

Scotia Archaeology

**REPORT
TO**

MNV CONSULTING LIMITED

**ANIE, ARDCHULLARIE & LENY
HYDRO-ELECTRIC SCHEMES,
CALLANDER**

**Desk study
and
walk-over surveys
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INTRODUCTION

This report describes the results of a desk study of archaeological sites and monuments and walk-over surveys along the routes of three proposed hydro-electric schemes to the north of Callander, Stirling District.

The Loch Lomond and Trossachs National Park Authority (LLTNPA) attached a condition on granting planning permission for these schemes whereby walk-over surveys were to be undertaken within the areas of development to identify any hitherto unrecorded sites of archaeological or historical significance located within them. Should any such sites be identified, the archaeological contractor undertaking the surveys would need to outline proposals for avoiding those sites or, if that proved impossible, a programme whereby the archaeological record is preserved by record.

The desk study and surveys were undertaken by John Lewis of Scotia Archaeology at the request of MNV Consulting Limited, the fieldwork being carried out on 15 October 2013 during dry and occasionally sunny conditions. The routes of the proposed pipelines and the locations of sites and monuments identified by the desk study and walk-over surveys are shown on maps supplied by MNV Consulting Ltd.

A desk study of readily available source material was undertaken prior to the commencement of field work. It comprises short descriptions of those sites located within the near vicinity of the proposed construction areas.

The sites are listed according to the numbers allocated by the Royal Commission on the Ancient and Historical Monuments of Scotland (RCAHMS) and by the West of Scotland Archaeology Service (WoSAS), archaeological advisors to the LLTNPA within whose jurisdiction the development sites lie.

ANIE

Anie is located near the east side of Loch Lubnaig, 5km north-west of Callander. The intake point for the hydro scheme will be on the Anie Burn at approximately NN 5954 1041. From there the penstock will run to the WSW as far as a turbine house, near the east bank of the burn at approximately NN 5883 1005, the overall length of the pipeline being some 800m.

THE DESK STUDY

1 **WoSAS Pin64978 Military road bridge**

The road now leading to Anie Farm was once part of the Stirling to Fort William military road built by Caulfeild in 1750-52. At NN 58801 10059 is a bridge forming an element of this road.

The road was re-routed in the late 18th century and is now the nearby A84 trunk road.

2 **WoSAS Pin64105 Anie: building**

This record depicts the remains of a building at NN 5891 1017. No further information is given.

3 **WoSAS Pin64104 Anie: kiln (possible)**

The possible remains of a kiln are recorded as being at NN 5891 1021. No further information is given.

4 **NN51SE 22 Anie: building**

The first edition Ordnance Survey (OS) 6-inch map (Perthshire, sheet 94), surveyed in 1866, shows a single unroofed long building at NN 5919 1014. This structure is also shown on the current OS 1:10,000 map.

5 **NN51SE 29/WoSAS Pin65704 Anie: farmstead**

The remains of a farmstead, field system and rig and furrow agriculture are recorded at Anie, centred on NN 5884 1019.

THE WALK-OVER SURVEY

The east half of the penstock route, from the intake point to approximately NN 5920 1017, runs along a forestry road before passing through relatively open woodland and forestry which allowed a thorough examination of the ground. The remainder of the penstock crosses gently sloping rough pasture covered predominantly with coarse grass and reeds.

Only two sites were encountered close to the proposed route of the penstock, both of which were identified by the desk study. They were the bridge (Site 1: see Photo Anie 1) on the 18th-century military road, at NN 58801 10059, and the remains of a building centred on NN 59190 10132 (Site 4: see Photos Anie 2-5). This stretch of the military road is now the access track to Anie Farm and the bridge forms an integral element of it.

The remains of the building at Site 4 lie only a short distance from the penstock route as shown on MNV's map. The building was very long, measuring some 30m north/south by 5m wide over 0.6m thick rubble walls of which a maximum of two courses survive. This structure is divided into two compartments, the south one being slightly the larger. No other structural remains or early field systems were evident in the vicinity of this building although such remains may lie hidden by the long grass and reeds that cover the area.

PHOTOGRAPHIC RECORD

- 1 Military road bridge (Site 1) at NN 58801 10059
- 2 South compartment of building at NN 59190 10132 (Site 4), viewed from the south
- 3 North compartment of building at NN 59190 10132 (Site 4), viewed from the north-east
- 4 North compartment of building at NN 59190 10132 (Site 4), viewed from the east
- 5 Site 4, viewed from the north

ARDCHULLARIE

Ardchullarie sits close to the A84 trunk road on the east side of Loch Lubnaig, some 8km north-west of Callander. The scheme will take water from the Ardchullarie Burn at approximately NN 5864 1413 from where the penstock will run to the south-west and then to the south to a turbine house on the west side of the same burn at approximately NN 5835 1371. The penstock will be some 630m long.

THE DESK STUDY

1 NN51SE 4/WoSASPin 63606 Ardchullarie township & head-dyke

The first edition OS 6-inch map (Perthshire, sheet 94) shows the remains of a township of five unroofed buildings, one enclosure and a head-dyke centred on NN 5840 1370. James Stobie's map of 1783 depicts three buildings to the west of the Ardchullarie Burn and two to its east.

In 1968 a survey found the remains of five buildings ranging in size from 4.5m by 2.8m to 10m by 4m. By 1988 all but one building had been destroyed by forestry ploughing. The current OS 1:10,000 map shows no trace of this settlement.

2 WoSASPin 64168 West Ardchullarie: building

WoSAS's record mentions the remains of a building at NN 5840 1390 but gives no further information. However, a close inspection of the first edition OS map suggests that this structure is located at NN 58418 13926, some 30m north-east of its recorded location.

3 NN51SE 23/WoSASPin 64308 Cread Ard Beag: building

The first edition OS 6-inch map (Perthshire, sheet 94) shows one unroofed building at NN 5846 1408. This structure is not shown on the current OS 1:10,000 map.

THE WALK-OVER SURVEY

The penstock will run through commercial forestry plantation: its route coincides with a corridor cleared of trees which allowed a full examination of the ground during the walk-over survey.

The south end of the route, in the area designated for the turbine house and construction compound, lies quite close to the former location of Ardchullarie township (Site 1). However, during the walk-over survey no structural remains were encountered in this area and it must be assumed that little has survived ploughing and other activities associated with the extant forestry plantation.

Site 2 was not observed during the survey and, if it still survives, is assumed to lie within the forestry plantation, away from the penstock. A short distance from Site 2, at NN 58374 13896 to the immediate west of the penstock, lies a group of boulders, some very large and others smaller (see Photos Ardchullarie 1 & 2). These stones should not be confused with Site 2; they have been deposited by natural means and do not form elements of any demolished structure.

PHOTOGRAPHIC RECORD

- 1 Boulders centred on NN 58274 13896, viewed from the north
- 2 Boulders centred on NN 58274 13896, viewed from the south

LENY

THE SITE

The Leny hydro scheme is located a short distance east of Kilmahog and some 2km north-west of Callander. The intake for the scheme will be on the Leny Burn at approximately NN 6123 0950 from where the penstock will run southwards near the east bank of the burn as far as a turbine house at approximately NN 6141 0867. The overall length of the penstock will be some 900m.

THE DESK STUDY

1 NN60NW 9/WoSAS Pin63776 Leny Castle

Leny Castle, burnt down in 1513, formerly occupied a low morainic mound, known as Caisteal Briste, at NN 6172 0820. This site has also been identified tentatively as a long cairn.

2 NN60NW 29 Leny House

Located at NN 61351 08908 and built in 1513 as a successor to the ruined Leny Castle, Leny House is a Listed Building (Category B). It originally comprised an L-shaped tower and was altered in 1691 and almost completely rebuilt in 1845-46.

3 NN60NW 29.3 Leny Burn: bridge

A bridge crosses the Leny Burn at NN 61422 08708.

4 NN60NW 50/WoSAS Pin 65667 Bridge of Leny

William Roy's map, surveyed 1747-55, shows the Bridge of Leny at approximately NN 6151 0817. No trace of this bridge is now visible.

5 WoSAS Pin63955 Leny: possible Roman road

The alleged route of a possible Roman road runs from NN 617 084 to NN 619 086. No further information is given.

6 NN60NW 17 Bochastle Roman fort and temporary camp

Centred on NN 6142 0790, to the south of the River Teith, lies the remains of Bochastle Roman fort and temporary camp, a Scheduled Ancient Monument (SAM 2389). Prehistoric enclosures are also contained within the confines of the camp.

This monument lies beyond the limits of the accompanying map.

THE WALK-OVER SURVEY

The penstock route crosses the east side of the valley of the Leny Burn which slopes fairly steeply down towards the stream. At the time of the walk-over survey most of the northern

half of the penstock route was covered with closely packed rhododendron bushes and other woodland. This made it impossible to determine what might lie beneath the vegetation within this area.

Much of the remainder of the route crosses ground covered with coarse grass with some reeds and gorse although, as it approaches the proposed site of the turbine house, the ground levels out and is better drained, providing good quality pasture. The pasture fields, at present used for sheep grazing, continue as far as the A84 road.

Two sites of archaeological or historical significance are located close to the proposed hydro scheme to the east of the Leny Burn. The first is the site of Leny Castle at Caisteal Briste, centred on approximately NN 61719 08219 Site 1: see Photo Leny 1). The summit of this linear mound is now covered with deciduous trees and no structural remains are in evidence.

The second site is the small bridge that crosses the Leny Burn at NN 61422 08708 (Site 3: see Photo Leny 2). This single-arched, rubble-built bridge is of good quality and originally may have allowed more than grazing animals to cross the burn. On the evidence of the first edition OS 6-inch map, the bridge was not an element of the nearby military road although its original function may have been as a pack-horse bridge.

PHOTOGRAPHIC RECORD

- 1 Site of Leny Castle (Site 1), viewed from the south-west
- 2 Bridge at NN 61422 08708 (Site 3), viewed from the north-east

CONCLUSIONS AND RECOMMENDATIONS

The most obvious danger to archaeological structures and features during the construction of a hydro-electric scheme is the excavation of pipe trenches. However, other activities could also affect the survival of the archaeological record, particularly the deposition and retrieval of spoil, the temporary storage of pipes and other materials and the movement of machinery and other vehicles.

It is usually preferable to avoid disturbing archaeological sites rather than to excavate them and preserving them only by record. For hydro schemes this may necessitate re-routing the course of a penstock and the means of access for vehicles and plant. Other strategies include fencing off vulnerable sites that may lie within the vicinity of development areas.

ANIE

The only site of archaeological or historical significance that might be affected by the proposed development is Site 4, the remains of the long building at NN 59190 10132. This structure is located quite near the proposed line of the penstock and could be vulnerable to the movement of traffic and perhaps the storage of materials. As a consequence, it is recommended that a fence be erected around these remains with a buffer zone of at least 5m between the limits of the building and the fence itself. The fence should be inspected and maintained throughout the construction of the hydro scheme.

ARDCHULLARIE

No structures or features of archaeological significance were encountered during the walk-over survey and there seems to be no threat to any of those identified in the desk study. The remains of the building of Site 2 appears to be within the forestry plantation and it is a matter of concern whether those remains were destroyed during forestry ploughing, as appears to be the case for most, if not all, of the structures of Site 1.

LENY

The proposed development poses no direct threat to Leny House, Leny Bridge or Bochartle Roman fort although the new access track to the construction site may cross the line of the putative Roman road (Site 5). The new track will also run close to the site of Leny Castle and it is conceivable that outworks associated with the castle extended some distance beyond the castle mound and that some such features could be crossed by this new track.

The construction of the new track may simply require vegetation to be removed and materials laid over the topsoil, in which case it is unlikely that damage would be wrought on any sub-surface archaeological features that might survive in that area. However, if construction requires the complete removal of topsoil, this could well have an impact on the surviving archaeological record and mitigation measures might need to be put into place.

The only other site that might require protection is the bridge that crosses the Leny Burn (Site 3) and which stands close to, or indeed within, the proposed construction compound. Although the bridge might still be used by farm machinery, it is felt that no construction vehicles or plant should use it during the development of the hydro scheme and measures should be taken to ensure it is fully protected during that time.