REPORT TO GREEN HIGHLAND RENEWABLES LIMITED

PITMACKIE HYDRO-ELECTRIC SCHEME GLEN QUOICH, PERTHSHIRE

Desk study and walk-over survey May 2013

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INTRODUCTION

This report describes the results of a desk study of archaeological sites and monuments and a walk-over survey along the routes of two proposed hydro-electric schemes at Pitmackie, Glen Quoich, Perthshire. The survey was carried out by Scotia Archaeology at the request of Green Highland Renewables Ltd who supplied a map showing indicative routes for both schemes.

THE SITE

The former farmhouse of Pitmackie stands close to an unnamed burn that runs southwards from Meall a' Choire Chreagaich, roughly parallel with the unclassified, single-track road that links Kenmore, at the east end of Loch Tay, to Amulree from where it joins the A826 Crieff to Aberfeldy road. The fast-flowing burn debouches into the River Quoich a short distance to the south-east of the farmhouse.

One hydro scheme (South Route) will take water from the River Quoich at approximately NN 8056 4008 to a power house which will be located at approximately NN 8190 4033, the penstock being some 1.4km long. The intake for the second scheme (North Route) will be on the unnamed burn at approximately NN 8122 4100 and its power house at NN 8149 4049, adjacent to Pitmackie farmhouse, a distance of approximately 0.75km. A map showing the indicative routes of both pipelines accompanies this report.

THE DESK STUDY

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 two proposed penstocks. The sources consulted for this work include:

the Royal Commission on the Ancient and Historical Monuments of Scotland (RCAHMS);

the Sites and Monuments Record maintained by the Perth & Kinross Heritage Trust (PKHT); and

early Ordnance Survey (OS) maps.

The sites are listed according to the numbers allocated by RCAHMS.

1 NN84SW 11 Farmstead

The first edition OS 6-inch map (surveyed 1862) shows two unroofed buildings and an enclosure at NN 8195 4032. They do not appear on the 1976 OS 1:10,000 map.

2 NN84SW 23 Farmstead

Aerial photography shows three buildings on either side of the gravel road leading to Pitmackie at NM 8170 4046, some 65m east of the farmhouse. They are not shown on the first edition OS 6-inch map.

3 NN84SW 24 Farmstead

Aerial photography shows two rectangular enclosures and at least three buildings at NN 8166 4034, 60m south of Pitmackie farmstead. These structures are enclosed by a field wall to the north and by the River Quaich to the south. A field wall is depicted at this location on the first edition OS 6-inch map although it shows no buildings there.

4 NN84SW 14 Farmstead

The first edition OS 6-inch map and the 1976 OS 1:10,000 map show two unroofed buildings at NN 8120 4029.

5 NN84SW 12 Farmstead

The first edition OS 6-inch map depicts two unroofed buildings and an enclosure at NN 8130 4065.

6 NN84SW 13 Farmstead

The 1976 OS 1:10,000 map shows two unroofed buildings, one within an enclosure, at NN 8159 4056. They do not appear on the first edition OS 6-inch map.

In addition to the farmsteads described above, PKHT has identified many field systems in this area. Most, if not all of them, would have been associated with these old farmsteads.

THE WALK-OVER SURVEYS

The walk-over surveys were undertaken by John Lewis on 24 May 2013, a bright, dry day with good visibility. All of the sites listed above were located during the survey although two previously unrecorded ones (Sites 7 and 8) were also identified. They are described in the order they were encountered during the survey and shown on a map that accompanies this report, as does the illustration supplied by Green Highland.

THE SOUTH ROUTE

The south route runs along the north side of the River Quoich, the overall gradient being relatively slight. Its upper reaches cross rough pasture comprising coarse grass and heather where no trace of settlement was encountered. The lower section of the penstock passes through improved grazing of mainly short grass through an area containing the remains of several farmsteads, some of which lie very close to the proposed route of the penstock.

Site 4 (Photos 1-5)

The RCAHMS record describes this site, on the north bank of the River Quoich, as comprising the remains of two buildings whereas, on the evidence of the field survey, it consists of one building and a small enclosure. The building is located at NN 81203 40300 and measures some 8m east/west by 5m wide over drystone rubble walls, 1m thick and standing to a maximum of three courses. The roughly circular enclosure is located 15m east of the building and measures 7m across. The walls of both structures are covered with heather.

Site 7 (Photos 14-18)

A short distance from the north bank of the River Quoich and centred on NN 81615 40334 are the scant remains of two, or perhaps three, buildings, none of which is represented on the first edition OS 6-inch map.

Building 1 measures 8m east/west by 4m wide externally, the walls being overlain by vegetation. It is divided internally by a cross wall; otherwise no other features are discernible. To its immediate east is Building 2 which measures 6m east/west by 4.5m wide externally. It appears to be sub-rectangular in shape although wall tumble makes it difficult to accurately assess its outline.

The possible remains of a third building, 8m long, lie to the immediate east of Building 2 although its entire outline is difficult to trace.

Site 3 (Photos 19-24)

The remains of this farmstead are located near the north bank of the River Quoich a short distance east of Site 7. Its most prominent building (Building 1) stands at NN 81699 40331 and measures 8m north/south by 5m wide over drystone rubble walls 0.85m thick and surviving to a maximum height of 2m. The entrance is at the south end of the west wall.

A short distance to the west of Building 1 are the remains of Building 2 which measures 11m north/south by 4.5m wide over grass-covered walls reduced almost to ground level. To its immediate west is Building 3, centred on NN 81672 40343 and measuring some 27m east/west by 5m wide. There are several internal partitions within this long house.

On the evidence of preservation, Building 1 appears to be later in date than the other two structures.

Site 1 (Photos 25-29)

Located at NN 81953 40334, close to the intended site of the power house, is Site 1 which sits above the flood plain of the River Quoich and very close to the access road to Pitmackie. Its visible remains comprise one building measuring 13m north/south by 4.5m wide over grass-covered walls, 0.8m thick and demolished to ground level, together with an enclosure to its west. Both structures are contiguous with a field dyke with runs along the edge of the flood plain.

Site 2 (Photos 30-32)

Of the three structures apparently shown by aerial photographs, only two were identified on the ground, neither of them depicted on the first edition OS 6-inch map.

Building 1 is located at NN 81797 40423, on the north side of the access road to Pitmackie. It measures approximately 8m north/south by 4m wide over grass-covered walls reduced to ground level. There is some evidence for a central partition within this building. The scant remains of Building 2, which measures 7m north/south by 4m wide over grass-covered walls, lie to the south of the road at NN 81691 40427.

NORTH ROUTE

The north route runs along the west side of the unnamed burn that runs past Pitmackie farmhouse, through steeply sloping ground whose lower slopes form good pasture while its upper reaches are mostly covered with heather. Two settlements were encountered on this survey, one (Site 5) was already described by RCAHMS and other authorities, the other (Site 8) previously unrecorded.

Site 8 (36-37)

Site 8 comprises the remains of a single building, its drystone rubble walls now reduced to one or two courses. The building is located at NN 81229 40864, close to the west bank of the burn, and measures 5.2m east/west by 3.8m wide. In all likelihood, this building was a shieling hut.

Site 5 (Photos 42-50)

The first edition OS 6-inch map depicts two buildings and an enclosure at this location, close to the burn, whereas the survey identified three buildings centred on NN 81309 40638.

Building 1 measures 9m north/south by 4m wide over walls 0.8m thick and standing to a consistent height of 1.2m. Roof crucks probably sprang from this level. The entrance was towards the north end of the west wall. Towards the south end of the building are two small compartments, each 0.85m square.

To the immediate west of Building 1 is an enclosure which measures roughly 17m north/south by 11m east/west and which extends around the south side of the building, terminating at the south wall of Building 2. Building 2 measures 7m north/south by 3m wide over walls 0.7m thick of which only one or two courses survive. Alongside its east wall are the slight remains of what might have been a narrow passage or perhaps an external stair.

The remains of Building 3 stand a short distance to the east of Building 1. It measures 18m east/west by 5m wide over walls 0.8m thick which stand to a maximum height of 1m on the south side of the building. The entrance was midway along the south wall and led directly into the east compartment of what appears to have been a bicameral structure. It is not clear how access was gained to the west compartment.

OTHER FEATURES

Although relatively close to Pitmackie, the farmstead at Site 6 is considered to be far enough from the courses of both penstocks to be under no threat from these developments. As a consequence, it is not described here.

It is clear that the penstocks will cut across old field systems and, in so doing, pass through several field boundaries. Some of the drystone walls that criss-cross the area are likely to date from the 19th century or perhaps later. Others almost certainly date from pre-Improvement times and are now reduced almost to ground level. Many of these structures feature in the photographic archive.

On the lower slopes of the north route are several mounds of field clearance boulders, testament to this area's former role in arable farming. Although the slope here is quite severe, there are a few small level platforms which would have allowed crops to be grown in what would have been a well drained environment.

CONCLUSIONS AND RECOMMENDATIONS

With the exception of Site 6, all of the settlements described in the desk study and encountered during the walk-over survey lie close to the areas of proposed development. At this stage the routes given for the penstocks are only indicative so it is difficult to describe a programme for protecting specific sites during the construction of the hydro schemes although some general advice can be offered for their protection.

The most obvious danger to archaeological structures and features would be 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 proposed that any of the sites identified during the archaeological surveys that stand within at least 10m of any development activities should be protected from such dangers by erecting clearly defined fences. It would be the contractor's responsibility to maintain these fences throughout the construction of the hydro scheme.

It will be difficult, if not impossible, to avoid breaching some of the early field boundaries that form a significant feature of the landscape around Pitmackie. However, it is recommended that where a pipe trench cuts through a wall it should be done where the structure is already demolished. If this proves impossible, then the wall should be reinstated to its original state.

PHOTOGRAPHIC RECORD

The photographs described below form part of the project archive and are not included in hard copies of this report.

SOUTH ROUTE

- 1-2 Site 4: enclosure viewed from the west
- 3 Site 4: remains of building, viewed from the south-east
- 4-5 Site 4: remains of building viewed from the west
- 6 View to the north along a field dyke from NN 80661 40178
- 7 View to the south along a field dyke from NN 80661 40178
- 8 View to the east along a field dyke at NN 80598 40128
- 9 View to the south along a field dyke at NN 81011 40256
- 10-11 View to the south at NN 81144 40306 showing the remains of field systems and field clearance cairns
- Drystone dyke at NN 81435 40332, viewed from the west
- View from the east along the scant remains of an early dyke running westwards from NN 81435 40332
- 14-15 Site 7: Buildings 1 and 2, viewed from the west
- 16 Site 7: Buildings 1 and 2, viewed from the east
- 17-18 Site 7: Building 3, viewed from the west, with the east wall of Building 2 in the foreground
- 19 Site 3: Building 1, viewed from the north
- 20 Site 3: Building 1, viewed from the west
- 21 Site 3: Building 2, viewed from the east
- 22 Site 3: Building 2, viewed from the south
- 23 Site 3: Building 3, viewed from the south
- Site 3: Building 3, viewed from the west, with Building 2 beyond
- 25 Site 1, viewed from the west
- Site 1: enclosure, viewed from the east
- 27-29 Site 1: building, viewed from the north
- 30-31 Site 2: Building 1 at NN 81797 40423, viewed from the west
- 32 Site 2: Building 2 at NN 81691 40427, viewed from the north

NORTH ROUTE

- View to the north along a field dyke at NN 81261 40670
- View to the south along a field dyke at NN 81261 40670
- View to the west along a field dyke at NN 81267 40777
- 36-37 Site 8: possible shieling hut at NN 81229 40864, viewed from the north
- 38-39 Head dyke where it crosses the burn at NN 81231 40939, viewed from the north
- Field dyke at NN 81217 40715 with Site 5 beyond, viewed from the north
- Field dyke at NN 81217 40715, viewed from the south
- 42-43 Site 5, viewed from the north
- Site 5: interior of Building 1, viewed from the north
- 45 Site 5: Building 1, viewed from the west
- Site 5: enclosure, viewed from the south
- 47 Site 5: Building 2, viewed from the north
- 48 Site 5: Building 3, viewed from the west
- 49 Site 5: Building 3, viewed from the north-west
- 50 Site 5: Building 3, viewed from the south-east
- Pitmackie and sheep fank, viewed from the west
- View from the west down Glen Quaich