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GLAMORGAN GWENT ARCHAEOLOGICAL TRUST CONTRACTS SECTION

ARCHAEOLOGICAL RECORDING ABERDULAIS FALLS WORKS ABERDULAIS, WEST GLAMORGAN

JULY 1994

GGAT REPORT NO 94/047

PROJECT NO A202 EXCAVATION NO 263

ABERDULAIS FALLS WORKS (SS 772 995)

Survey and recording work was carried out by GGAT Contracts at Aberdulais Falls (PRN 1085w), in advance of the consolidation of part of a riverside wall. The work, undertaken for the National Trust, recorded the wall revetting the western side of the central area of the site (Archaeological Areas P and Q).

History

The riverside wall was built in the nineteenth century when the ground level on the eastern side of the river-valley of the River Dulais was raised to 3.2m above the mean river level (Hayman 1986, 153). The exact date of the construction of the wall is unknown, but it lies in the first half of the century.

Methodology

A 1:50 plan view of the wall was drawn up by off-setting from a fixed baseline. The upper line of the elevation was constructed from a series of spot-heights taken at intervals along the top edge of the wall. In the absence of a benchmark the datum was taken as being the instrument height. A spot height was taken in the centre of the modern bridge spanning the opening in the wall; marked on the elevation drawing, it will allow an Ordnance Datum height to be calculated. The remainder of the elevation was drawn up from direct measurement of features on the wall. Notes on the construction and bonding of the wall were made and a series of general and detail photographs were taken.

The wall

As surveyed, the wall appears to be of a single phase of construction. The outer face of the wall is of squared coursed sandstone rubble with a core of flaggy sandstone rubble with a few river cobbles. The wall is bonded with grey mortar containing coal flecks, typical of nineteenth-century structures. No coping stones survive on the top of the wall, and some stones from the upper courses are missing or dislodged. Where visible, the base of the wall stands on a rock shelf. The wall structure is undermined at its northern end, at the corner close to the rock overhang.

An opening (marked in Archaeological Area F) formed part of the original construction of the wall; the sides of the opening are faced and the quoins stressed with larger sandstone blocks. As built, the opening apparently had a sill at the level of the floors of the structures to the east of the wall. The sill has been lost, and as a result the core of the wall has been exposed and suffered damage.

The broken ends of three iron girders protruding from the wall, and the probable site of a fourth, suggest that a gantry or similar structure overhung the river, spanning the opening in the wall. The end of one of the girders is also visible on the inner face of the wall. Three iron wall-ties appear on the outer face of the wall below the girders. Each tie consists of a large iron plate, measuring approximately 0.7m x 0.15m, with a nut approximately 0.1m square in the centre of the plate.

A drain passes through the base of the wall downstream of the opening. The drain is approximately 0.5m square, with a single slab lintel spanning the opening. Although blocked the drain extends at least 0.5m back from the outer face of the wall.

Bibliography

Hayman R, 1986 Aberdulais Falls. <u>Industrial</u> Archaeological Review 8, 2.

Catalogue of Photographs

Frame	Description
6 and 7	Waterfall, taken from north end of wall.
8	North end of wall beneath rock overhang.
10 and 11	Undercut wall corner resting on rock shelf, the lower rock shelf lies beneath the water.
12 and 13	View from same site as Frame 11, looking south along the length of the wall, the opening is visible near the right edge of shot.
14	Opening with wall tie visible to left.
15	View of undercut wall from south
16	Wall tie and broken girder on the north side of the opening.
17	View to north, taken level with opening.
18	North side of opening, showing wall facing, position of sill and exposed wall core.
19	Outer face of wall on the south side of the opening, showing wall tie and position of missing quoins.
20	Wall tie and site of missing girder, oblique shot.
21	Wall tie and site of missing girder.
22	Drain at base of wall.
23	Face of wall from the drain south.
24	River and south end of recorded section.
25	West side of valley.
26	View to north showing wall and river.
27	River and west side of valley.
28	Base of rocks on the west side of the valley.

