Sheffield Royal Infirmary

The Infirmary was the first major hospital to be built in Sheffield and was known originally as Sheffield General Infirmary. The main block was constructed between 1793 and 1797, and opened in October 1797. Other wings and extensions were added at intervals from 1844 until 1935. The main building is currently awaiting a new use.

The main building is constructed in large blocks of dimension stone (i.e. load-bearing), using a coarse gritstone which exhibits cross-bedding in places; planar bedding in others. The colour is quite variable, ranging from brown iron oxidation staining to a grey, leached appearance. Seen from ground level, the roof appears to be of grey slate, presumably Welsh, although it is conceivable that the building has been re-roofed since 1793.

Where did the stone and slate come from? The following account is included in full, in the order in which the information came to light, to indicate the methods which may be used to try to find out such sources.

Archive quotes for roofing slates in 1793 were straightforward, with “Best Westmorland Slate” at £3 10/- per ton and Best Welch (sic) Slate at the same price. Presumably, these charges include transport. No means of transport is given, but similar quotes for the supply of timber refer to it being brought to Tinsley Wharf (the canal was not extended to Sheffield itself until 1819).

There are tantalising references to the source of the building stone blocks in Sheffield Archives, but they are mostly potential suppliers’ quotations given in the summer of 1793, rather than firm contracts. The main hopeful quarry owner seems to have been the Rev.
Halliday with quarries on Loxley Chace (*sic*), although there are hints that he was not willing to let the stone be supplied on credit and would expect prompt payment! Rev. Halliday's terms were “3/6d per ton for getting and squaring in the common way” and appear to have been 4/- (per ton?) for delivery to the site – a clear indication of the high costs of transport compared with actual quarrying. A Mr. Ridal was proposing to supply stone “up to the top of the plinth, from the quarries belonging to Revd. Mr. Halliday on Loxley Chace, according to such sizes as may be described by the architect, at the rate of two shillings and sixpence per ton” (= 12½ p). The plinth is the base of the building, and in other situations e.g. the Hillsborough Barracks, a different stone is used for the rest of the structure. However, at the Infirmary, the same stone seems to have been used for the whole complex, without a break.

Other firms were quoting for plain ashlar (for corners) and circular ashlar (for columns), and quotes came from quarries including Fox Hill Delf and Skew Hill Quarry, both lying north of the city on Grenoside Sandstone.

The 1855 map (Yorkshire 288) shows substantial quarries at both Fox Hill and Skew Hill, near Grenoside, but the finer-grained nature of the stone at these sites would rule them out as a source, in spite of the quotes received from them in the 1790s. Another possibility would be the Rough Rock, but there are no quotes in the Archives from quarries in this stone.

Fox Hill Quarry, Birley Edge, probably around 1910
S10859.  www.picturesheffield.com

Jon. Hawksley quoted 3/- per ton for carriage of stone from Loxley.
Robert Unwin gave his opinion that “Moor Stone has been found to be the most durable”.
Yes, but which moor?
An apparent entry from an overseer required that “the stone be got upon its bed”, i.e. that blocks should be of such a size that they could be laid parallel to the original bedding, rather than vertically, to reduce water penetration and hence weathering rates.

The nature of the stone would suggest that it probably comes from the Loxley Edge Rock, or from the Wharncliffe Rock. The Sheffield Independent of 1820 reported that “The beautiful stone of which the Infirmary is built came from quarries at Loxley”.
Curiously, there are no quarries or “old quarries” shown on the 1855 “6 inch” OS map of Loxley Chase, and the quantity of stone required means that a quarry would have been obvious for years afterwards. There is, however, a large quarry in the Loxley Edge Rock at Wadsley, impinging on Wadsley/Loxley Commons (not Chase), which was known to be very productive in records of 1858, although not mentioned by John Farey in 1811. The Common was later affected by large scale working of ganister and the ground is confused and overgrown. However, a land ownership map of the Manor of Wadsley of 1787 indicates only a very small quarry at Wadsley and it is evident that its growth was largely a 19th Century phenomenon.
Fortunately, the same map indicates the northern boundary of land belonging to Thomas Halliday, running along Loxley Edge and extending down the scarp slope along the outcrop of the Loxley Edge Rock into a now heavily wooded area. Clearly, this must be the land
referred to in the quotes, as belonging to Rev. Halliday. A field search was rewarded with the discovery of an extensive set of overgrown shallow quarries running along below the Edge, as marked on the 1855 Ordnance Survey map. There are also many huge blocks of sandstone which slid down the slope under permafrost conditions during the last glaciation, which could also have provided good blocks of building stone. Well-built haulage tracks appear to link the quarries to the more level ground at the foot of the slope. In places, several rock faces exhibit surfaces which have been smoothed off by chisels, ready for extraction. Finally a jumble of well-shaped blocks was found lying below a quarry face, almost ready for carting off for building purposes. Whether these date from the 1790s is impossible to say, but it now makes it look almost certain that here was the source of the stone for the Royal Infirmary, and maybe other buildings, too.

References:

From Sheffield Archives:

*The Story of the Royal Infirmary, Sheffield, 1797-1947*, by Dr A. Gurney Yates. This says nothing about the stone, but gives the dates of successive extensions.

File NHS/17/2/2, with sub-files up to NHS 17/2/2/22. Quotes for sourcing and carrying building stone from a range of contractors.

MD5685. Plan of Wadsley Manor, 1787.

Fox Hill Quarry photograph from Sheffield Archives and Local Studies Library.

Sheffield Independent of 22\textsuperscript{nd} January 1820, quoting from Joseph Hunter's "Hallamshire".

Peter Kennett, v2, June 2015  © Sheffield Area Geology Trust