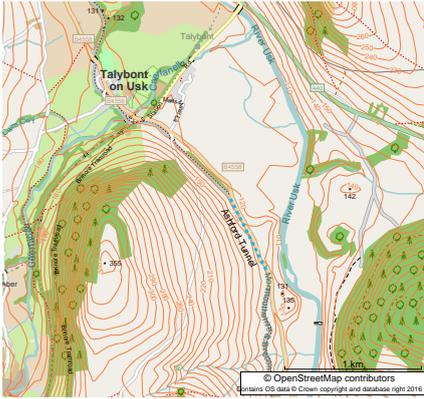


The 'Misfortune' at the Ashford Tunnel



A mile to the south east of Talybont lies the 375 yard long Ashford Tunnel. No tunnel at this point is indicated on the survey maps of either John Dadford or Thomas Dadford Jr. and it seems that the treacherous nature of the hillside at this point close above the River Usk was first recognised by James Brindley's son in law, Hugh Henshall.

Called in to advise on the design and estimated cost of the Brecon & Abergavenny Canal, Henshall's report in May 1794 included the recommendation for a Tunnel "on the east side of Ashford ... about 300 yards in length, to avoid the steep and slippery bank by the side of the river, along which the Canal cannot be carried, but at a great expence, as well as the uncertainty of supporting it, when made." He estimated the cost of the tunnel at £5.5s per yard for 300 yards, a total of £1575. His recommendation was noted and in July 1797, as canal cutting approached from the east, the canal committee "Ordered that the Engineer be at liberty to sink three or four Shafts to ascertain the nature of the Ground near Ashford."

Evidently this confirmed Henshall's recommendation and a contract "for making the tunnel near Ashford in length about Three Hundred and Forty Yards according to the Engineer's specification at Six Pounds and Six Shillings per yard forward payable monthly as the work shall be done" was awarded to Thomas James of Merthyr Tidvil, Mason, on 29th January 1798. £500 was to be retained in hand by the canal company "by way of security for Compleating the Contract" and the work was to be finished on or before the first day of November 1798.

The direction of canal cutting generally was towards Brecon and there is no reason to doubt that construction of the tunnel started at its southern end. Work apparently started well. Thomas James and his men "entered under Ground" (the words a clear indication that construction started by tunnelling rather than 'cut and cover') and by the end of April the Engineer, Thomas Dadford Jr., was able to report to the General Assembly of the Proprietors (i.e. the shareholders) that "about eighty yards of the tunnel were arched and other parts cutting open".

Henshall may have been a little optimistic in his estimate of the cost but he was certainly right about the nature of the ground and part way through construction in 1798, around the beginning of November, a 'misfortune' occurred – a significant portion of the tunnel collapsed!

A canal committee meeting on 17th December "Ordered that it be referred to a Sub-Committee at Brecon to come to a proper understanding with Thomas James respecting the tunnel at Ashford making a report thereof at the next Meeting and that Mr. John Powell write to Thomas James to attend the sub-Committee next Friday sennight at 11 o'clock and Mr. Dadford is likewise to attend."

James declined to attend but instead wrote to the committee on 27th December justifying his actions and disclaiming responsibility for the 'misfortune':-

"Gentlemen, the inclosed certificate will shew the reason why I have not attended the meeting personally.

The tunnel was exactly carried on conformable to the Engineer's direction. I have sent but two of my workmen who was (sic) on the line from the beginning until I quitted the work when the misfortune happened. These and several others can prove I proceeded in every particular by his orders – And when I entered under Ground he placed the Counter to inspect every movement I made – If he saw I was wrong it was his place to stop me from proceeding further because I was bound to comply with his injunctions – Why should he permit me to go 294 yds and to draw money on account if he did not approve of my proceedings (in intervally admeasured my work) if it was not done satisfactorily to his thinking. I proposed making a drain behind to prevent water from injuring the main Tunnel and to be in one half of the expence (sic) myself but Mr. Dadford objected – Mr. Dadford placed Edward Evans personally to attend to our placing the leading Frame to work by and we were constantly obliged to keep according to his directions;



southern end

even the Turn which was before under construction was done by his complicit orders (i.e. by Ed^d Evans). I proposed sending to Merthir (sic) for some planks to expedite the work but Mr. Dadford objected – I have several persons who will verify all I have said.

Gentlemen, I am willing to stand by any fair determination; but if Mr. Dadford will compel me to anything unreasonable I do not mean to do anything contrary to equity.

I am, gentlemen, Your obedient servant,

Thomas James

Merthir (sic)

27 Dec 1798”

His letter reveals several interesting points: work had apparently started by tunnelling and had reached 294 yards in length when the collapse occurred; ground water was clearly a problem during construction and the Engineer, no doubt with a keen eye on the expense of a tunnel he had not envisaged, had refused permission for protective measures, including James’ proposed “drain behind to prevent water from injuring the main tunnel”.

Another interesting point about Thomas James’ letter is his reference to the Counter’s apparently supervisory role. A Counter’s primary job was to record the work being done so that the right payments could be made. He needed to be a person of undoubted probity with a salary to match but at the Ashford tunnel the otherwise unknown Edwards Evans seems to have been exercising engineering responsibility as well.

Whether by mutual agreement or otherwise, James and the canal company parted company and on 1st March 1799 the committee “Resolved that William Wallis of Talybont Canal Cutter and John Stephens of the same place Canal Cutter be contracted with the cutting open the ground at Rhyd yr Onnen Tunnel according to the specifications and particulars now produced by the Engineer ...”. Clearly construction was now to be done by ‘cut and cover’. The minutes record that they were to be paid at the rate of five pence per cube yard, except for Top Cutting for which they were “not to draw for or be paid more than at the Rate of three pence three farthings per cube yard” (the depth of ‘top cutting’ isn’t defined in the minute but presumably was defined in the specification).

Masonry work was to follow “as soon as the cutting will admit thereof” and on 20th June a contract was entered into with Benjamin James and Walter Walters “for Building the Arch at the Ashford Tunnel and punning the same, finding all materials particularly Aberthaw Lime and none other to be used according to the Engineers Plan and Specifications at four pounds and fifteen shillings a yard forward”. Benjamin James and Walter Walters were to uphold the work for two years from the completion of the contract and in case of any damage occurring during that period were to be answerable to the amount of Two Hundred and fifty Pounds.

It was agreed at the same meeting that Benjamin Outram would be asked to “report his Opinion on the Works already Executed as well Canal as rail ways and whether any Improvements can be made in the Latter and at what Expencc and particularly his Opinion on the State and proposed Execution of the Tunnel near Ashford ...”. When he reported in October, Outram wrote “The Walling and Arching of the Tunnel has been ill done, all those parts which have failed must be taken down and rebuilt; those Parts which have not failed do not look well but perhaps may be sufficiently substantial. A little Time, after that Part of the Canal shall be filled with Water, will prove whether they are so”.

It is difficult not to have some sympathy with Thomas James, particularly bearing in mind that Dadford had been criticised by John Rennie in 1795 following the collapse of his (Dadford’s) Southnet tunnel on the Leominster Canal! Whether Outram’s comment about “ill done” walling and arching was a reflection on Dadford’s specifications or James’ workmanship is a matter for speculation.

In the hands of the new contractors construction was completed in time for the canal to be open to Brecon by December 1800.

It is difficult if not impossible to determine now how much of the tunnel when completed, was the surviving work of Thomas James and how much the work of Benjamin James and Walter Walters but, given the need to control costs, one would expect “those parts which have not failed” to be given time to prove themselves sufficiently substantial! There are some pointers:-

1. The total final cost of the tunnel, recorded as 372 yards in length, was reported in March 1800 to be £2694.19.0.1. The canal company cash books record that Thomas James had been paid £1505, implying that the contractors who took over - William Wallis & John Stephens for cutting and Benjamin James & William Walters for masonry - were paid £1190. Allowing say 15 shillings per yard forward for the cutting work (it can hardly have been less) and £4.15s per yard forward for the masonry work would suggest that the replacement contractors were responsible for at most 270 yards.
2. Wallis and Stephens were to cut open the ground "at Rhyd yr Onnen Tunnel". Clearly at that time the tunnel hadn't definitely acquired the name 'Ashford' but the fact that Rhyd yr Onnen is close to the northern end may be a pointer to where they started work.
3. Thomas James claimed to have tunnelled 294 yards. For this he would have been due payment of £1852, less £500 security money kept in hand by the canal company. That he was paid a little more, was probably due to payments being made on account, but in any case amply supports his claim of distance tunnelled..
4. Thomas James letter refers to 'the Turn'. This must surely be the very slight kink in the line that survives approximately a third of the way from the southern end, at the lowest part of the roof?
5. The roof is generally higher on the north side of the dip than the south side.



*approaching the lowest point,
heading south*

The tentative conclusions to be drawn from all the above are that when the tunnel was completed approx. 80 yards at the northern end was the work of William Wallis & John Stephens and Benjamin James & William Walters, approx 100 yards at the southern end was the surviving work of Thomas James and approx. 190 yards in the middle was the collapsed section of Thomas James' work that had to be rebuilt by the replacement contractors.

Concerns over land water from the hillside above the tunnel continued for many years. The tunnel itself was reported to be in good repair but measures to maintain the bank at the southern end from the towpath down to the river were minuted on numerous occasions and a succession of landowners were paid an annual sum to refrain from watering the meadow above the tunnel and above the canal at the tunnel's southern end.

More recently, a partial collapse of the side wall and arch approximately 15 yards in length occurred during dredging operations early in 1985. The repairs are recorded at the southern portal:-



ASHFORD TUNNEL

FOLLOWING COMPLETION OF EXTENSIVE REPAIR WORK
THIS TUNNEL WAS RE-OPENED TO NAVIGATION BY
T. T. LUCKCUCK
SECRETARY AND DEPUTY CHIEF EXECUTIVE.
BRITISH WATERWAYS BOARD
ON THE 5TH MAY 1985

Just downstream of the tunnel, lime scale on the water level indicator shows how the level in this section of canal was reduced by several inches some years ago, possibly to take account of lowered headroom in the tunnel caused by reinforcement at the lowest point.

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Money Note: Figures are given in pounds and shillings. There were 20 shillings to the pound so, for example, £5.5s represents £5.25 in decimal currency. £1 in 1798 is roughly the equivalent of £80 in 2019.
Measurement note: I have deliberately retained the Imperial units used at the time to avoid the inaccuracies implicit in the conversion of approximate distances. 100.00 yards is 91.44m