

Archaeological Watching Brief on the laying of a Water Pipeline at Loch Caladail, Durness, Sutherland.



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Introduction

In 1995 an archaeological survey was undertaken by the Centre for Field Archaeology (CFA) This identified 24 archaeological sites in the vicinity of the proposed pipeline route. These included three sites of National Importance (two ring cairns and a chambered cairn, of which two are scheduled ancient monuments and the third is of schedulable quality), nine hut circles of local importance, ten features also considered to be of local importance which represent the remains of an extensive pre-Clearance landscape, and one feature of uncertain importance. The CFA report made several recommendations to mitigate the effect of the pipeline project on the archaeological record. These recommendations included a watching brief over the entire length of the pipeline East of the road. The author was commissioned by NoSWA in May 2000 to carry out a watching brief on the section of pipeline from the road to the SE corner of Loch Caladail. This was carried out on May 31st, June 1st, 2nd and 5th 2000 in generally good weather conditions.

Aims of the Watching Brief

1. **Protection of known Archaeological Features from Damage:** As all the features recorded in the CFA report, bar 6, were outwith the wayleave, the remit here would be to ensure that plant did not leave the wayleave except where absolutely necessary, and where this occurred, to ensure that they avoided all known archaeological sites.
2. **Identification of unrecorded archaeological features:** Any archaeological features not recorded in the original CFA report would be identified by careful ground survey prior to work commencing, and protection or recording of these features would be included in the brief.
3. **Monitoring of Excavation Work:** The author proposed to be on site to monitor all topsoiling operations, subsequent to which a decision would be made as to whether to monitor the excavation into the subsoil of the pipeline trench itself. A careful watch would be kept for any archaeological features or objects revealed, these would be recorded or investigated further as appropriate. Particular attention would be paid to the points of damage to those archaeological features which lie across the route of the pipeline: 4 field banks (sites 2, 3, 16, 23 in the CFA report) one patch of rig and furrow cultivation (site 1) and a sunken trackway (site 18) Exposed sections of these features would be measured and recorded, and care would be taken to avoid the dumping of excavated material on these features, which might then be damaged further by backfilling operations.
4. **Investigation of buried soil horizons:** It was noted in the CFA report that buried soil horizons might be preserved under the field banks, and the opportunity should be taken to examine these in the sections revealed by trenching.

Method

1. Prior to the commencement of work, the area was visited by the author accompanied by Gary Geddes, Project Technician for NoSWA and a representative of the contractors, MacLeans of Ardgay. Certain archaeological features close to the wayleave were pegged to prevent accidental damage, and the wayleave was altered fractionally to ensure the maximum possible distance of the pipeline from archaeological features. As this area is an SSSI, it had already been agreed with SNH that the width of the trench should be kept to a minimum, if ground conditions allowed, over the high ground to the West of Loch Caladail. As this was the area where most of the archaeological features occur, it was felt that no further measures need be taken by the contractors except to ensure that no excavation take place without the archaeologist present on site.
2. Although the area designated for archaeological monitoring extended only to the SE corner of Loch Caladail, the CFA report suggested that further archaeological remains might lie undetected to the East of this area. On the occasion of the first site visit by the author, pipeline laying operations were well underway in this area, and the entire stretch from the reservoir site above Sango Mor to the drystone dyke marking the Eastern boundary of the area of archaeological monitoring had been topsoil stripped. The author walked along this trench and was satisfied that no unrecorded archaeological features had been revealed.
3. Similar sites in the Durness area were visited, to gain information on what features associated with hut circles might be revealed during excavation work. Particularly useful were the prehistoric landscape West of Loch Borralie and the hut circle at NC 3773 6673 which had been completely exposed by the erosion of the sand dunes. The associated features here consisted of a broad rubble bank extending away from the hut circle for 5-6m., more a consumption dyke than a field boundary, and one roughly circular rubble pile at approximately 20m. distance. It was noted that this entire area was rich in pre-Clearance features, and the majority of field clearance cairns probably related to these rather than an earlier phase of settlement. The souterrain at Port nan Con was also visited to assess the likelihood of such a feature being associated with any of the Loch Caladail hut circles, but as none of these display the characteristic thickened walls, this was considered to be highly unlikely.
4. Background information was gained from Reid, David and Aitken: 'Prehistoric Settlement in Durness' PSAS XCII 1966-67 and Fairhurst and Taylor: 'A Hut Circle Settlement at Kilphedir, Sutherland' PSAS CIII 1970-71. This excavation in the Strath of Kildonan, E. Sutherland, revealed certain features such as cobbled platforms extending up to 2m. beyond the entrance of the hut circles. This emphasised the importance of leaving as wide a gap as possible between the visible features and the excavated trench.

Pre-Excavation Survey: the following features were noted by survey prior to the commencement of pipeline laying:

1. **Small circular structure.** This grass-covered feature measures only 3-4m. in diameter, too small for a hut circle but may have a similar function to the small penannular feature to its SE (Site 4 in the CFA report). It was noted as it is adjacent to the access route taken by heavy plant to avoid the soft boggy ground on the top of the ridge. This is located at NC 3889 6608
2. **Turf Dyke.** Sections of a turf dyke running approximately NNW-SSE and standing up to 0.3m. high. It appears to pass within 1m. of the western edge of the hut circle, site no. 8 in the CFA report, but cannot be traced south of this. This feature was also on the route of heavy plant access to the East side of the ridge. This feature is located at NC 3904 6613.
3. **Probable Clearance cairn:** An oval pile of turf and heather covered rubble, standing 0.5m. high, aligned NE-SW and measuring 2-3m. in length. This is located SSW of the hut circle, Site no. 11 in the CFA report, and only 2m. north of the topsoiled area of the wayleave. This feature was unaffected by the present work.
4. **Probable Clearance cairn:** A low turf-covered circular pile of rubble, approximately 1m. in diameter and 0.3m. in height. This is located ENE of the hut circle, site no. 12 in the CFA report, and roughly 5m. south of the topsoiled area of the wayleave. This feature was unaffected by the present work.
5. **Possible row of clearance cairns, or consumption dyke or bank.** A group of three low turf-covered mounds forming an apparent line north of the NW point of the hut circle, site no. 12 in the CFA report. Topsoiling operations revealed a further pile of stones within the upper layers which had not been visible on the surface (see below)

Report on the Monitoring of Excavation Work

The author was present at all times during topsoiling operations and was satisfied that, apart from those listed below, no archaeological features were damaged or revealed. Excavation of the pipeline trench was allowed to continue without close monitoring, although this trench was quickly checked before backfilling. Care was taken to avoid the dumping of excavated material on archaeological features, particularly those turf boundary dykes which were being broken through, to minimise the area of damage to these features. The following notes were made during the removal of topsoil through the six previously recorded features where damage was inevitable. The site numbers are those in the CFA report.

1. **Area of rig and furrow:** the soil here was brown sandy earth on orange sandy subsoil. The furrows did not cut into the subsoil. The depth of earth ranged from 15cm. at the bottom of the furrow to 50cm at the crest of

the rig. There was a general impression that the rigs were stone free, and the furrows contained an accumulation of small boulders and rubble, although this had not been visible on the surface.

2. **Turf Bank.** At this point the bank stands at a height of 30cm. above present ground level. It appears to be constructed of the same brown sandy soil as the 20cm. topsoil layer. Between the topsoil and the orange/red sandy subsoil is a broken layer of black peaty material, no more than 5cm. thick. This layer is only preserved immediately below the dyke, and presumably represents a layer destroyed by subsequent cultivation.
3. **Turf Bank.** The material forming this bank is indistinguishable from the top 20cm. layer of brown sandy soil lying above the orange sandy subsoil. Between these two layers is a thin broken layer of iron pan about 1.5cm. thick. This continues under the dyke.
23. **Turf and Stone Dyke.** Although a lot of stone is present in other sections of this dyke, the point at which it was broken through is eroded and generally free of stones. It is possible that these stones were removed during the erection of the modern fence which crosses the dyke. The section of the dyke revealed by excavation stands 30cm. above present ground level, its material is undifferentiated from the topsoil layer. There are traces of iron pan between the topsoil and the orange sandy subsoil.
16. **Turf Dyke.** This feature was not located. Along this section the soil profile consisted of peat, 20-40cm. deep, on occasional patches of grey sandy soil above a general subsoil of orange stony sand. There is an incomplete layer of iron pan between the grey and the orange subsoils. Large boulders are common, these appear to be embedded into the orange subsoil layer.
18. **Trackway.** Although the trackway is sunken to a depth of 0.7m. at this point, it appears to have had no impact on the soil profiles.

The following feature was revealed during excavation work: One possible rubble pile, possibly a clearance cairn, to the north of a short row of possible clearance cairns or a spread consumption dyke. This pile of medium-sized stones seemed to lie just below the peat layer but not bedded into the subsoil.

Small Objects: One sheep bone was recovered from the peat close to the location on the wayleave of site no. 16. This was peat-stained and presumed to be of modern origin.

Soil Samples: One soil sample was collected from a point in the topsoiled strip due north of the west point of the sheep pen, site no. 20. In the vicinity of a number of large boulders which had just been removed, this material appeared to be overlying the grey soil which lies between the peat and the iron pan. This stood out as a dark solid lump of foreign material, covering an area no more than 20cm. in diameter and forming a layer 10cm. deep. The sample appears to consist of a mixture of black crystalline chips and minute fragments of mica, combined with brown peaty material, compressed into a solid mass which crumbles easily.

Conclusion

The watching brief was carried out with the full co-operation of NoSWA and MacLeans of Ardgay. No sites of National or Local Importance were damaged. Where sections of sites were to be inevitably damaged, this was done under supervision, and the opportunity was taken to examine the construction of these sites and look for buried soil profiles. No additional archaeological features were revealed during excavation work, with the exception of one possible clearance cairn. This, together with the other archaeological features identified during the watching brief, have added to our knowledge of the archaeological landscape while preserving it for future research.

Catherine Dagg 22.6.00



