

CPAT Report No 1099

Felindre Weir, Llanidloes

SURVEY AND RECORDING



THE CLWYD-POWYS ARCHAEOLOGICAL TRUST

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May 2011

Report for Hyder Consulting/Environment Agency

The Clwyd-Powys Archaeological Trust

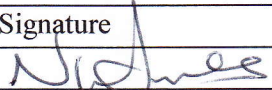
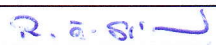

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CPAT Report Record

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1 INTRODUCTION

- 1.1 The Field Services Section of the Clwyd-Powys Archaeological Trust was invited by Hyder Consulting, on behalf of the Environment Agency, to undertake a programme of survey and recording on the site of a former mill weir at Felindre, near Llanidloes in Powys (SN 9423383980). The work was associated with proposed modifications to the weir to improve fish passage for salmon and other species.
- 1.2 The weir is sited on the River Severn to the west of Llanidloes adjacent to the grounds of the Mount Severn Activity Centre (Fig. 1). A site visit was made on 10 May 2011 to record the weir prior to its modification.

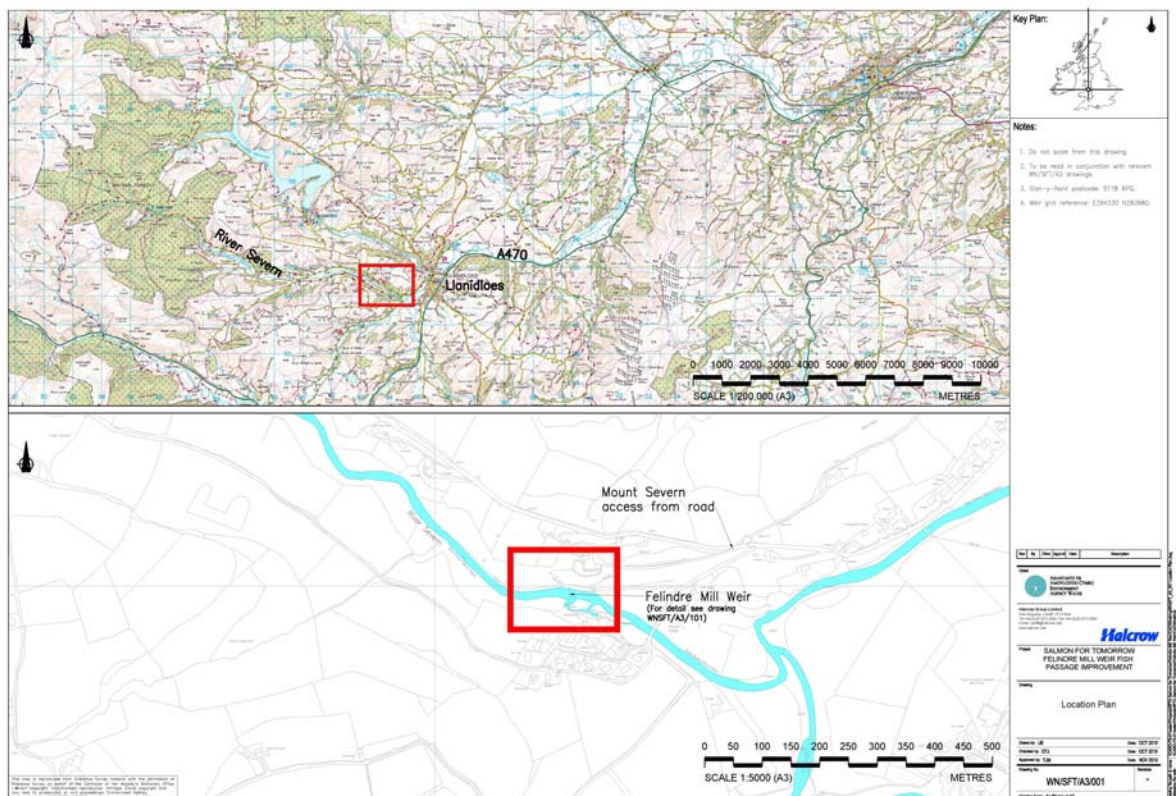


Fig. 1 Location of Felindre Weir

2 THE MILL COMPLEX

- 2.1 It is not known how long there has been a mill at Felindre, although the mill house is considerably older than the remains of the mill and contains internal timber partitions which are infilled with split oak beneath plaster. The name 'Melin dre' is depicted on the Ordnance Survey Surveyors' drawing of 1820, suggesting that there was a mill here by this time.
- 2.2 The mill building (PRN 20902) is of rubble masonry with red brick quoins, joints and opening heads. Originally a three-storeyed building, it has more recently been reduced to a single storey and is currently used as a stables. The building was recorded by the Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMW) in 1979, from which the following description is taken. The lower section of the wheel gable is of red sandstone ashlar, but the head of the shaft-opening is of brick. The wheel, which was probably backshot, no longer survives, but the cast-iron axle, which is cruciform in section, and the eight-spoked hub remains. Behind the wheel is a ring for a horizontal shaft and it seems probable that the wheel carried a gear-ring

and drove a shaft to the mill via a smaller cog. The present owner has a cast iron plate which apparently recorded the installation of the mill stones in 1853, with the makers being Kay and Hilton of Fleet Street, Liverpool.

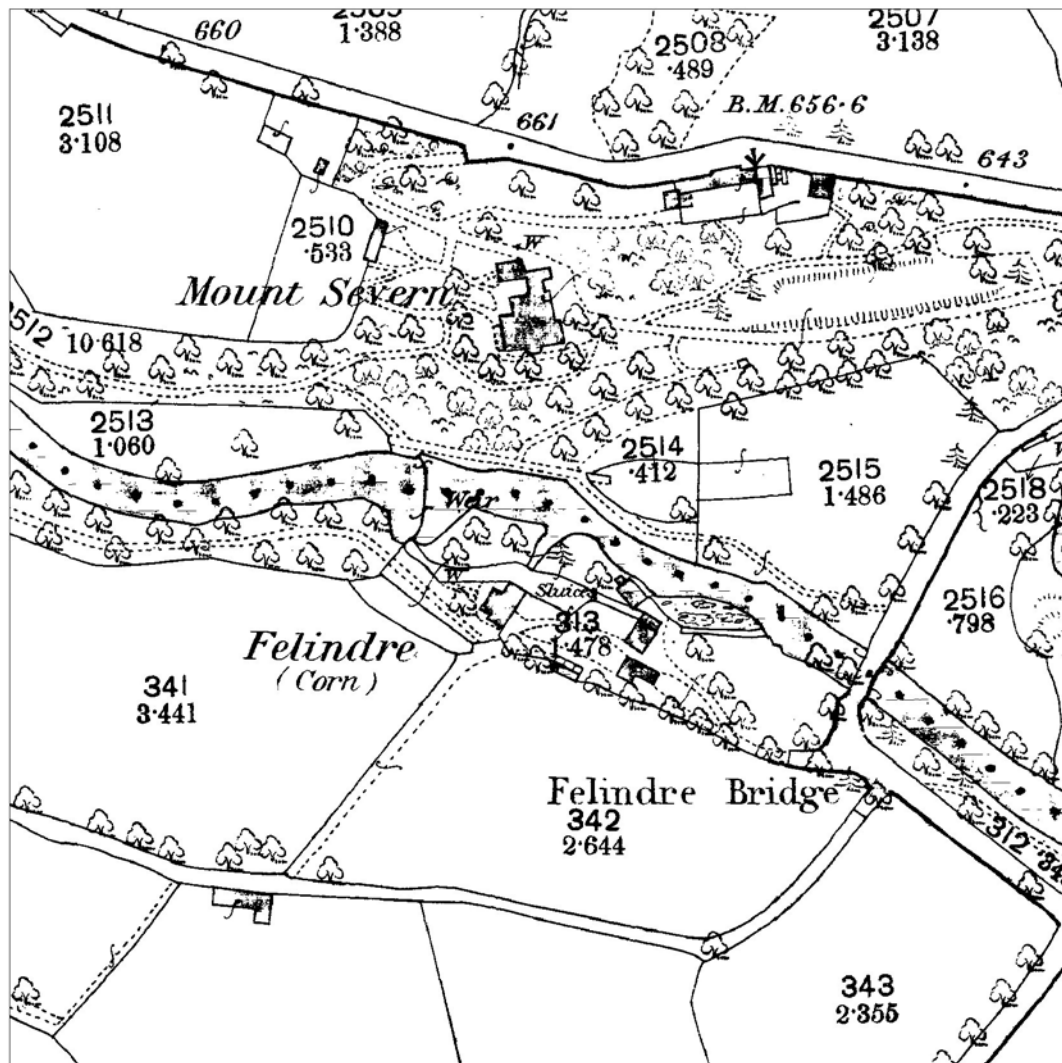


Fig. 2 Extract from the Ordnance Survey 1st edition 25'' map of 1887 (Montgomeryshire 47.04)

- 2.3 The mill complex is depicted on the Ordnance Survey 25'' map of 1887 (Fig. 2). This shows the weir with a short head race leading westwards along the south side of the river to an elongated mill pond with a sluice at the eastern end. A stone launder then carried the water to the mill and thence back to the river via a tail race. The map also shows a building to the south of the mill which was a two-storey corn drier, although this no longer survives. A third building to the north-west of the mill does survive, however, although its date and original function are uncertain. The ground floor was at one time a byre, possibly with a hay loft above. The south-eastern gable is timber-framed, clad in corrugated iron, while the remainder of the building is of stone rubble, and there is a small, two-seater privy adjoining the north-west gable.
- 2.4 Water from the mill leat was later used to drive a Pelton wheel for a small electricity generating plant which supplied Mount Severn house, on the opposite bank of the Severn. The building still survives with the machinery intact.

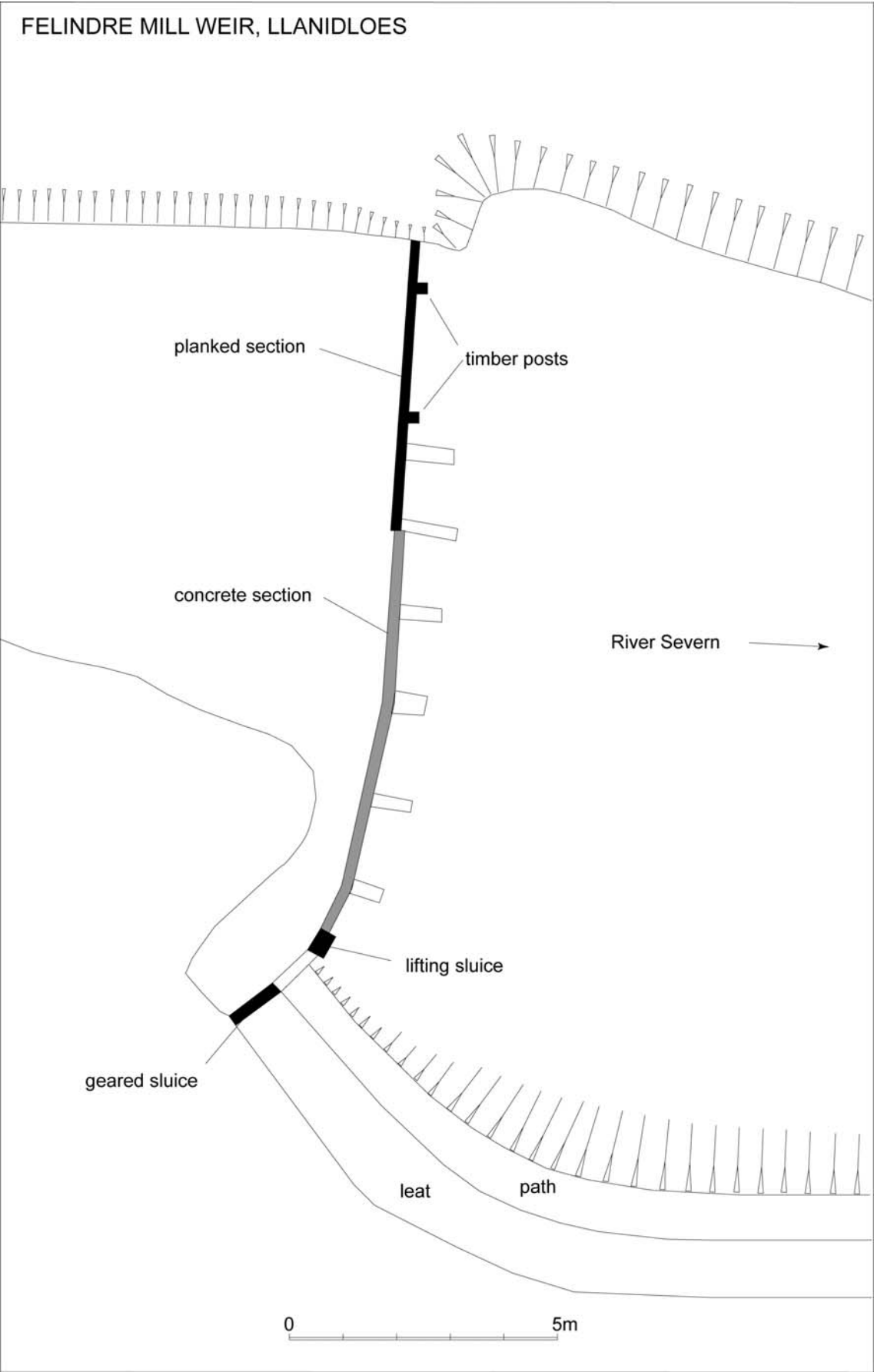


Fig. 3 Plan of Felindre Weir

3 THE WEIR

- 3.1 The mill weir (PRN 20921) was constructed at the lip of a waterfall and was originally built of vertical posts and horizontal planking. The planking still survives at the northern end of the weir, extending for around 10m, with two vertical posts remaining and a stone buttress adding additional support. The southern part has been replaced in concrete, extending to around 16m, supported by five stone or concrete buttresses (Fig. 3).



Fig. 4 The northern end of the weir showing the surviving original planking.
Photo CPAT 3283.0001



Fig. 5 The southern end of the weir showing the concrete section. Photo CPAT 3283.0015

- 3.2 At the southern end of the weir there is a modern lifting sluice which was designed to control the build-up of silt behind the weir, although it does not appear to have been used in some time as there is now a significant deposit of silt and gravel. Adjacent to this is a 19th-century geared lifting sluice which controlled the flow of water to the leat feeding the mill pond for Felindre Mill. The geared sluice is operated by a cast iron hand-wheel, which bears the name Gilkes of Kendal. This turns a gear which meshes with a cog on a shaft. At the other end of the shaft a pinion engages with a rack on the edge of the extended centre-plank of the sluice-gate. To prevent slipping a second rack and 'free' pinion work on the opposite edge of the plank. The mechanism has been restored and the timber replaced.

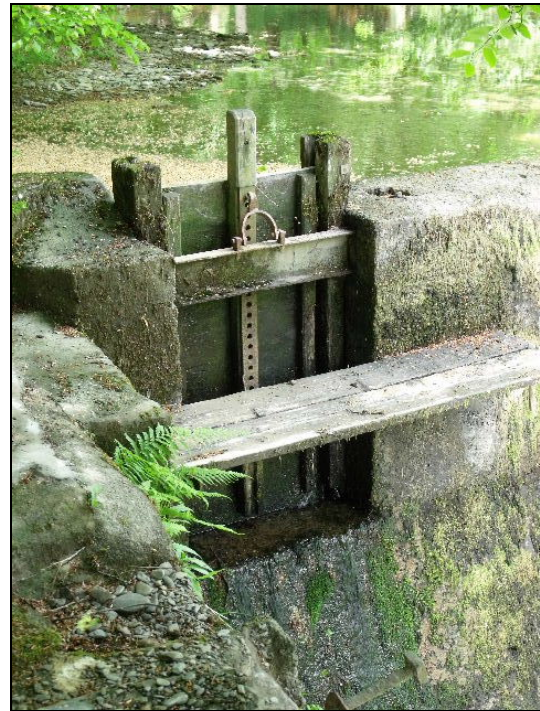


Fig. 6 The lifting sluice. Photo CPAT 3283.0014



Fig. 7 The geared sluice controlling the feeder leat. Photo CPAT 3283.0012

4 CONCLUSIONS

- 4.1 The surviving remains of Felindre Mill date from the mid 19th century and a plaque dated 1853, which was associated with the mill stones, appears to confirm this. The mill weir was originally built of horizontal planks retained by vertical posts, although only the northern end of the weir survives, the rest having been replaced in concrete. The construction of the fish pass will remove the last surviving sections of the original weir.
- 4.2 During the 19th and much of the 20th century there was quite a complex of buildings at Felindre Mill. Apart from the mill and mill house there was also a drying kiln and a byre, as well as a pig sty. During the early 20th century a small powerhouse was added below the mill, using water from the mill leat to generate electricity for Mount Severn house, on the opposite bank of the river.