INTRODUCTION

This document describes the results of a walk-over survey and subsequent series of watching briefs undertaken in Glen Ogle, Stirling District. The initial survey was intended to define a route for a new underground cable to replace a stretch of an existing 11kv overhead power line. It was undertaken on 8th May 2008 by John Lewis of Scotia Archaeology, accompanied by Allan Coburn and other personnel from Scottish & Southern Energy (SSE) who commissioned the work.

Lorna Main, Stirling County's Archaeological Officer, had supplied SSE with a list of archaeological sites and monuments known to exist in Glen Ogle so that the new route could avoid as many of them as possible. The most significant monument within Glen Ogle is the military road built under the direction of Major William Caulfeild in 1750-2. It is still visible along most of the length of the glen although uncertainty surrounds its precise route in places.

Other factors also influenced the course of the new cable route and the timing of its emplacement. These included ecological issues and the nature of the ground through which the cable trench would be excavated. Once the route and timing had been established, work commenced on the installation of the cable, working southwards from Pole 50 at NN 5585 2860 to Pole 99 at NN 5840 2514 on the existing line.

Archaeological watching briefs were maintained where ground-breaking activities might have impinged on known or suspected archaeological sites, particularly the military road. The watching briefs were undertaken by John Lewis on 24th March, 1st April and 8th April 2009.

THE MILITARY ROADS

Following the failure of the 1715 Jacobite uprising, the Government established a system of military forts and connecting roads throughout the Scottish Highlands in an attempt to placate what was essentially a hostile local population. As well as upgrading some existing fortifications, four new forts and military barracks were built: Inversnaid, near the east bank of Loch Lomond; Ruthven, near Kingussie; Kiliwhimen (or Kilcumein), at what is now Fort Augustus; and Bernera, near Glenelg, facing the east coast of Skye.

The construction of these barracks began shortly after their locations were established in 1717. However, it was not until 1724 that work on a system of roads linking them was implemented, following the appointment of General George Wade as chief engineer for the project. In 1740 he was succeeded by Major William Caulfeild who continued this programme until 1767. Although the road network is usually associated with Wade, Caulfeild was responsible for the majority of it, including the route through Glen Ogle.

This early system formed the basis of today's network of highways that criss-crosses the Highlands. Some of the roads have been upgraded to take modern traffic while the routes of others have been altered slightly leaving stretches of the original roads abandoned. Some have fallen into complete disuse while others have been utilised as tracks for farm and forestry vehicles.

Wade had intended the roads to be a standard 16ft (5m) wide although he saw the need to reduce their width to 10ft (3m) over difficult terrain (Tabraham & Grove 1995, 74). They

were meant to consist of a base of large boulders over which were lain smaller stones topped with a surface of gravel.

GLEN OGLE

Caulfeild's military road is one of several lines of communication running through Glen Ogle. They include the A85 trunk road which hugs the east side of the valley and the former Callander to Oban railway line which skirts its west side and part of which is now used as a cycle path. In addition, traces of what was perhaps a pack road, predating the military road, are also visible in places. Large stretches of this early route appear to have been upgraded to form the military road although new sections were added in places, particularly where the gradient proved too steep.

Glen Ogle, which is located within the Loch Lomond and The Trossachs National Park, runs from near Lochan Lairig Cheile southwards to the village of Lochearnhead at the west end of Loch Earn, a distance of some 5km. It cuts through Dalradian mica-schists of which many boulders litter the valley as the result of glacial activity. Land slips are common in Glen Ogle, one such event resulting in the permanent closure of the railway in the 1960s and another causing the A85 to be blocked for some time in August 2004. The results of these and other slides are clearly visible and numerous large boulders litter the valley, many of them perched precariously on its upper slopes.

The Ogle Burn meanders along the base of the glen, collecting water from numerous streams that discharge into it from both sides of the valley. Towards its north end it displays properties typical of young rivers before becoming more placid where the valley widens out further south in more developed, but still pastoral, farmland.

With the exception of a few cottages near Lochan Lairig Cheile and a few farms and houses at its south end, the glen is uninhabited and there is little evidence that much of it was ever occupied. Over most of its length it supports vegetation fit only as rough grazing on soil that tends to be quite peaty and frequently waterlogged even during sustained dry weather.

The southern section of the military road is now used as a farm track whereas further north its course is often difficult to discern. In places it has almost disappeared from view beneath vegetation which includes small trees and boggy ground which tends to be waterlogged because of the road's impermeable surface. There would have been drainage channels alongside the road to divert water running off the slope although these drains are now visible in only a few places. In addition, where the road runs hard against the slope on the east side of the glen, a retaining wall provides protection against hillwash.

THE WALK-OVER SURVEY

The walk-over survey was carried out from north to south, beginning at NN 5585 2860 at Pole 50 on the existing overhead line and terminating at Pole 99 at NN 5840 2514, some 400m north of Glenogle Farm.

The Royal Commission on the Ancient and Historical Monuments of Scotland (RCAHMS) points out discrepancies concerning the course of the military road (NN52NE 11.00) between the observations of some field investigators and the route shown on Ordnance Survey maps. There are clearly early roads running between approximately NN 563 275 and NN 572 267,

one along the bottom of the valley and the other higher up on its east side, close to the A85 trunk road. This may represent the rerouting of the military road in the late 18th century although some authorities suggest that at least part of the lower track may be Roman in date (NN52NE 3) while others see it as a toll road (DES 1973, 39) whereas it may simply be an early pack road. Clearly, the situation needs resolution but that lies beyond the remit of this project.

Most of the sites and monuments noted during the survey were essentially elements of the military road or the other, disputed track(s) and are not described here. Observations of other possible sites and monuments are listed below.

Possible enclosure

At NN 56773 26940 was what appeared to be a sub-rectangular enclosure, measuring 13m east/west by 3-5m wide and enclosed by banks 1-1.5m high. It is tentatively interpreted as an animal shelter. Alternatively, it could simply be a borrow pit resulting from the excavation of materials for the military road, the 'banks' perhaps being spoil.

Quarries

Numerous small quarries, or borrow pits, are evident throughout the glen. Most probably result from the construction of the 18th-century military road although some may be associated with the earlier road or roads.

Building and enclosure

At NN 5839 2515, just north-west of Pole 99, were the remains of a rectangular structure measuring approximately 6m east/west by 3m wide with barely discernible turf-covered walls. Some 15m to its east, on a level platform, was a roughly square enclosure measuring approximately 12-15m across.

METHODOLOGY

Along most of the route the cable was inserted using a cable plough which cuts a narrow furrow through the ground, inserts the cable and replaces the disturbed ground thereafter. This process is far quicker than any other method for laying cable. However, where the cable route crossed the military road or the other old road the preferred option was open trenching which would allow the remains of the road and any surviving ancillary features to be examined in detail. There were to be six such crossings but this number was reduced considerably by modifying the cable route to reduce disturbance.

Ideally, the trenches would have been aligned at right angles to the road. However, although the cable has some flexibility, it is very limited and it proved impossible to achieve the desired objective.

In addition to road crossings, all trenching within 5m of archaeological features was to be carried out under archaeological supervision. This proved necessary at only one location, where the ground to the east of the military road had to be levelled to allow the cable plough to sit securely.

THE RESULTS OF THE WATCHING BRIEF

There were only three locations where watching briefs proved necessary:

midway along the cable route where the ground had to be levelled by a mechanical excavator (Trench 1);

at a point where the ground was too waterlogged to allow open trenching, the cable plough being used to cross the military road (Trench 2); and

towards the south end of the cable route where an open trench (Trench 3) was cut across the military road.

Trench 1

Trench 1 was simply a narrow strip of ground that was levelled to allow the cable plough to operate safely and effectively. It was cut into the slope some 5-8m to the east of the military road, in an arc from NN 5716 2669 to NN 5724 2663, and measured approximately 100m long and 3m wide. The trench, which was dug by machine, cut through vegetation, a thin layer of peaty topsoil and underlying glacial till of orange sand, gravel, pebbles and boulders to a total depth of approximately 1m.

At this point the military road is bounded on its east (upslope) side by a narrow gulley and, beyond it, a drystone retaining wall. The gulley crosses below the road at NN 5719 2666, discharging southwards towards the Ogle Burn. With the exception of these features, which were evident prior to excavation, nothing of archaeological significance was found in this trench.

Trench 2

Trench 2 was located at NN 5756 2637, roughly midway along the glen where the military road was defined by a thicket of saplings whose roots had penetrated into the road's fabric. The ground was completely waterlogged in this area and was unsuitable for open trenching: the trench would fill with water and its sides would be too unstable. As a consequence, it was decided to cross the military road at this point by cable plough. Unfortunately, there was no opportunity to examine the structure of the military road or any associated features during the insertion of the cable, merely record photographically the progress of the plough.

Trench 3

It had been hoped that this trench would provide some information on the construction of the military road during the open excavation of a trench across it. However, the crossing at NN 5820 2521 coincided exactly with the location of a fast-flowing stream running off the west side of the valley. The stream ran across the road, used as a farm track at this location, causing localised flooding.

The plough had already laid cables to within a short distance of either side of the road, leaving the crossing to be dug by a mechanical excavator with a toothless ditching bucket. Before the cable trench could be excavated the stream was diverted through a large pipe over which the road was eventually reinstated. The pipe trench was cut across the road at a right

angle whereas the cable trench was cut at an oblique angle, following the existing line of the cable. The whole area of disturbance/investigation measured roughly 25m east/west by 7m wide.

No trace of the military road survived within the limits of Trench 3, having been swept away by the stream, replacing the road material with unsorted gravel, pebbles and boulders deposited during periodic inundations. The trench cut through these materials which were up to 1m deep in places although some undisturbed glacially deposited sand was exposed at the base of the trench.

A short distance to the south of Trench 3 the surface of the farm track appeared to comprise large boulders although it is not known whether these were contemporary with the farm or formed part of the 18th-century military road.

CONCLUSIONS

Investigations of military roads at other locations in Scotland have demonstrated that Wade's tenets were not always carried out to the letter, doubtlessly because of the paucity of raw materials at some locations although lapses in standards appear to be the reason at others (Curtis 1980). Near Fort Augustus, the Kiliwhimen to Bernera military road was constructed as Wade intended with a base of boulders overlain by pebbles and surfaced with gravel (Lewis 2007) although its width barely attained half the recommended 5m in places. The Tyndrum to Fort William military road at Kingshouse, Glencoe achieved its expected width of 5m but was of inferior construction, comprising a mere 0.3m of gravel lying directly on peat with no trace of the expected foundations of boulders (Lewis 2009).

It is disappointing that the small-scale investigation at Glen Ogle provided no information about the construction of the military road there. Of the three trenches, only two actually crossed the military road and only one was by open trenching which unfortunately proved unrewarding, natural forces having conspired to destroy the road at the very point at which the cable trench crossed it.

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PHOTOGRAPHIC ARCHIVE

- 1-2 Enclosure or borrow pit at NN 56773 26940, viewed from the east
- 3 Borrow pit at NN 56867 26879, viewed from the south-east
- 4 Rectangular structure and platform at NN 57422 25155, viewed from the west
- 5-6 The location of Trench 1, between NN 57159 26689 and NN 57237 26628, prior to excavation, viewed from the north
- 7 The location of Trench 1, between NN 57159 26689 and NN 57237 26628, prior to excavation, viewed from the south. The machine is adjacent to Pole 76 whose location differs from that shown on SSE drawings
- 8 Trench 1 fully excavated, viewed from the south
- 9 Another old road at NN 57099 26680, viewed from the north-west
- 10 Another old road at NN 57099 26680 cut by borrow pits, viewed from the north-west
- 11 Borrow pits cutting other old road at NN 57099 26680, viewed from the south-east
- 12 Machine retracing its course along Trench 1 on completion of excavation
- 13 The military road and the borrow pits cutting the other old road, viewed from the south
- 14-18 The cable plough in action
- 19 After the plough has laid the cable
- 20-22 The area around the military road after the plough has crossed it at NN 57564 26382 (Trench 2)
- 23 Point of crossing (Trench 3) for cable route at NN 58202 25211 prior to excavation, viewed from the north
- 24 Point of crossing (Trench 3) for cable route at NN 58202 25211 prior to excavation, viewed from the south
- 25 View to the north towards crossing point at NN 58202 25211, along farm track
- 26 View to the south towards crossing point at NN 58202 25211, along farm track
- 27 Trench to divert stream being excavated, viewed from the north
- 28 Trench to divert stream being excavated, viewed from the north-west
- 29 Pipe to channel stream being placed in trench
- 30-31 The stream being diverted through the pipe
- 32 The cable trench across the military road to the north of the stream, viewed from the south-east
- 33 The cable trench across the military road to the north of the stream, viewed from the east
- 34 The cable trench across the military road to the north of the stream, viewed from the north-east
- 35 The cable trench across the military road to the south of the stream, viewed from the north
- 36 The stream at NN 58202 25211, viewed from the east.