006).

### ***Field Survey***

The instrument survey was conducted using a Total Station EDM controlled by a field computer running Penmap software. The survey was tied to the National Grid using existing control points supplied by Falck Renewables. The 2005 handheld GPS survey was used as a guide to quickly locate the archaeological features on the ground.

## **5. RESULTS**

### ***Borrow-pit Excavation***

Once the peat had been removed to the gleyed horizon the two cairns identified in the evaluation were located and a further sub-rounded cairn and a curvilinear stony bank were identified. It was clear that no cultivation remains, in the form of ard- or plough-marks, or other cut features, such as pits or post-holes, were visible in the gleyed mineral soil. A full description of all deposits is provided in Appendix 1 and plans of all the features recorded are shown in Figures 2-5.

#### ***Cairn 1 (Figure 2)***

After the removal of the peat, the cairn, previously recorded in the evaluation, appeared to have been greatly disturbed. Situated on moderately steep sloping ground, stone tumble embedded in the gley surrounding the central core of the cairn gave an initial diameter of 6m. The overlying peat soil and loose stones were removed by hand to reveal the remaining elements of the sub-rounded cairn. It measured 2.4m by 2m in plan dimension and reached a maximum height of 0.50m. The north-east and south-west quadrants were excavated and revealed a cairn made up of sub-rounded boulders and sub-angular stone fragments of granite and schist (01). They were mostly 0.20m in diameter but ranged in size from 0.05 to 0.30m in diameter. A very large sub-angular boulder positioned at the centre of the cairn measured 0.80m by 0.40 by 0.60m. This large boulder protruded from the natural silt and was overlain by medium to large stones.

The boulder interstices, particularly at the base, were filled with peaty soil, and decayed stone. The boulders overlay, and were embedded in the gleyed mineral soil (03) 0.16m in depth. Below this an iron pan overlay a subsoil of mid orange-brown silt.

#### ***Cairn 2 (Figure 3)***

The removal of the peat revealed a sub-rounded cairn previously recorded in the evaluation. It was situated on moderately steep sloping ground to the west of a large outcrop of bedrock. Occasional stone tumble was found downhill of the cairn. The overlying peat soil and loose stones were removed to reveal the remaining elements of the cairn. It measured 4.30m by 3.50m in plan dimension and reached a maximum height of 0.40m. The north-west and south-east quadrants were excavated and revealed a cairn made up of sub-rounded boulders of granite and schist (02). They were mostly 0.16m in diameter but ranged in size from 0.04 to 0.32m in diameter. Two very large sub-rectangular boulders were found in the centre of the

cairn. They measured 0.90m by 0.40m by 0.40m and 0.70m by 0.60m by 0.40m respectively and were surrounded by medium to large sub-rounded stones.

The boulder interstices, particularly in the upper 0.10-0.25m of the heap, were filled with peaty soil (05), and decayed stone. The boulders overlay, and were embedded in the gleyed mineral soil (06) 0.15m in depth. The mineral soil below the cairn was very compacted and contained frequent inclusions of grit and decayed stone.

#### *Cairn 3 (Figure 4)*

The removal of the peat revealed a sub-rounded cairn. Situated on steeply sloping ground, the eastern extent of the cairn was found on almost level ground while the western extent dropped steeply downhill. The overlying peat soil and loose stones were removed to expose the remaining elements of the cairn. It measured 5m by 4.60m in plan dimension and reached a maximum height of 0.60m. The north-east and south-west quadrants were excavated and revealed a cairn made up of sub-rounded boulders of granite and schist, many of which were partially rotted (07). They were mostly 0.12m in diameter but ranged in size from 0.05 to 0.30m in diameter. Larger boulders were concentrated towards the centre of the cairn and towards the western downslope extent.

The boulder interstices, particularly in the upper 0.10-0.30m of the heap, were filled with peaty soil (09). The boulders overlay and were embedded in the gleyed mineral soil (08) 0.20m in depth. The mineral soil (08) below the cairn was highly compacted and contained frequent small stone fragments, grit and decayed schist.

#### *Curvilinear stone clearance heap (Figure 5)*

The removal of the peat downslope of the three clearance cairns uncovered a curvilinear stone clearance heap. Situated on the brow of the hill the heap of stones was found curving along the western edge of the excavation area (Figure 1). The excavation area was widened to gather more information on the full extent of the clearance heap. The overlying peat soil and loose stones were then removed to expose the outer edges of clearance heap. It measured 23.4m by 2.7m and reached a maximum height of 0.25m. A slot excavated through the clearance heap revealed that the heap consisted of a spread of stone ranging from sub-rounded cobbles to small boulders of granite and schist (04). They were mostly 0.16m in diameter but ranged in size from 0.10 to 0.50m in diameter. The stones overlay and were embedded in the gleyed mineral soil (10).

#### *Field Survey*

The instrument survey of Sites 3 to 5 is shown in detail in Figure 1. The possibly burnt mound (Site 3) was visible as a large peaty mound overtopped with grasses. Rushes, sedges and sphagnum mosses dominated the surrounding flat boggy ground. It measures 16.5 by 15.5m in plan dimension and is up to 1.20m high.

The field and settlement systems of Sites 4 and 5, together, consist of the stone foundations of three hut circles, a possible shieling and numerous groups of stone cairns. The above-ground features are visible as peaty turf-covered mounds with some stone protruding through their surface.

The field and settlement system is spread over an area of 400m by 200m. The spacing of cairns is generally erratic with the densest concentration located to the north-east. Straight and curving lines of stone cairns do occur, intermixed with patches of clear ground. The straight lines are on a rough NW-SE alignment, curving to one end and open at the other.

## 6. ENVIRONMENTAL ASSESSMENT

Charcoal fragments are present in three of the samples (02, 04, 05). Only small quantities of charcoal were recovered and with the exception of one fragment from Sample 04 were less than 1cm. This charcoal is likely to represent transported material such as via windblown or surface runoff rather than any *in-situ* deposit. In itself this small quantity of charcoal offers little interpretative value for the site other than indicating past burning events on the hillside.

## 7. DISCUSSION

The excavation of the three cairns revealed them to be simple field clearance heaps associated with the large settlement and field systems to the east. Similar large groups of stone cairns and associated hut-circles are an ever-present feature in the landscape of upland Scotland with perhaps as many as 500 systems recorded in the country of Sutherland alone (Edwards, 1978; Fairhurst & Taylor 1971; Yates 1984).

The stone heaps of the excavated cairns were generally formed around large stones, which were either earthfast or possibly the most obvious or easiest stones to be cleared. The cairns ranged in size from 2m to 5m in diameter and had a height of between 0.40 and 0.60m.

It is clear that the excavated cairns represent the north-western margins of the field systems (Sites 4 and 5) and possibly the limit of cultivation before the land becomes much steeper below. The bedrock was very close to the surface around the north-eastern margins of the excavation area and the position of Cairn 1, situated on a rock outcrop, may be suggestive of an area that was not suitable for cultivation. The curvilinear stone clearance heap may have acted as a boundary over which cultivation would have been impossible.

Among the cultivation remains to the east (Sites 4 / 5), the straight and curving lines of cairns are suggestive of enclosure boundaries or divisions between plots of land, associated with individual hut-circles.

The absence of peat beneath the cairns suggests that they were constructed when soil conditions were much better than they are today (Edwards 1978; McIntyre 1998). That the cairnfields are located on a gentle west and south-west facing slope would have been important in providing warmth and light (Yates 1984).

## 8. ACKNOWLEDGEMENT

Headland would like to thank Falck Renewables Civil Engineer Ken Hardie, for his assistance throughout the project.

## 9. BIBLIOGRAPHY

Cappers R.T.J., Bekker R.M. and Jans J.E.A 2006 *Digital seed atlas of the Netherlands* (Barkhuis Publishing and Groningen University Library, Groningen).

Dalland, M & Lowe, C E 2005 *Kilbraur Wind Farm: further supplemental information Part II: Archaeology Sketch Plans and Notations*. Unpublished client Report, August 2005.

Edwards, K. J 1978 'Excavation and environmental archaeology of a small cairn associated with cultivation ridges in Aberdeenshire', *Proc Soc Antiq Scot*, **109**, 22-9.

Fairhurst, H & Taylor, D.B 1971 'A hut-circle in Kilphedir, Sutherland', *Proc Soc Antiq Scot*, **103**, 65-99.

Geddes, G 2006 *Kilbraur Wind Farm, Strath Brora: Archaeological Watching Brief on trial pits in borrow pit area*. Unpublished client Report, December 2006.

Haston, S 2007 *Kilbraur Wind Farm, Strath Brora, Highland. An Archaeological Evaluation of a proposed borrow-pit; A Watching brief on the groundworks of an access road & the Survey of Sites 102, 103 and 104*. Unpublished client Report, January 2007.

Hatherley, C K 2006 *Kilbraur Wind Farm, Strath Brora: Archaeological Watching Brief on Preliminary Works*. Unpublished client Report, October 2006.

Kenward, H. K., Hall, A. R. and Jones, A. K. G 1980 'A tested set of techniques for the extraction of plant and animal microfossils from waterlogged archaeological deposits', *Science and Archaeology* **22**, 3-15.

Lowe, C E 2006a *Kilbraur Wind Farm: Method Statement for an archaeological trial trench evaluation*. Unpublished client Report, December 2006.

Lowe, C E 2006b *Kilbraur Wind Farm: Method Statement for an archaeological programme of works*. Unpublished client Report, December 2006.

Lowe, C 2007 *Kilbraur Wind Farm, Strath Brora, Highland: Archaeological excavation of clearance cairns & related features adjacent to prehistoric settlement remains. Written Scheme of Investigation* Unpublished Client Report, January 2007.

McIntyre, A 1998 'Survey and exaction at Kilearnan Hill, Sutherland, 1982-3', *Proc Soc Antiq Scot*, **128**, 167-201.

Robertson, A 2006 *Kilbraur Wind Farm, Strath Brora: Archaeological Watching Brief on Preliminary Works*. Unpublished client Report, August 2006.

Yates, M. J 1984 'Groups of small cairns in northern Britain – a view from SW Scotland', *Proc Soc Antiq Scot*, **114**, 217-234.

## APPENDIX 1: Site Registers

### 1.1 Context Register

Context No.	Description
01	Levelled cairn composed of sub-rounded boulders up to 0.2m in diameter. Has a length of 2.4m, a width of 2m and has a remaining height of 0.50m.
02	Round cairn composed of sub-rounded boulders and sub-angular stone fragments. Has a length of 4.3m, a width of 3.5m and reaches a maximum height of 0.40m.
03	Mid brown-grey silt underlying Cairn 01
04	Curvilinear Stone clearance heap. Has a length of 23.4, a width of 2.7m and reaches a maximum height of 0.25m
05	Dark brown peaty sandy silt. Fairly loose with gritty inclusions within stone interstices of Cairn 02
06	Mid brown-grey silt underlying Cairn 02
07	Round cairn composed of sub-rounded boulders to 0.40m diameter. Has a length of 5m, a width of 4.60 and reaches a maximum height of 0.60m.
08	Mid brown-grey silt underlying Cairn 07
09	Dark brown peaty sandy silt. Fairly loose with gritty inclusions within stone interstices of Cairn 07
10	Mid brown-grey silt underlying and surrounding clearance 04

### 1.2 Sample Register

Sample No.	Context No.	Description
01	03	A mid brown-grey sandy silt, below cairn 01
02	05	Peat within stone interstices of Cairn 2
03	06	A mid brown-grey sandy silt, below cairn 02
04	09	Peat within stone interstices of Cairn 3
05	08	A mid brown-grey sandy silt, below cairn 03
06	05/06	Kubiena tin of interface between peat 005/grey sandy silt 06 within Cairn 2
07		Peat Monolith

### 1.3 Drawing Register

Drawing No.	Scale	Description
01	1:20	Pre-excavation plan of clearance cairn 01
02	1:10	N facing section of clearance cairn 01
03	1:10	S facing section of clearance cairn 01
04	1:10	E facing section of clearance cairn 01
05	1:10	W facing section of clearance cairn 01
06	1:20	Pre-excavation plan of clearance cairn 02
07	1:10	N facing section through curvilinear clearance 04
08	1:20	Pre-ex plan of clearance cairn 07
09	1:10	N facing section of clearance cairn 02
10	1:10	E facing section of clearance cairn 02
11	1:10	S facing section of clearance cairn 02
12	1:10	W facing section of clearance cairn 02
13	1:10	W facing section of clearance cairn 03
14	1:10	E facing section of clearance cairn 03

15	1:10	N facing section of clearance cairn 03
16	1:10	S facing section of clearance cairn 03
17	1:20	Intermediate plan of clearance cairn 03, showing excavated quadrants

#### 1.4 Photographic Register

##### Colour Print & Colour Slide

Shot No.	Direction Facing	Description
1	/	Identity shot
2	NW	View of groundworks for access track
3	N	View of access track up to the borrow pit area
4	SW	Pre-excavation view of borrow-pit area
5	W	Pre-excavation view of borrow-pit area
6	SW	View of canes marking the edge of the borrow pit area and clearance cairn to the east
7	SW	General view from the borrow pit area
8	W	General view from the borrow pit area
9	W	General view from the borrow pit area
10	NW	General view from the borrow pit area
11	N	General view from the borrow pit area
12	N	General view from the borrow pit area
13	NE	General view from the borrow pit area
14	E	General view from the borrow pit area
15	NE	General view of drainage marks in north-eastern margins of site
16	NE	Close view of drainage marks
17	E	Pre-excavation view of clearance cairn 01
18	S	Pre-excavation view of clearance cairn 01
19	S	Pre-excavation view of clearance cairn 02
20	NW	Pre-excavation view of clearance cairn 02
21	NE	Mid-excavation view of clearance cairn 01
22	SW	Mid-excavation view of clearance cairn 01
23	S	N facing section of clearance cairn 01
24	N	S facing section of clearance cairn 01
25	W	E facing section of clearance cairn 01
26	E	W facing section of clearance cairn 01
27	E	Pre-excavation view of clearance cairn 03
28	W	Pre-excavation view of clearance cairn 03, showing mineral gley horizon
29	S	Pre-excavation view of clearance cairn 03
30	NE	Pre-excavation view of clearance cairn 03
31	S	General view of curvilinear stone clearance 04
32	E	Close view of curvilinear stone clearance 04
33	NE	General view of curvilinear stone clearance 04
34	N	Working shot showing the excavation of clearance cairn 03
35	N	Working shot showing the excavation of clearance cairn 03
36	N	S facing section of clearance cairn 02
37	E	W facing section of clearance cairn 02
38	N	S facing section through curvilinear stone clearance 04
39	NW	General view of curvilinear stone clearance 04
40	W	Pre-excavation view of clearance cairn 07
41	N	Pre-excavation view of clearance cairn 07
42	W	Working shot showing excavation of clearance cairn 07
43	W	E facing section of clearance cairn 02
44	N	S facing section of clearance cairn 03

45	E	W facing section of clearance cairn 02 showing position of kubiena tin
46	E	W facing section of clearance cairn 07
47	N	S facing section of clearance cairn 07
48	S	Post-excavation view of clearance cairn 02
49	W	E facing section of clearance cairn 07
50	S	N facing section of clearance cairn 07
51	NW	Close view of clearance cairn 07 under snow
52	NE	Working shot showing the excavation of clearance cairn 07
53	E	Working shot showing the surveying of clearance cairn 07
54	NW	Working shot showing the excavation of clearance cairn 07
55	S	Working shot showing the cleaning of the section for the monolith
56	N	Working shot showing the machine excavation of the borrow-pit area

## APPENDIX 2: WRITTEN SCHEME OF INVESTIGATION

Lowe, C 2007 *Kilbraur Windfarm, Strath Brora, Highland: Archaeological excavation of clearance cairns & related features adjacent to prehistoric settlement remains. Written Scheme of Investigation*

*Revised 17 January 2007*

### 1 INTRODUCTION

This document is submitted as Headland Archaeology's method statement for a programme of area excavation on the site of the proposed borrow pit, north of Farlary at site centre NC 7700 0700. It is based on the results of the recent evaluation (Haston 2007) which was, itself, undertaken in accordance with a standard *Brief* supplied by Highland Council Planning and Development Service (Archaeology Unit).

The proposed development site lies in an area of archaeological potential (Figure 1). It lies immediately to the south of a possible burnt mound (Site 3) and on the NW flank of an old settlement area marked by hut circles and cultivation remains, principally small, field-clearance cairns (Sites 4 & 5). The trial-trench evaluation, however, has clearly shown that this potential is higher to the SE, in proximity to the visible distribution, and lower to the N and NW where the ground becomes wetter and steeper and less suitable for cultivation.

The remains of two previously unrecorded clearance cairns were identified in proximity to the visible distribution of above-ground features during the course of the December 2006 trial-trench evaluation. The features were identified immediately below the organic soil horizon on a gleyed mineral soil. No cultivation remains – in the form of ard- or plough-marks – or other cut features, such as pits or post-holes, were visible in the surface-water gleyed horizon. These may, however, be identifiable in the interface between the gleyed horizon and the subsoil below.

### 2 SCHEDULE

Subject to receipt of the necessary approval and to any notice period which the council's archaeological advisors may require, the opening of an area roughly 75 x 40m around and adjacent to the newly-found features is scheduled for the week commencing 22 January 2007. Actual dates will be confirmed with the Highland Council Planning and Development Service (Archaeology Unit), to facilitate their site monitoring visit, once the availability of plant-hire has been confirmed.

The detailed methodology is set out below but it is anticipated that the complete programme of fieldwork will be completed within three working weeks. A suitably equipped tracked-excavator (minimum 7 ton, with a wide toothless ditching bucket) will be required for Week 1 to remove the organic soil cover and, again, later to remove the gleyed horizon.

All products will be delivered to the client and copied to the Council Archaeology Unit within 3 months of the completion of fieldwork.

### **3 PROJECT TEAM & LIAISON**

The project will be managed for Headland Archaeology by Dr Christopher Lowe; the field team will be supervised on site by Sarah-jane Haston. *Curricula vitae* of key personnel are available on request. The project team will familiarise themselves with the archaeological background to the site and its environs – including data that has been collated as part of the Environmental Statement and the more recent surveys – and will be aware of the project's aims and methodologies (Dalland & Lowe 2005; Lowe 2006; Robertson 2006; WCE 2004; Haston 2007).

Headland Archaeology is a Registered Archaeological Organisation (RAO-40) and abides by the Codes of Conduct and Approved Practice and Standards of the Institute of Field Archaeologists. The company has all the necessary technical and personnel resources for the satisfactory completion of the excavation.

Prior notice of the fieldwork schedule and contact details of the relevant personnel will be provided to Highland Council Archaeology Unit. The project Manager will be responsible for ensuring that the Highland Council Archaeology Unit is kept informed of the progress of the works and any significant discoveries.

### **4 INSURANCE**

Headland Archaeology Ltd is fully indemnified and all necessary insurances can be presented on request.

### **5 HEALTH & SAFETY**

All of Headland's work is undertaken in accordance with current H&S legislation. A risk assessment will be prepared prior to the commencement of fieldwork.

### **6 ACCESS & SERVICES**

This Written Scheme of Investigation is submitted on the understanding that there will be unhindered access (including machine-access) to all areas of the site; a plan of any services within the proposed development area will also be provided by the client or his agents. Plant and welfare facilities will be provided *gratis* by the main contractor.

### **7 PROJECT DESIGN**

#### **7.1 OBJECTIVES AND STRATEGY**

The objective of the excavation is to preserve by record the two cairns previously identified during the evaluation; to ascertain whether there are further cairns or other stone features in the vicinity, and whether cut features (such as cultivation marks, pits or post-holes) survive below the gleyed horizon on which the stone features sit. A further objective is to clarify whether the identified cairns are simply piles of field

clearance stones, removed and gathered during the course of cultivation, or whether any have a burial or ritual function.

## 7.2 METHOD

### **Fieldwork**

All aspects of the fieldwork programme will be undertaken in accordance with the Council *Brief (Sections 2 & 3)*. All excavation trenches will be tied into National Grid by means of a Total Station EDM.

An area roughly 75 x 40m will be stripped by a tracked excavator, suitably equipped with a wide toothless ditching bucket. This work will remove the upper organic soil horizon, down to the top of the gleyed mineral soil below, on which the stone features are located.

All identified stone features will be cleaned by hand, recorded and investigated by opposing quadrants to ascertain the character and form of the cairns. All identified features will be fully excavated.

The gleyed horizon and stone features will subsequently be removed by machine, under archaeological supervision, exposing the subsoil and any negative features cut into it. The surface will be cleaned by hand to clarify the nature and extent of any features.

### **Recording**

All aspects of the recording and storage procedures will be undertaken in accordance with the Council *Brief (Sections 3 & 4)*.

All recording will follow Headland Archaeology Ltd standard procedures. All contexts, small finds and environmental samples will be given unique numbers. Bulk finds will be collected by context. Colour transparencies and black-and-white prints will be taken; a graduated metric scale will be clearly visible. An overall site plan will be recorded at 1:2500 or 1:1250 relative to the National Grid with 1:20 plans of the individual features. Sections/elevations will be drawn at 1:10. Small finds will be 3D plotted where appropriate. All recording will be undertaken on *pro forma* record cards. Survey recording of all trench locations will be related to the Ordnance Survey grid; sections will be accurately related to Ordnance Datum. In the event that stratified deposits are encountered, a 'Harris' matrix will be compiled.

### **Samples and Artefacts**

Any artefacts retrieved during the evaluation will be bagged, labelled and catalogued on site. Archaeological deposits will be sampled systematically in accordance with Headland Archaeology Ltd standard environmental sampling practice. Bulk samples, a minimum of 10 litres but up to 30 litres if possible, will be taken for wet sieving and flotation. Bulk samples will be taken from any waterlogged deposits present for assessment of organic remains and for their potential for radiocarbon and archaeomagnetic dating. Any organic artefacts that are retrieved during the evaluation will be stored in appropriate conditions and assessed by a qualified archaeological conservator as a part of this contract.

### **Reporting**

All reporting will be undertaken in accordance with the Brief supplied and will contain, as a minimum, the items listed in Section 5a of the Brief. In summary, the results of the excavation will be reported as follows:

- a written report (comprising a Data Structure Report as defined by Historic Scotland). This will contain the results of the excavation, including specialist examination (assessment) of any samples and artefacts;
- a brief summary of the results will be prepared for inclusion in *Discovery and Excavation in Scotland*;
- costed proposals will be presented (if appropriate) for a programme of analysis and reporting that will complete all remaining archaeological work for this project.

A project archive will be prepared and submitted to the National Monuments Record for Scotland within six months of completion of all work on this project. All finds will be declared promptly to the Treasure Trove Advisory Panel.

The report will be distributed to the client and as per Section 5b of the Brief. If significant finds are discovered, then a presentation of the results of the work will also be offered to the local community – for example, as part of Highland Archaeology Month – within one year of the completion of fieldwork.

### **Reinstatement**

Upon completion of fieldwork and after any monitoring visit by the council's archaeological advisors, unless it is required for extraction, the area will be backfilled by machine and tamped down as tidily as practicable.

### 7.3 GENERAL

In accordance with Section 9 of the Brief, the archaeologist agrees not to comment to the press or other media without prior approval from the client and the Highland Council Archaeology Unit.

### 8 REFERENCES

Dalland, M & Lowe, C E 2005 *Kilbraur Wind Farm: further supplemental information Part II: Archaeology Sketch Plans and Notations*. Unpublished client Report, August 2005.

Haston, S 2007 *Kilbraur On-Site Borrow Pit: Archaeological Evaluation Report*. Unpublished client Report, January 2007.

Lowe, C E 2006 *Kilbraur On-Site Borrow Pit: Environmental Statement*. Unpublished client Report, July 2006.

Robertson, A 2006 *Kilbraur Windfarm, Strath Brora: archaeological watching brief on preliminary works*. Unpublished client report, August 2006.

WCE (West Coast Energy) 2004 *Kilbraur Windfarm Environmental Statement (Chapter 9, Cultural Heritage)*

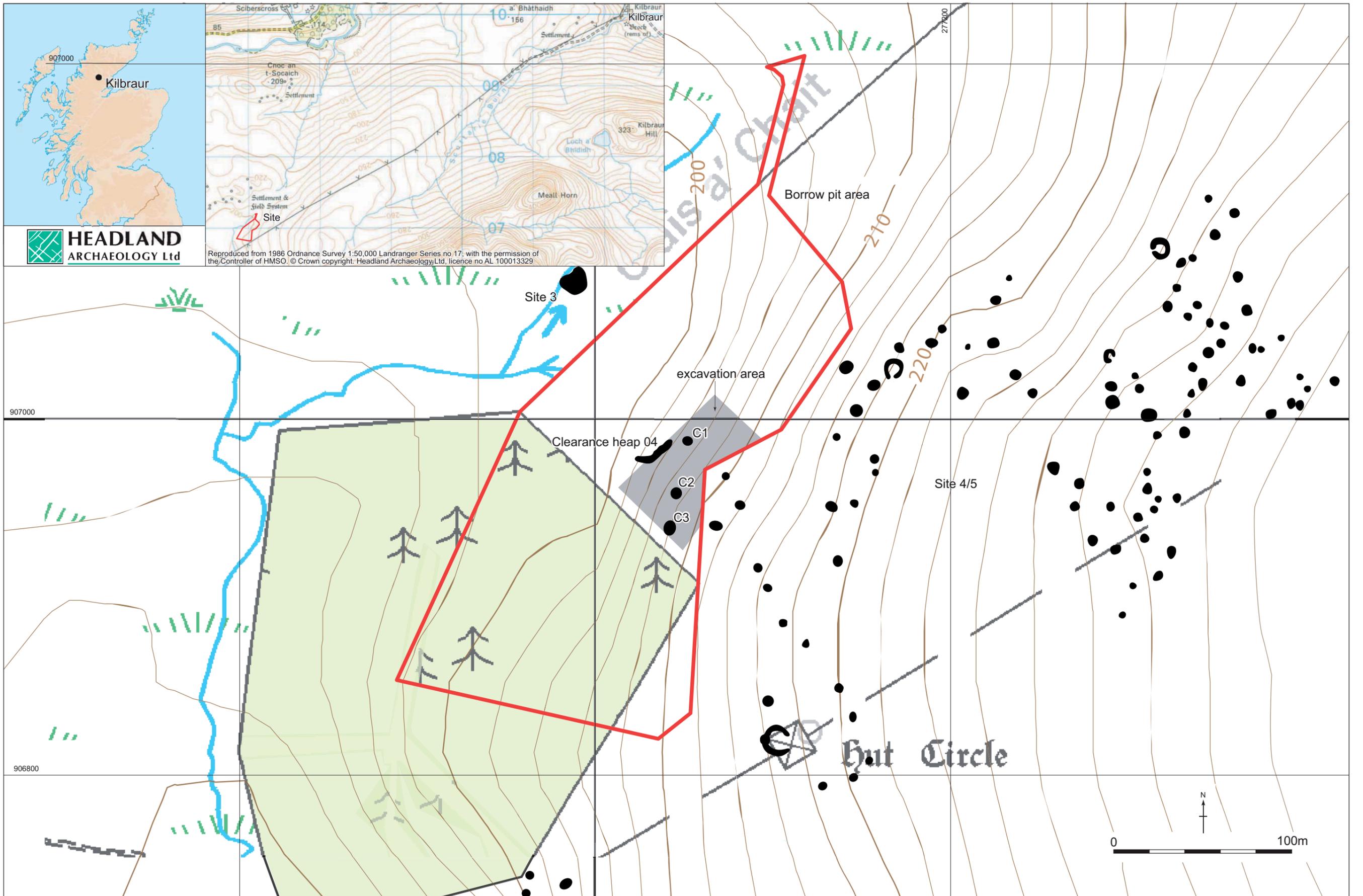


Figure 1 - SBW02: Location of site and distribution of archaeological monuments.

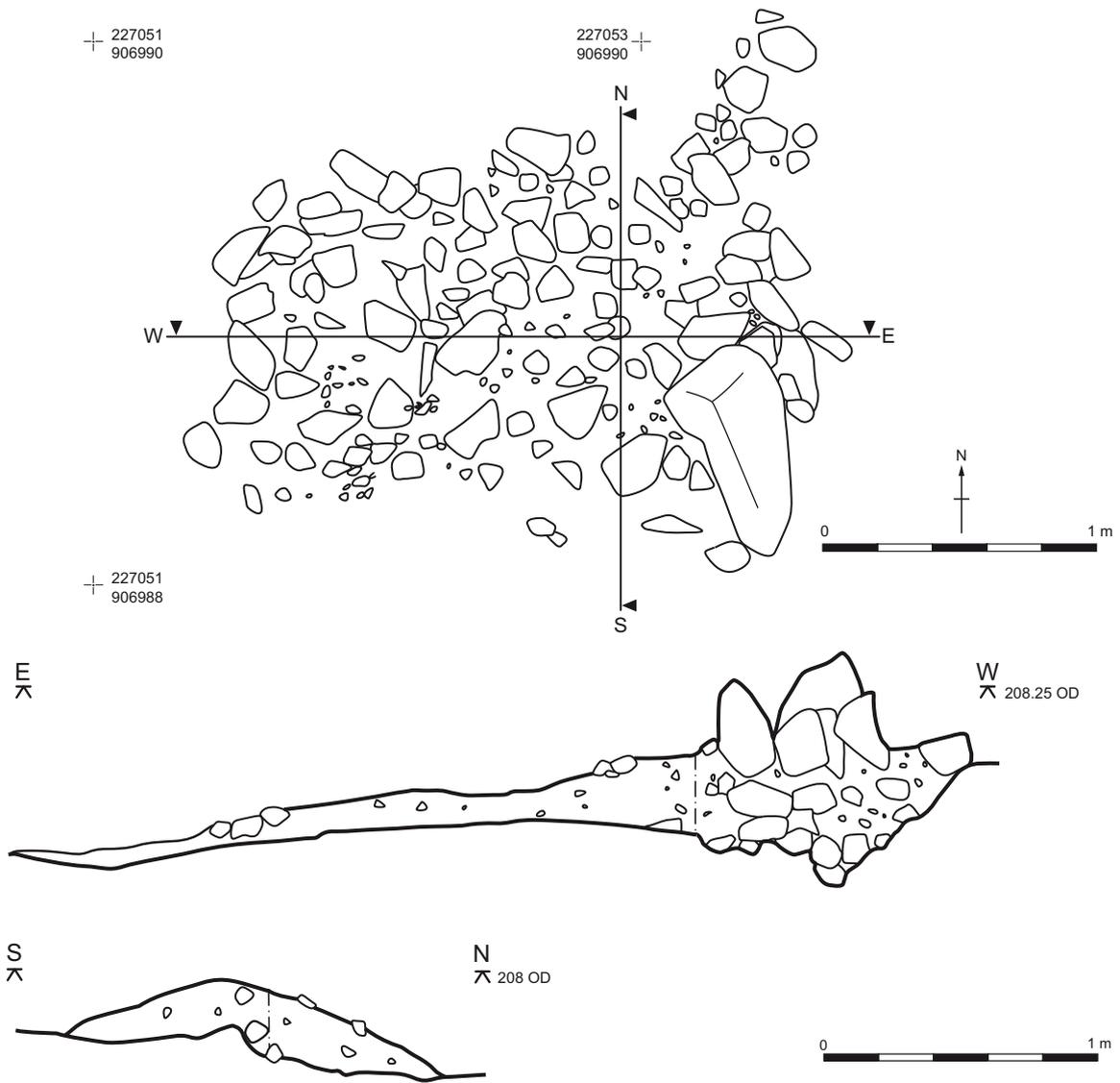


Figure 2 - SBW02: Clearance Cairn 01 - plans and sections

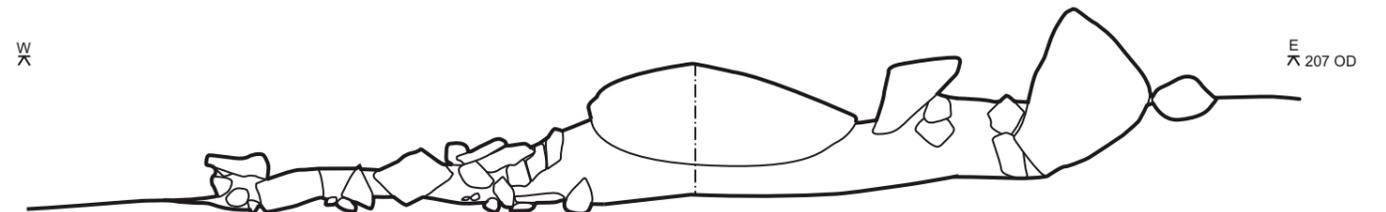
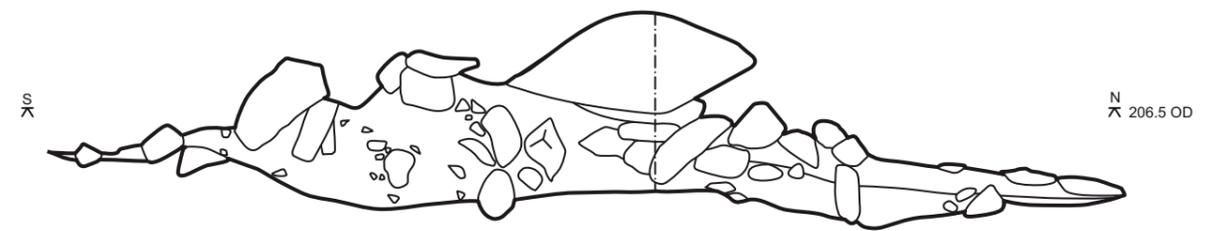
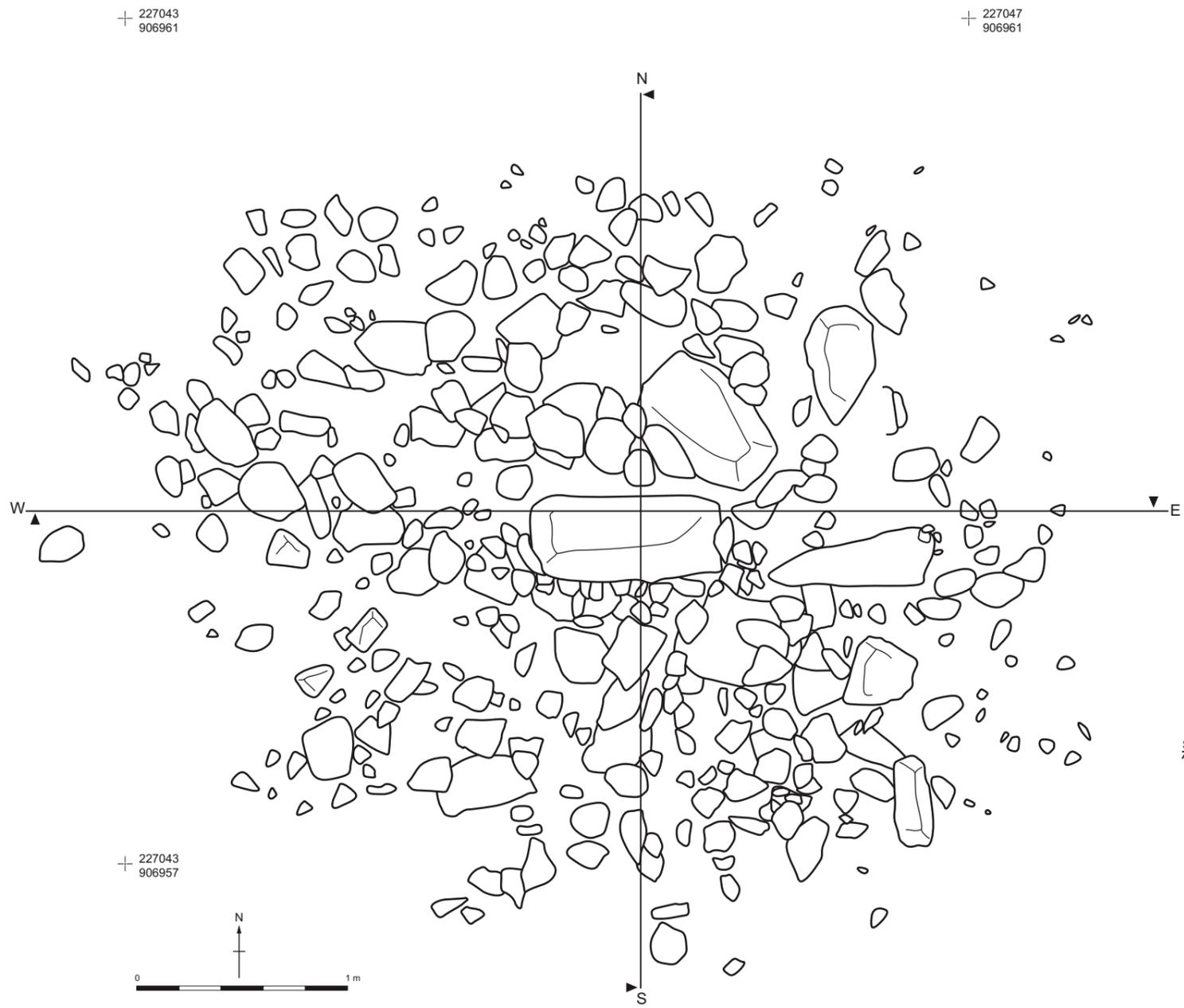


Figure 3 - SBW02: Clearance Cairn 02 - plans and sections

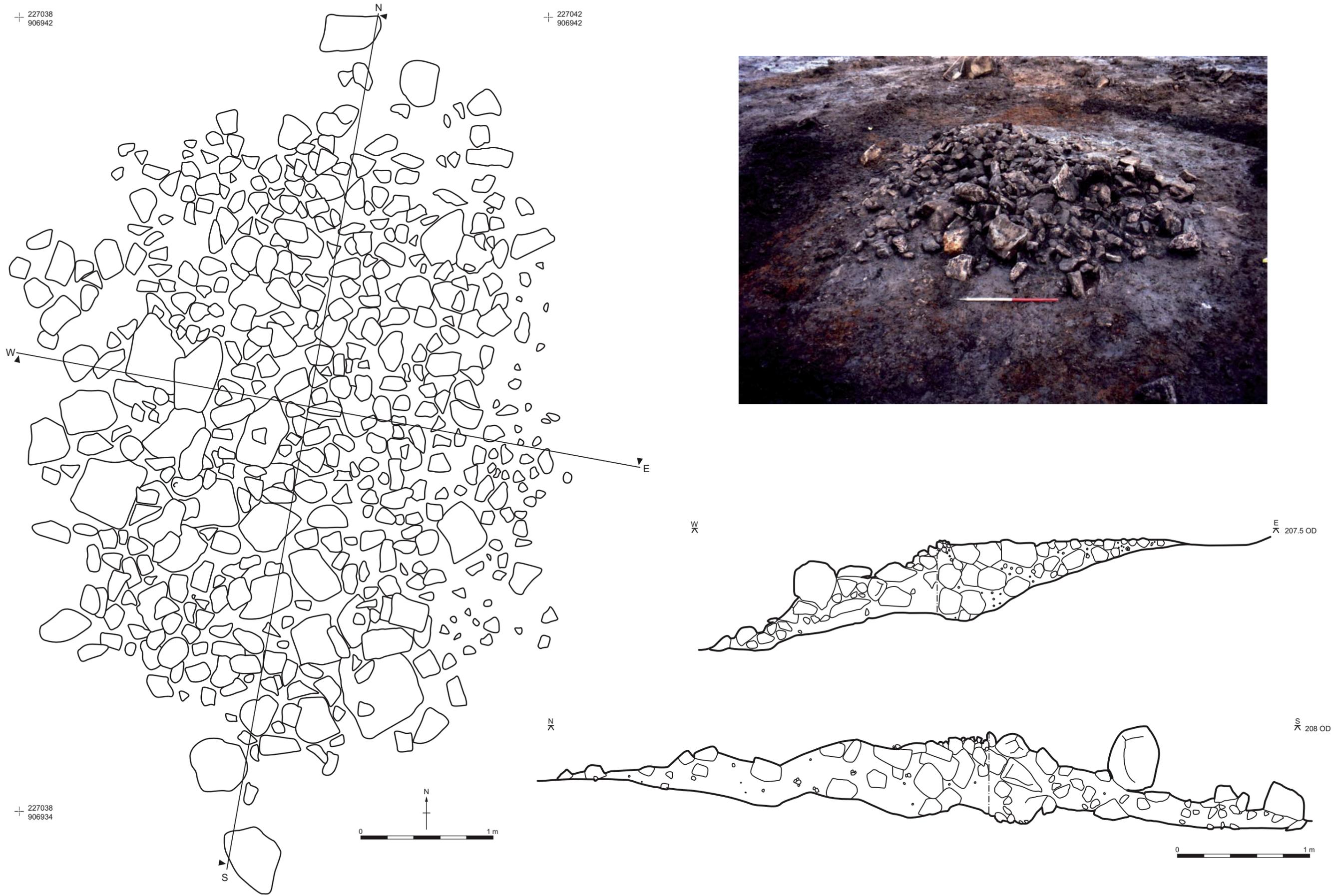


Figure 4 - SBW02: Clearance Cairn 03 - plans and sections



W  
X

E  
X 203.75 OD

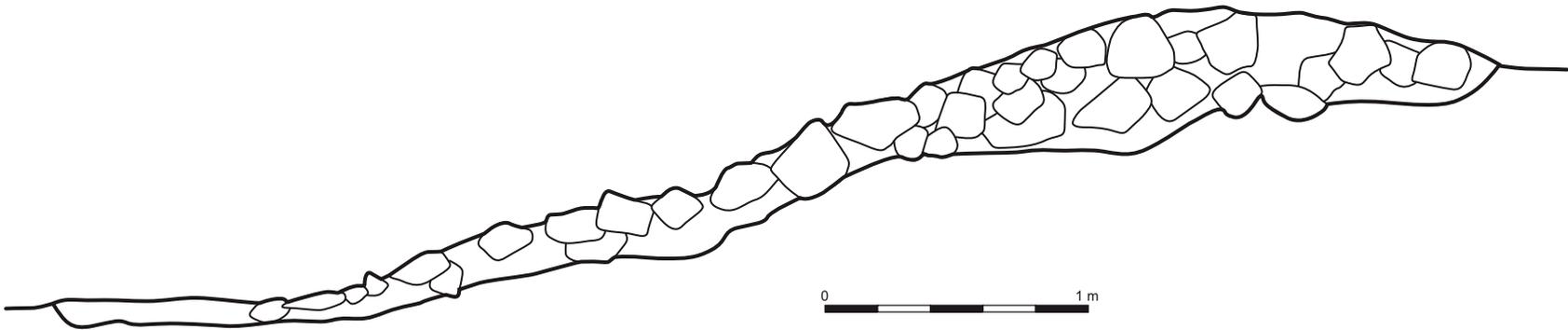


Figure 5 - SBW02: Section of curvilinear stone clearance heap