

BUILDINGS AT RISK

Bridges and head-pennies: a history of our longest river

Our Buildings at Risk series covers buildings and structures at risk, lost and saved; and this week Dave Martin of the Isle of Man Natural History and Antiquarian Society continues our trip down the Sulby river, and some of its tributaries, looking at a selection of the bridges and other structures used to cross the rivers and streams.

Last time, we got as far as the 'five ton' bridge at the Western end of Sulby Claddagh, built of recycled Harbour Board crane girders in 1935 to replace the ford and footbridge swept away in the 1930 'great flood'.

Often unnoticed, the only visible evidence to those passing by on the road now might be a parapet railing or wall – but in some cases the bridge parapet appears as one with the roadside wall so even that clue may not be obvious – but the name may enter memory for what happens/happened there, than for its water-crossing ability.

For example, that 'five ton' bridge on the Claddagh is still renowned amongst the motor rallying fraternity as the scene of some epic two-wheeled cornering by the likes of Pentti Airikkala and Malcolm Wilson.

Much of the land to the north of the current course of the Sulby river was wet or curragh land.

Beyond the village of Sulby – as we head east towards Ramsey traversing the flat northern plain – habitation and communications continue along the southern edge of the curraghs / former Lake Andreas.

The majority of the curraghs were not that accessible, but there were higher/drier spots, such as 'Ellanbane' – white island – and possibly, whilst its exact location is still not known, Myerscough Abbey.

The abbey held lands up into the northern foothills – for example the farm known as The Grangee above Narradale – and could surely have established their house on dry ground – but it is believed they



Narradale bridge with two 'slate'-slabbed square spans

chose to build it somewhere in those curraghs, possibly as a defensive measure.

In general though, water-courses and curraghs were an obstacle to most on the island.

Last time, we saw how slabs of Manx 'slate' could be used to span a ditch or very narrow stream – but you can't splice lengths of slate together.

If the stream to be crossed

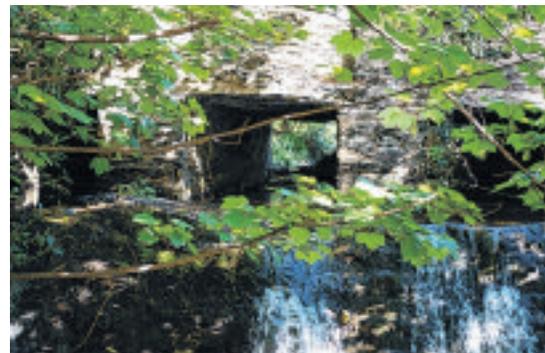
was wider than a single slab could span, one approach was to divide the width to be spanned into smaller lengths that could safely be spanned, but they needed to be supported on what were effectively stepping-stones for bridges!

This was done by erecting masonry pillars or piers mid-stream so one slab went from the first bank to the mid-stream pier and then the second slab from the pier to the other bank.

Where the banks were themselves exposed bedrock, the ends of the bridge would have good foundations.

Otherwise it became necessary to build a solid masonry foundation – the abutments – which would hold the weight of the bridge and prevent erosion and undermining of the ends of the bridge.

If you build a mid-stream bridge pier with a flat up-



Ballamanaugh bridge with three 'slate' slab spans

stream face, it takes the pressure of oncoming water, and can be eroded and is prone to collecting debris being washed downstream, so it became practice to add protection like the bow of a ship to deflect the water away from the pier and under the spans.

Two excellent honest as-

yet unspoiled examples of multi-span slate slab bridges can be seen on the Sulby river's tributaries which come down from the hills either side of Cronk Sumark.

In Narradale, there is a two slab span bridge (reputedly haunted – but by whom is not recorded).

The Ballamanaugh stream – which joins the Sulby river just at the western end of Sulby Claddagh – was too wide for even two slate-slab spans, so it was crossed in three spans which means abutments (foundations) on either bank and then two mid-river piers.

Whilst girder or concrete slab bridges have flat bottoms, as can be seen from the pictures of Narradale and Ballamanaugh bridges, a slate slab bridge (especially multi-span) does have definite diagnostic characteristic square-shaped spans.

For many hundreds of years, roads had been maintained and even improved by communities, and then organised at a parish level; and communities even came together to build bridges, such as that at



Protective 'bow' on upstream pier face at Narradale



Sulby Bridge, as known to millions of TT fans (photo: Richard Martin)



A modern bridge on the Bayr ny Hayrey (Bernahara) road over a drainage

Tholt-y-Will. However, bridge upkeep was problematical, especially sometimes when a bridge straddled parochial boundaries, as rivers were sometimes used as part of a parish's boundaries.

Also, no parish was keen to build a bridge which was any more than its own parishioners needed.

Such was the impact of riverine obstacles to the island's commerce, especially to the citizenry of the island's towns, pressure grew, and in 1739 Tynwald passed 'An Act for the building and repairing of Bridges within this Isle'.

'Whereas the building and Repairing of Bridges is found to be not only convenient but

absolutely necessary for the publick Advantage and safe Travelling of the People of this Isle in general; be it therefore ordained.. that with all convenient speed .. new Bridges shall be built and erected over such Rivers, Streams and Waters running cross the Highroads of the Isle at such Places as shall be deemed most necessary for Travellers and Carriages ... and likewise that the old Bridges shall be repaired.'

To fund this work (and repairs to the Chapel used by Tynwald at St John's), Tynwald instigated an all-island levy.

Poll taxes had been used to raise funds in Britain for military adventures, and to replenish the 'public purse', but

at least in the Isle of Man, this 1739 Act was one of the first occasions when an attempt was made to fund the island's infrastructure equitably and for a specific purpose.

The levy was one penny per head per annum, payable by all between ages of 16 and 60 unless 'decrepit ... or disabled by Poverty', and was to be collected each spring from both permanent residents and those visiting the island at the time of collection.

The 1739 Bridges Act also empowered compulsory acquisition of land to create better road access to bridges, and penalties for non-cooperation; but went on to specify compensation for those whose land had been so taken.

As well general instructions on the need for maintaining old, and building new, bridges, '... in order to prevent any Disputes that may arise concerning the Different Places where such Bridges are to be erected..' the 1739 Act specified five locations where bridges were urgently needed and should be built as soon as the head-penny levy was in operation and had collected sufficient to start, and top of the list was: '... first built over



Stonework on the 1876 bridge which carries the Jurby Road over a stream near Lough Mallow

At a Tynwald Court holden at St. John's Chappel the 25th Day of June, in the Year of our Lord God one thousand seven hundred and thirty-nine, before the Honourable James Murray, Esq., Governor, the Council, Deemster, and Keyes of this Isle, now assembled.

An Act for the building and repairing of Bridges within this Isle.¹

Whereas the building and repairing of Bridges is found to be not only convenient but absolutely necessary for the publick Advantage and safe Travelling of the People of this Isle in general; be it therefore ordained, declared, and enacted by the Most Noble and Puissant Prince James Duke of Atholl, Baron Strange, Lord of Mann and the Isles, &c. by and with the Advice and Consent of the Governor, Council, Deemster, and Keyes, in this present Tynwald Court assembled, and by the Authority of the same, That with all convenient Speed, and especially as soon as the Fund to be raised and settled by this Act shall enable thereunto, new Bridges shall be built and erected over such Rivers, Streams, and Waters running cross the Highroads of this Isle, at such Places as shall be deemed most necessary and convenient for Travellers and Carriages, in Manner hereafter directed and appointed by this Act; and likewise, that the old Bridges, and also the Chappel of St. John Baptist at the Tynwald, shall be repaired and amended in a sufficient Manner, under the same Direction hereafter mentioned: And, for the raising and establishing of a proper Fund or Supply to carry on so necessary Works, be it ordained and enacted by the Authority aforesaid, That every Man and Woman, Natives of this Isle, of the Age of sixteen Years and upwards, and also every Stranger Man and Woman of the same Age inhabiting here, shall and are hereby obliged to pay to the Persons now to be appointed respectively to collect and receive the same, the Sum of one Penny each Yearly and every Year during the Term hereafter limited by this Act; and that none shall be exempt from the Payment thereof, save only such as shall be found to be decrepit, indigent, or disabled by Poverty, being past sixty Years of Age, and not otherwise, which is to be particularly enquired of and

Bridges.

St. John's Chapel to be repaired.

Head Money of one Penny per Annum.

¹ Renewed for 21 years by Act of 1753, Chap. 2., but expired.

The 1739 Bridges Act

(courtesy Tynwald Library)



Garey ford

the River of Sulby, in the Parish of Kirk Christ Lezayre, at and upon the most convenient Part or Place of or near the antique Highway there;...

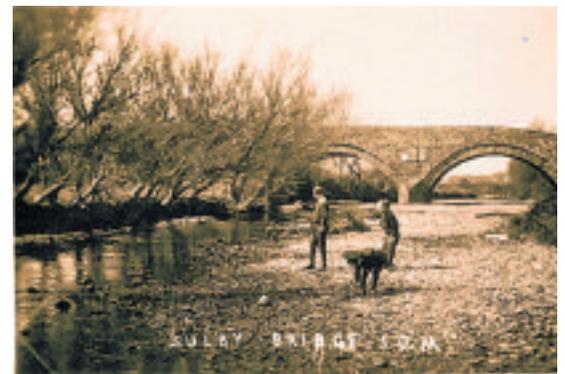
So, Sulby Bridge was the first of those bridges built under the all-island scheme in the 1739 Bridges Act.

These first bridges were built with a carriageway literally wide enough for two carriages – a 15 feet wide deck.

Over time though, they have been strengthened and widened – at times sympathetically; at times less so.

Sulby Bridge's delicate stone-arched spans have now been replaced by iron girders; neither the bridge's structure, or indeed the river, are really visible from the roadway, but the mere fact it is a bridge at Sulby is known to millions, courtesy of the TT races.

Due to the lack of quarryable stone on the northern plain, buildings and structures – including bridges – were commonly built with 'shore stone' (collected from beaches or dropped in fields



The previous stone Sulby Bridge, now supported on iron girders (photo: Manx Museum)

by the glaciers) whose rounded surfaces made bonding more difficult.

Sulby bridge was itself built with stone quarried from the nearby hills; and once built, the bridge itself had an impact on building in the north of the island, as it provided an easier way to carry better building stone.

This better stone wasn't just used for dwellings and

agricultural buildings though – it was used for more bridges, such as that which carries the Jurby Road over one of the streams which drain into the Sulby river from the north.

Later bridges, such as on the Bayr ny Hayrey (Bernahara) road over the Sulby river and its northern tributaries exploited concrete, although some still had stone parapets.

To be continued...