

# Great Archaeological Sites in Merthyr Tydfil



## 7. GURNOS QUARRY, LEAT AND TRAMROAD



All ironworks needed supplies of raw materials – iron ore, coking coal, and limestone. The ironmasters leased land that where they could mine or quarry these resources, which were then taken by tramroad to the furnaces. The works at Cyfarthfa were no exception. In 1771 limestone quarries were opened for Cyfarthfa further up the Taff Fechan, alongside the river below what is now the Gurnos estate, and in 1792 William Crawshay constructed a tramroad to carry the limestone to the Cyfarthfa Ironworks. Drums full of ironstone would have been drawn by horses along a plateway formed from L-shaped iron plates was fastened to the pairs of sleeper stones that can still be seen at intervals along the route. The surviving part runs between SO 0341 0828 and SO 0348 0839.

Another necessity was water – the Cyfarthfa works were known for the great waterwheel known as Aeolus that was built in the 1790s to power the blowing engine for the furnaces. Although this was eventually replaced by a steam-powered blowing engine, Cyfarthfa continued to make use of waterpower right up until the 1870s. In 1825 the channel known as the Gurnos leat was constructed alongside the tramroad

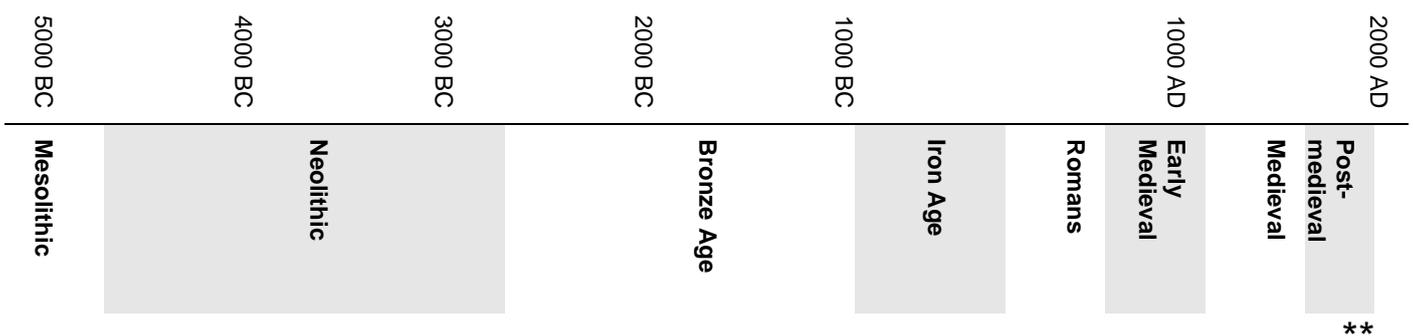
to bring water from the Taff Fechan down to Cyfartha, via Pont-y-cafau, 'Bridge of the Troughs', which took the leat and the tramway across the river to the works. The leat another branch of the leat ended at the lake in Cyfartha Park. This was not just an amenity for the grounds of the castle – it also acted as a reservoir, feeding water as it was needed into the works. This end of the leat has been partly rebuilt in brick, but further up its course it still has stone-lined banks and runs along a stone embankment above the tramway.

The leat was filled by means of a sluice in the riverbank, which lead the water via an underground channel into its head at the south end of the quarry. This was the means by which the water was kept topped up. To prevent it from bursting the banks there was an overflow further down, where the water cascades back down into the river if the leat is in danger of becoming too full.



A footpath follows the Gurnos leat and tramway, access at the bottom of Gurnos Road opposite the entrance to Cyfarthfa Park (CF48 2EH). Maps: OS Landranger Series sheet 160, Explorer Series Outdoor Leisure sheet 12.

**Timeline** (the asterisks indicate the time-span)



You can learn more about this site, and other similar archaeological sites in Wales, by going to <https://www.archwilio.org.uk/arch/>. Please read and observe the Conditions of Use. The Gurnos quarry has the PRN (Primary Record Number) 03183m, the tramroad is 02433.0m and the leat 02434.0m. You can search for other similar sites here too. You can contact us via social media or through the methods given at the bottom of the page. You can find more about the South Wales iron industry via the industrial pages of our timeline <http://www.ggat.org.uk/timeline/timeline.html>.