

**Report of Desktop and Walkover Survey
For a Proposed Wind Farm at
Upper Dounreay, Caithness
ND 008/660 (centred)**



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Non-Technical Summary

Stuart Farrell was commissioned by Dalgleish Associates Ltd in August 2003 to undertake an archaeological desktop and walkover survey at Upper Dounreay (ND 008/660 centred) as part of a proposed wind farm on behalf of 3W Ltd. Highland Council Archaeology Unit produced a specification for this work.

Work revealed a number of previously unrecorded buildings dating to WW2 and two modern clearance cairns. A number of previously recorded sites were also located.

Recommendations have been made that part of the site be excluded from any proposed development.

1. Introduction

This report is for an archaeological desktop and walkover survey for a proposed wind farm at Upper Dounreay conducted by the author for Dalgleish Associates Ltd on behalf of 3W Ltd for Upper Dounreay, Caithness. This report is to form part of an environmental impact assessment.

2. Acknowledgements

I would like to thank the following for their help during the work:

- Mrs. K Dalgleish, of Dalgleish Associates Ltd;
- Staff of the Royal Commission on the Ancient and Historic Monuments of Scotland;
- Staff of the National Library of Scotland Map Room, Edinburgh;
- Staff of the National Archives of Scotland, West Register House, Edinburgh;
- Staff of Highland Council Archives;
- Staff of Highland Council Archaeology Unit.

Cover: View of Standing Stone from site of Chambered Cairn facing NW.

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Figure 1 - Site Location 1: 50,000



Figure 2 – Site Area 1: 10,000

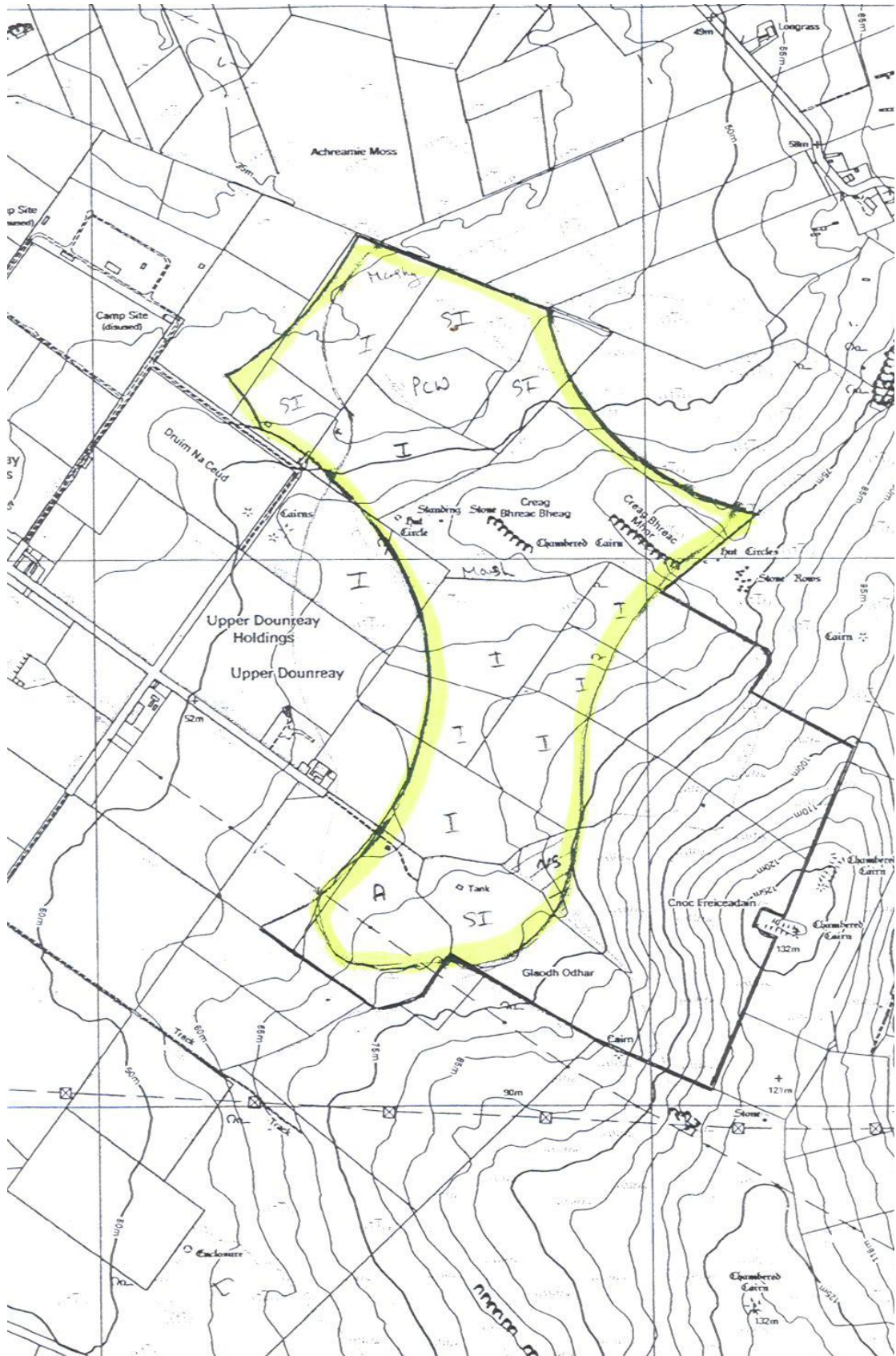


Figure 3 – 1st Edition Ordnance Survey of 1877 6 inches- Mile.

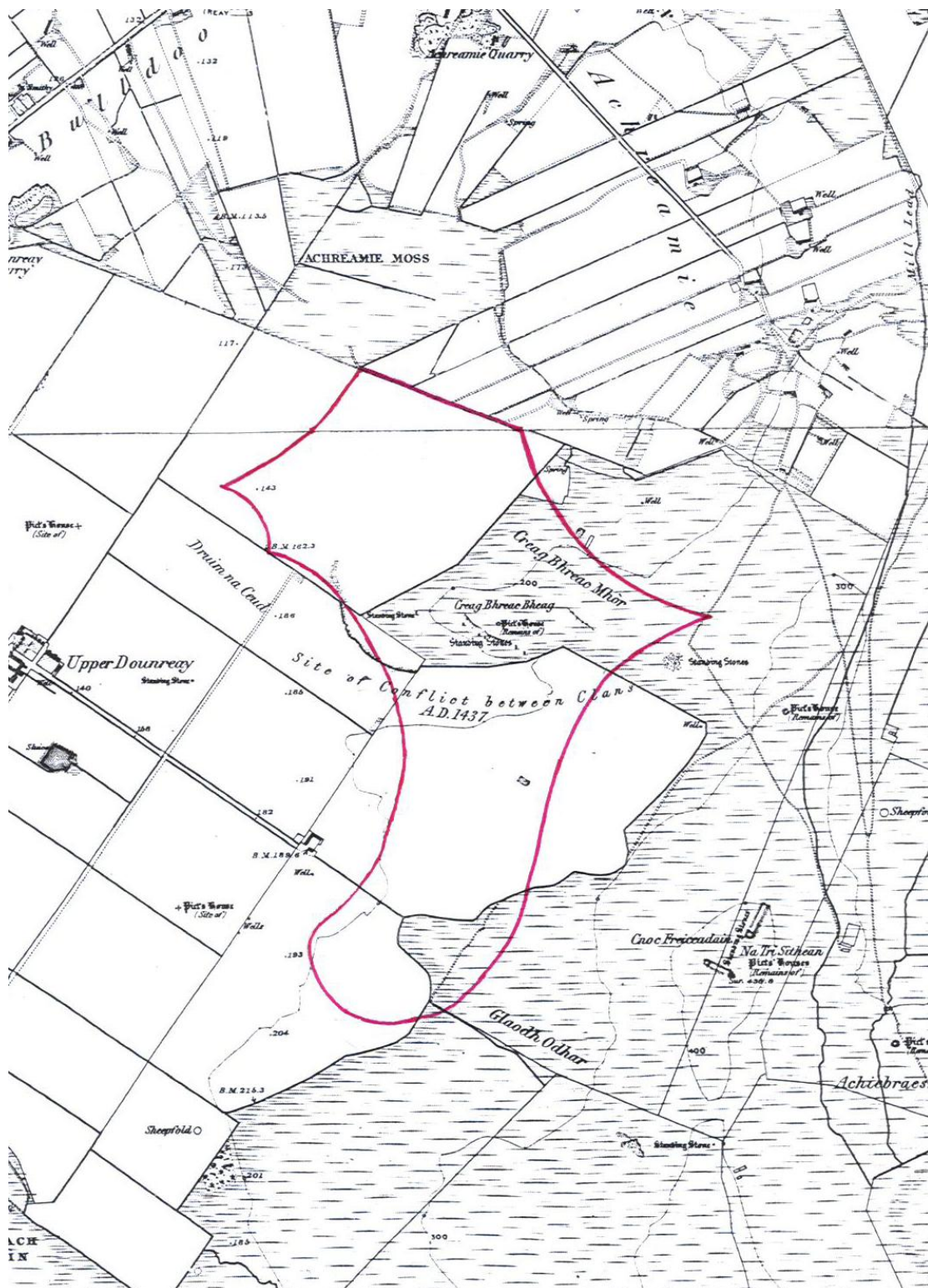


Figure 4 – 2nd Edition Ordnance Survey of 1907 6 inches- Mile.

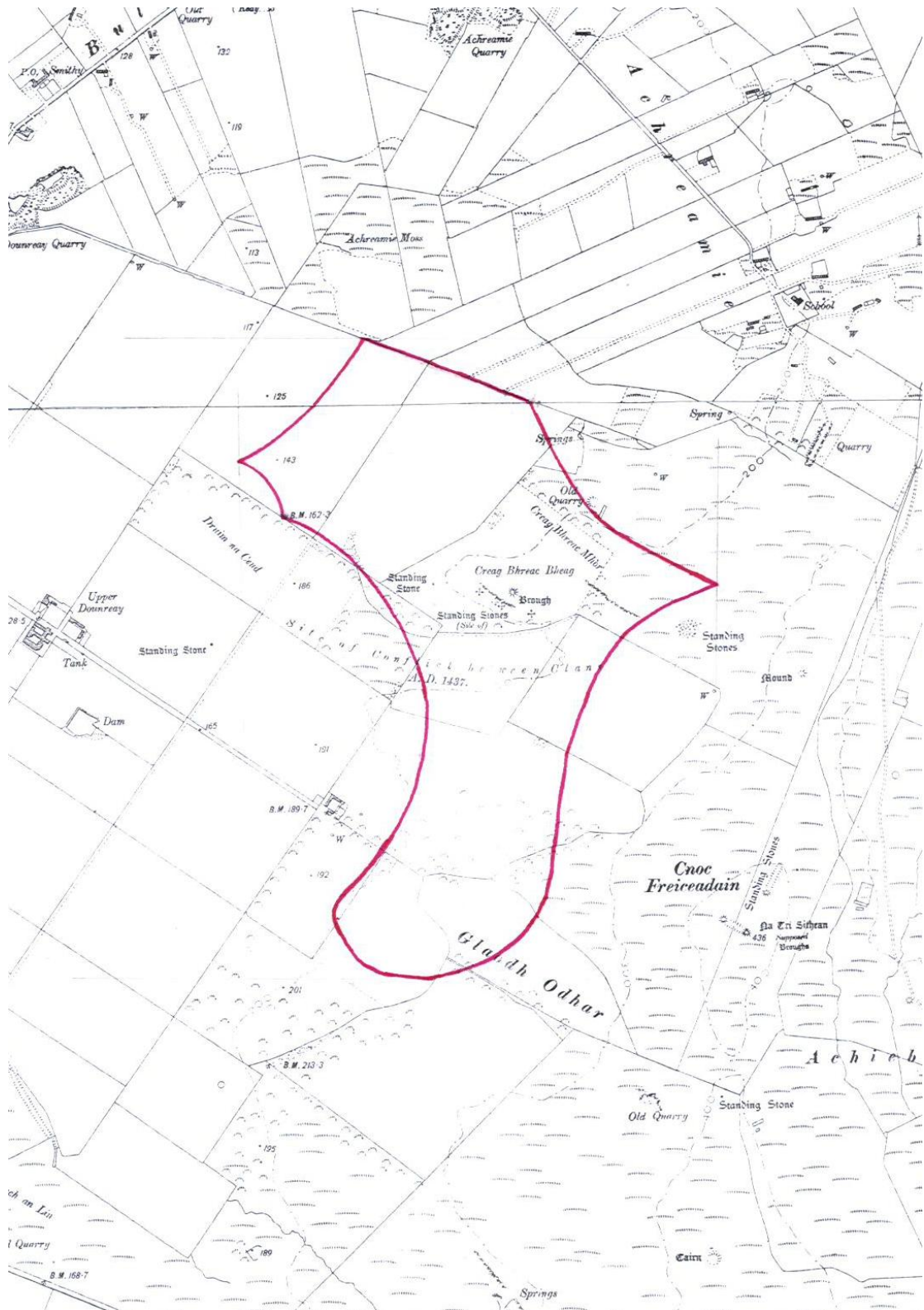
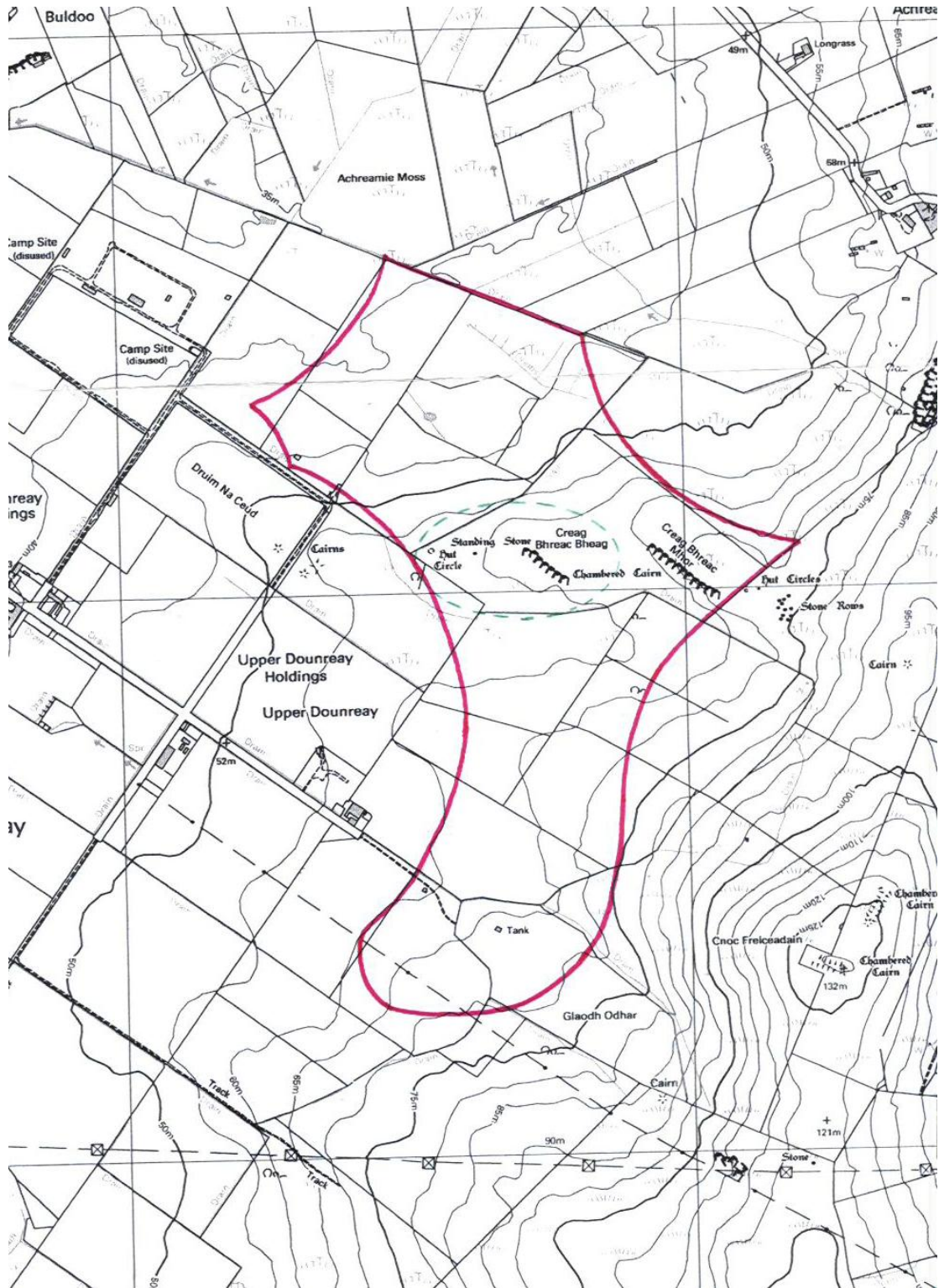


Figure 5 – Aerial Photograph of 1966 1:6000



Figure 6 – Recommended Area of Exclusion from Development 1: 10,000 Area marked in green.



3. Objectives

A desktop and walkover survey was conducted to identify those archaeological sites that lie in the area of the proposed wind farm. (See enclosed map – scale 1:2500) This followed on a desktop survey of records held in the Highland Council Sites and Monuments Record, the National Monuments Record of Scotland and Highland Council Archives and to follow the specification of the Highland Council Archaeology Unit (See enclosed).

4. Survey Results

Currently a number of archaeological sites are recorded in the Highland Sites and Monuments Record or the National Monuments Record of Scotland CANMORE database to the area of the proposed wind farm. Limited archaeological survey has been undertaken in the past to the area of proposed development. The area was partly surveyed by the Royal Commission on the Ancient and Historic Monuments in Scotland in 1910 (RCAHMS 1911) and part of the survey of Caithness by Edinburgh University in 1982- 1983 (Mercer, 1985).

A number of archaeological sites including 2 standing stones and a 'Picts House' are shown on the 1st edition Ordnance Survey map of 1880. By the 2nd edition Ordnance Survey map of 1907 one standing stone had been removed and the 'Picts House' renamed as a 'brough' (see figures 3 and 4).

Aerial photographic coverage of the development area was quite good, except the latest coverage was very limited due to scale and cloud.

Recommendations are given after each site.

Weather on the day of the walkover survey (September 12th 2003) was partly cloudy with sunny periods. A walkover was made of all areas of the proposed wind farm. (Grid references were obtained using a Garmin II Plus GPS) Results are as follows:

HSMR – Highland Sites and Monuments Record
NMRS – National Monuments Record of Scotland
N/a – not available

1 – Ruaig Haunsaid
HSMR – ND06NW 4
NMRS – ND06NW 4
Grid Ref: - ND 060/658
Type – Battle Site

Noted in HSMR and NMRS of 'In 1437 raiders from Strathnaver (A MacKay 1914), Sutherland, led by Robert Neil - Wasse - McKay, Earl of Sutherland, were intercepted at Dounreay (ND 006 658) by Caithness men. The latter were forced to withdraw eastward to the Water of Forss but, receiving reinforcements, drove the invaders west to Sandside (NC 950 642). Here the McKays turned and pursued the Caithness men back to Dounreay. This engagement is named the Chase of Sansett, or Ruoig Hansett, and the Sandside Chase or Ruiog Haunsaid. The Ordnance Survey Name Book (1873) (possibly following MacBain's Gaelic Dictionary) changed 'Ruiog' to 'Ruaig'. Standing stones (ND06NW 3) are said to mark graves of the slain. No further information when visited by Ordnance Survey September 1964.'

No evidence for battle site found during walkover survey. Area partly planted with trees.

Site possibly to be excluded from any proposals due to being site of local importance, though area currently partly planted with trees.

2 – Creag Bhreac Mhor
HSMR – ND06NW 14
NMRS – ND06NW 14
Grid Ref: - ND 0111/6599
Type – Cairn

Noted in the HSMR and NMRS of 'There are two small possible hut circles or mounds to the W of the stone rows described on ND06NW 8. (RCAHMS, 1911). At ND 0111 6599 and ND 0113 6599 there are two heather-covered circular constructions, 5.0 and 3.0m in diameter respectively, and 0.2m high, which have the appearance of hut circles. Visited by Ordnance Survey November 1964. Situated on a prominent ridge, immediately NW of the stone rows in a hollow (see ND06NW 8), are two denuded heather-covered cairns, not hut circles. They are circular, 8.0m in diameter and 0.2m high, each with a distinct central depression. The content is not exposed. Visited by Ordnance Survey November 1981.'

Site is recorded in HSMR as site of importance worthy of scheduled protection.

Visible on RAF aerial photograph of 1946 (3362) ibid for 1951 (4067) ibid on aerial photograph of 1964 (038 & 072) ibid on aerial photograph of 1966 (207) ibid on aerial photograph of 1988 (129).

Walkover reveals 2 cairns as described by the OS in 1981. 1st closest to the fence at ND 01106/65979 oval in shape c7m EW x 8m NS to height of 0.3m gorse to centre. 2nd at ND 01127/65979 c6.5m in diameter 1 small up right stone visible to centre.

No recommendations to be made as out-with proposed area.

Left: View of site 1 facing E – scales 1m.

Right: View of site 2 facing E – scales 1m.



3 – Upper Dounreay
HSMR – ND06NW 8
NMRS – ND06NW 8
Grid Ref: - ND 0117/6595
Type – Stone Rows

Status – Scheduled Ancient Monument (1964)

Noted in the HSMR and NMRS of 'The thirteen rows of stones in this monument appear to radiate generally to the ESE from a group of four stones. These are arranged in an irregular square 4ft wide, and are between 1ft and 1ft 2ins long and the same in height above ground. The rows are about 100ft long and occupy an area some 44ft wide at the inner end and 115ft wide at the outer. The thin flat slabs which form the rows and which remain in situ appear to number 115 and are set on edge across the rows; they protrude about 1ft 6ins from the ground; the stones at the outer ends of the rows are larger. Some two thirds of the distance towards its broader extremity, the monument has been cut through by a road, and possibly a similar cause has destroyed the rows between the small square setting and their present commencement. (RCAHMS 1911).

The stones are said to mark the graves of those killed in the 'Sandside Chase' (site 1 - 15th century clan battle). Ordnance Survey Name Book 1871. Only 56 stones, mostly set on edge, can be seen protruding through the heather to a maximum height of 0.6m. They are neither hewn nor marked and do not conform to any definite shape. Visited by Ordnance Survey November 1964. The stone rows, in a hollow on undulating moorland, have been considerably obscured by peat and heather growth since the visit of the RCAHMS, and only about six rows (less than half of the stones planned by the RCAHMS) can be traced. The southern rows have been almost entirely buried by the vegetation. The stones appear to radiate from the direction of two cairns which are situated on a ridge to the NW (see ND06NW 14). Visited by Ordnance Survey September 1969.'

Noted by Mercer (1985) that by the time of his survey in 1982 that there remained only 36 upright stones spread over an area of 45m x 45m compared to the 115 that were noted in 1910 (RCAHMS 1911) or the 56 noted by the Ordnance Survey in 1964. The reason for this loss in the number of stones was 'not clear'. (See plans over)

Not visible on RAF aerial photograph of 1946 (3362) or for photographs 1951 or 1964, partly visible on aerial photograph of 1966 (206).

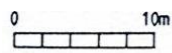
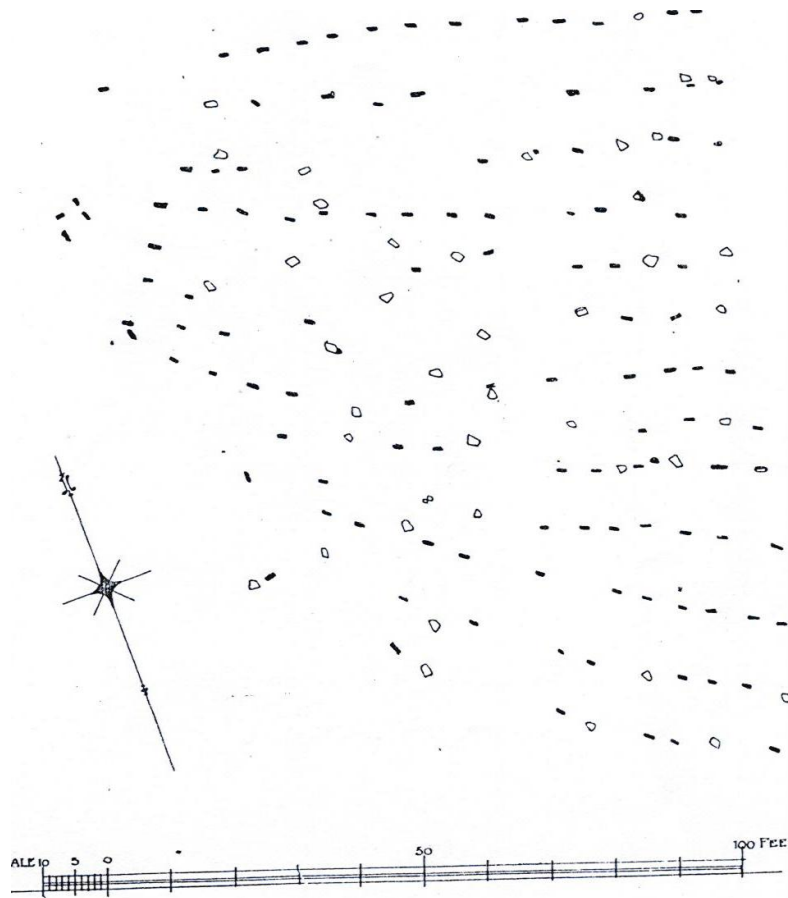
Walkover reveals site to be just outside development area, with only 11 stones being visible in the heather, with only 4 rows in a single row.

No recommendations to be made as out-with proposed area.

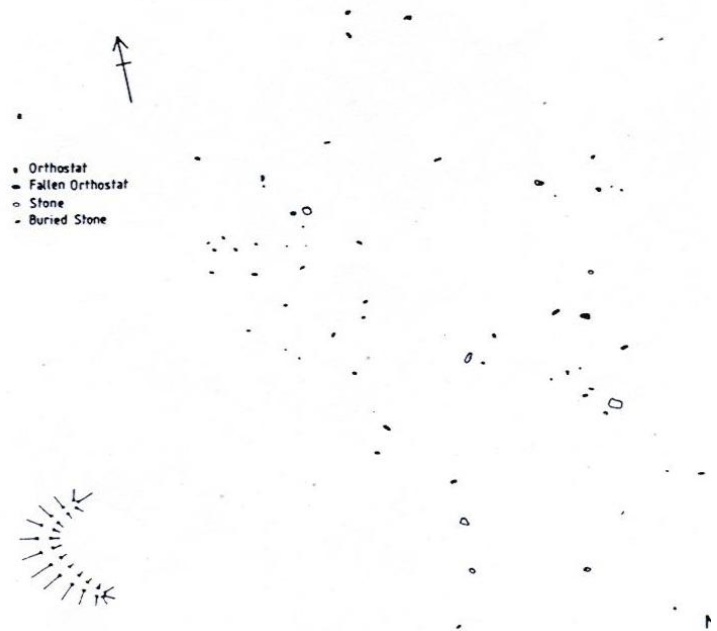
Below: View of site facing SW.



Top: Plan of stone rows (after RCAHMS 1911)
Bottom: Plan of Stone rows (after Mercer, 1985)



- Orthostat
- Fallen Orthostat
- Stone
- Buried Stone



4 – Upper Dounreay

HSMR – ND06NW 5

NMRS – ND06NW 5

Grid Ref: - ND 0079/6604

Type – Chambered Cairn; Cist

Noted in the HSMR and NMRS of 'The short, horned, chambered cairn of the Orkney-Cromarty group at Upper Dounreay measures about 55ft across and has horns projecting towards the cardinal points, giving a diameter from tip to tip across the cairn of about 90ft. The top of the cairn has been removed, leaving a present height of 4 to 5ft, and four stones of the chamber are visible. Two sides of a short cist can be seen on the S horn. (A Henshall 1963; RCAHMS 1911). This turf-covered chamber cairn, 1.5m maximum height, is generally as described above. The W horn although shapeless is larger than the others. Stone slabs set on edge, forming part of the burial chamber, are visible in the mutilated top of the cairn. In the S horn, one end and one side slab of a cist, 1.0m by 0.6m, can be seen protruding 0.1m through the surface of the cairn. Visited by Ordnance Survey November 1964. No change to the previous field report when visited by Ordnance Survey September 1981.'

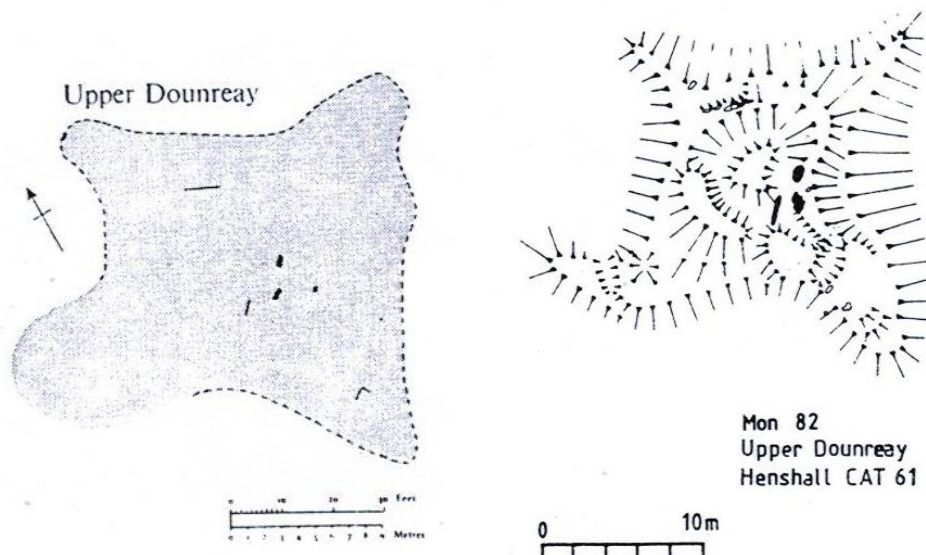
Noted by Mercer (1985) of 'There are four upright stones visible in the centre of the cairn'.

Site is recorded in HSMR as site of importance worthy of scheduled protection.

Visible on RAF aerial photograph of 1946 (3362) not clearly visible on aerial photograph of 1964 (072) visible on aerial photograph of 1966 (207) ibid on aerial photograph of 1988 (129).

Left: Plan of Chambered Cairn (after Henshall, 1963, 298)

Right: Plan of Chambered Cairn (after Mercer, 1985)



Walkover reveals cairn as described and planned by Henshall and Mercer. Two stones visible to centre of cairn aligned NE-SW. Cairn located at ND 00791/66035 at 246ft.

Site to be excluded from any proposals.

Below: View of stones in cist facing SW – scales 1m.



5 – Upper Dounreay
HSMR – ND06NW 48
NMRS – ND06NW 43
Grid Ref: - ND 00760/66024
Type – Quarry

No information available in the HSMR or the NMRS. Not visible on any aerial photograph's of the area from 1946 to 1988.

Walkover reveals quarry working along edge of ridge for c100m.

No recommendations to be made.

Below: View of quarry facing SE.



6 – Creag Bhreac Bheag

HSMR – ND06NW 3

NMRS – ND06NW 3

Grid Ref: - ND 007/660

Type – Stone Rows

Noted in the HSMR and NMRS of ‘Several stones set on edge, about 1.5ft high, are said to mark the graves of some of the combatants in 15th century clan battle noted on ND06NW 4. Ordnance Survey Name Book 1873. Some sixty stones, aligned N-S, are traditionally the site of a battle. No standing stones remain at points indicated on the Ordnance Survey map and there is no local knowledge of such features, other than standing stone ND06NW 2 when visited by Ordnance Survey November 1964. No change to the previous field report when visited by Ordnance Survey September 1981.’

Nothing visible on any aerial photographs for period 1946 to 1988.

Walkover reveals no trace of any stones, though there is a possible natural mound between site 7 and site 4 which may relate to this site. Possibly removed by quarrying operations.

Site to be excluded from any proposals.

7 – Creag Breac Bheag

HSMR – ND06NW 2

NMRS – ND06NW 2

Grid Ref: - ND 00627/66054

Type – Standing Stone

Noted in the HSMR and NMRS of ‘This upright slab of sandstone, facing ESE and WNW, slightly pointed at the upper end, is 6ft 6ins high above ground, 4ft 2ins broad and 1ft thick. RCAHMS 1911. No change when visited by Ordnance Survey November 1964. No change to the previous field report when visited by Ordnance Survey September 1981.’

Not visible on aerial photograph of 1964 (072) or on aerial photograph of 1966 (207) ibid on aerial photograph of 1988 (129).

Walkover reveals stone as described by OS 1.9m high and 1.25m wide and 0.4m thick. Collar of stones to base, heavy with lichen with evidence of stone starting to split into 2.

Site to be excluded from any proposals.

Left: View of stone facing S – scale 2m.

Right: View of stone facing N – scale 2m.



8 – Creag Bhreac Bheag
HSMR – ND06NW 32
NMRS – ND06NW 32
Grid Ref: - ND 0055/6607
Type – Hut Circle

Noted in the HSMR and NMRS of 'At ND 0055 6607, on flat ground at the edge of a pasture field, is a denuded, turf-covered hut circle, 8.0m in diameter within a wall spread to 2.0m and 0.2m high. A slight lowering in the wall in the S arc may be the entrance, but the hut is disfigured by a tractor track crossing it. There is no evidence of associated cultivation. Visited by Ordnance Survey November 1981.'
Site is recorded in HSMR as site of regional importance.

Possibly visible on RAF aerial photograph of 1946 (3362) as mound, not visible on aerial photograph of 1951 (4067) again not visible on aerial photograph of 1964 (072) ibid on aerial photograph of 1966 (207) ibid on aerial photograph of 1988 (129).

Walkover reveals nothing discernible as a hut circle to this location, though at time of visit in long grass except slight dip in the ground at ND 00552/66053.

Site to be excluded from any proposals.

Below: View of dip in ground facing E.



9 – Upper Dounreay
HSMR – ND06NW 30
NMRS – ND06NW 30
Grid Ref: - ND 003/660
Type – Cairn

Noted in the HSMR and NMRS of 'At ND 003 660, on a low ridge within modern fields, is a group of three turf-covered cairns (A - C), now severely reduced and disturbed. The farmer (G Begg, Upper Dounreay Farm) does not plough these cairns, but has attempted to do so in the past, when he has found high concentrations of stone but no cists. Cairn A, the best preserved, is 17.0m in diameter and 0.6m high; B survives as a low swelling, about 9.0m in diameter and 0.2m high, and C is 9.0m in diameter and 0.3m high. Visited by Ordnance Survey November 1981.'
Site is recorded in HSMR as site of regional importance.

Visible on RAF aerial photograph of 1946 (3362) as mound, not visible on aerial photograph of 1951 (4067) again not visible on aerial photograph of 1964 (072) ibid on aerial photograph of 1966 (207) doubtful on aerial photograph of 1988 (129) as field ploughed.

Walkover reveals no trace of any cairns only 2 patches of nettles with no sign of any stones within them. Possible that both cairns here have been ploughed out as lies in grass field. In opposite field (by edge of track also of grass) is a small clearance cairn of stone, with slight rise in field being possible site of cairn again having been ploughed out.

No recommendations to be made as out-with proposed area.

Top: View of nettles patches facing S.

Below: View of CC by edge of track facing N.



10 – Upper Dounreay

HSMR – N/A

NMRS – N/A

Grid Ref: - ND 00375/66257

Type – Building

Structure is not marked on the 1st edition Ordnance Survey Map of 1877 (sheet 10) or on the 2nd edition of 1907 (sheet 10).

Visible on RAF aerial photograph of 1946 (3362) as part of military camp with 27 other buildings, *ibid* for 1951 (4067) *ibid* on aerial photograph of 1964 (038) *ibid* on aerial photograph of 1966 (207) *ibid* on aerial photograph of 1988 (129).

Walkover reveals of toilet (urinals) and shower block 8m x 11m of concrete with generator room (remains of generator still in place) with metal windows. Building dates from WW2 period. No trace of other buildings, area around has been mounded revealing tarmac surface around and planted with trees.

No recommendations to be made.

Top: View of building facing SW.

Below: Detail of generator.



11 – Upper Dounreay

HSMR – N/A

NMRS – N/A

Grid Ref: - ND 00526/65474

Type – Building

Structure is not marked on the 1st edition Ordnance Survey Map of 1877 (sheet 10) or on the 2nd edition of 1907 (sheet 10).

Visible on RAF aerial photograph of 1946 (3362) *ibid* for 1951(4067) *ibid* on aerial photograph of 1964 (073) *ibid* on aerial photograph of 1966 (207) *ibid* on aerial photograph of 1988 (129).

Walkover reveals building of brick and concrete with a corrugated concrete-asbestos roof. L-shaped building with concrete floor and metal windows. Building is 6m x 7m with addition of 2.5m x 3m, with building aligned NE-SW. Building dates from WW2 period with function unknown.

No recommendations to be made.

Below: View of building facing N – scale 2m.



12 – Upper Dounreay

HSMR – N/A

NMRS – N/A

Grid Ref: - ND 00657/65401

Type – Tank

Structure is not marked on the 1st edition Ordnance Survey Map of 1877 (sheet 10) or on the 2nd edition of 1907 (sheet 10).

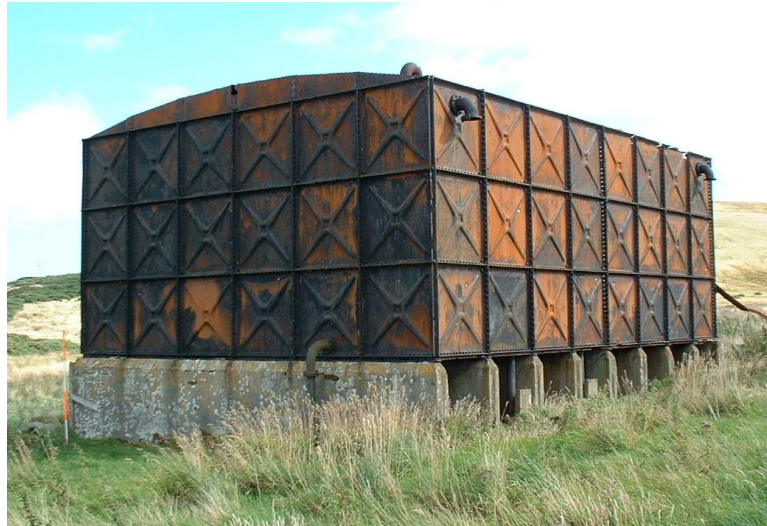
Visible on RAF aerial photograph of 1946 (3362) ibid for 1951 (4067) ibid on aerial photograph of 1964 (073) ibid on aerial photograph of 1966 (207) ibid on aerial photograph of 1988 (129).

Walkover reveals water tank of cast-iron with concrete supporting base 8m x 10.5m, collapsed inwards at S end. Structure dates from WW2 period.

No recommendations to be made. In dangerous condition, possibly will be demolished in the near future.

Top View of site facing SE – scale 2m.

Below: View of site facing NW.



13 – Creag Bhreac Mhor
HSMR – ND06NW 87
NMRS – ND06NW 124
Grid Ref: ND 0099/6621
Type - Building

Noted in the HSMR and NMRS of 'What may be an unroofed long building is depicted on the 1st edition of the Ordnance Survey 6-inch map (Caithness 1876, sheet x), and it is shown on the current edition of the Ordnance Survey 1:10,560 map (1969).'
Site is marked as old quarry on the 2nd edition Ordnance Survey map of 1907.

Visible on RAF aerial photograph of 1946 (3362) as possible rectangular structure, partly visible on aerial photograph of 1951 (4067) *ibid* on aerial photograph of 1964 (039) *ibid* on aerial photograph of 1966 (207).

Walkover reveals no trace of any building here or in the vicinity, in area of rough grass though part of area heavy with gorse. Quarry scoop at ND 00970/66219 irregular shaped. Possible that building has been removed due to quarrying or agricultural work.

No recommendations currently to be made.

Below: View of quarry scoop facing SE.



14 – Upper Dounreay
HSMR – N/A
NMRS – N/A
Grid Ref: - ND 0079/6594
Type – Building

Possible structure of 2 compartments visible on RAF aerial photograph of 1946 (3362) *ibid* for 1951 (4067) not visible on aerial photograph of 1964 (072) *ibid* on aerial photograph of 1966 (206) *ibid* on aerial photograph of 1988 (129).

Walkover reveals site to lie in area of wet ground and heavy gorse, site not located.

No recommendations currently to be made.

15 – Creag Bhreac Mhor

HSMR – N/A

NMRS – N/A

Grid Ref: - ND 0104/6619

Type – Building

Visible on aerial photograph of 1946 (3362) of long building of 3 compartments, not visible on aerial photograph of 1951 (4067) visible on aerial photograph of 1964 (039) ibid on aerial photograph of 1966 (207)

Walkover reveals no trace of building. Possible natural depression aligned E-W at ND 01012/66190. Possible that building has been removed due to agricultural work.

No recommendations currently to be made.

16 – Upper Dounreay

HSMR – N/A

NMRS – N/A

Grid Ref: - ND 00847/65709 (centred)

Type – Clearance Cairn

Walkover reveals dump of large stones and occasional pieces of concrete to edge of field on possible natural ridge. All looks modern.

No recommendations currently to be made.

Below: View of stones facing SE – scale 2m.



17 – Upper Dounreay
HSMR – N/A
NMRS – N/A
Grid Ref: - ND 00536/66047
Type – Clearance Cairn

Walkover reveals dump of large stones to edge of field in long grass 4m in diameter and 1m high. All looks modern.

No recommendations currently to be made.

Below: View of stones facing N – scale 2m.



5. Conclusions

The archaeological sites revealed by this survey are a mixture both modern and prehistoric and have seen changes both by time and continued use of the land both by agricultural practices and recent afforestation (see areas marked on enclosed map for recent planting). Recent agricultural work, including quarrying operations has seen the possible removal of a number of sites and the creation of new ones in the form of modern clearance cairns.

6. Recommendations

The main area of archaeological interest must be the area around the chambered cairn (site 4) and standing stone (site 7) though there has been recorded other standing stones and a hut circle to this area, and it is recommended that this area be excluded from any proposals for development (see figure 6). Any work here would necessitate extensive and costly archaeological work.

Apart from the other sites located it is also recommended that an archaeological watching brief be conducted on any excavation work for any access road and associated work for any turbine bases for the wind farm when they are under construction due to the number of archaeological sites within and to the edge of the proposed development area.

7. Archive

The following is to be deposited in the National Monuments Record in Edinburgh:

- Notebook of results
- Copy of this report

Digital images used in this report have been deposited with HSMR on disc as well as a copy of this report as a PDF film as requested in the Highland Council Archaeology Unit Specification.

8. Discovery & Excavation in Scotland

A short summary of the results of this project will be submitted to the Council for Scottish Archaeology's publication *Discovery & Excavation in Scotland*.

9. References

Davidson, J L & Henshall, A S (1991) *The Chambered Cairns of Caithness: An Inventory of the Structures and their contents*. Edinburgh University Press. Edinburgh.

Henshall, A S (1963) *The Chambered Tombs of Scotland. Volume 1*. Edinburgh University Press. Edinburgh.

Highland Council Sites and Monuments Record entries for ND06NW.

Mercer, R (1985) *Archaeological Field Survey in Northern Scotland Volume III 1982-1983*. University of Edinburgh Occasional Paper no.11. Edinburgh.

National Monuments Record of Scotland CANMORE database entries for ND06NW.

RCAHMS (1911) *Third Report and Inventory of Monuments and Constructions in the county of Caithness*. HMSO. Edinburgh.

Aerial Photographs Consulted

| | | | |
|---------------------|-----------------|-----------|----------|
| RAF 106G/Scot/UK 75 | 3361-3364 | 9-5-1946 | 1:10,000 |
| RAF 540/RAF/506 | 4066-4069 | 19-5-1951 | 1:10,000 |
| OS OS/64/201 | 38-40, 71-73 | 25-9-1964 | 1:7,500 |
| Meridian 25/66 | 128-131,205-208 | 21-5-1966 | 1:6,000 |
| OS 60888 | 227-229 | 6-5-1988 | 1:24,000 |

Maps Consulted

Ordnance Survey 1st edition 6inches-mile sheet 4 Caithness of 1876 surveyed 1871-2.

Ordnance Survey 1st edition 6inches-mile sheet 10 Caithness of 1877 surveyed 1871-2.

Ordnance Survey 2nd edition 6inches-mile sheet 4 Caithness of 1907 revised 1905.

Ordnance Survey 2nd edition 6inches-mile sheet 10 Caithness of 1907 revised 1905.

Ordnance Survey 1:10,000 ND06NW of 1969.

Appendix 1 – Photographic Register

- 1 – View of building at site 11 facing NE – scale 2m.
- 2 – View of tank site 12 facing SE – scale 2m.
- 3 – View of tank site 12 facing NW.
- 4 – View of clearance cairns site 16 facing SE – scale 2m.
- 5 – View of standing stone site 7 facing S – scale 2m.
- 6 – View of standing stone site 7 facing N – scale 2m.
- 7 – View of quarry - site 5 facing SE.
- 8 – General view of site from site 4 facing NW.
- 9 – Detail of stones in cist facing SW – scales 1m.
- 10 – View of cairn 1 site 2 facing E – scales 1m.
- 11 – View of cairn 2 site 2 facing E – scales 1m.
- 12 – View of stone rows site 3 facing SW.
- 13 – View of quarry - site 13 facing E.
- 14 – View of building site 10 facing SW.
- 15 – Detail of generator site 10.
- 16 – View of site 8 facing E.
- 17 – View of clearance cairn site 17 facing N – scale 2m.
- 18 – View of site of cairns site 9 facing SE.
- 19 – View of site of cairn site 9 facing N.