
RESTORATION OF THE 'SHAKKIN BRIGGIE'

across the River Dee at Cults



The Bridge

Named St. Devenick's Bridge by its builder, but popularly known as the Shakkin' Briggie, the bridge is probably unique in Britain as an example of an early cast iron chain suspension bridge.

The two rough stone support piers are some 180 ft. apart and are surmounted by cast iron Greek Doric style towers. The suspension 'chains' that pass over the towers are made of 3 in. diameter, 6 ft. long, cast iron bars. The chains are anchored some 45 ft. back into massive stone anchor blocks, one on the north bank and the other now stranded in the middle of the river.

At the join of each pair of 'chain' bars slender hanger rods descend to transverse iron deck beams. These beams support the timber decking. The lattice pattern guard rails appear to be lattice girders but are also wooden and have no structural importance.

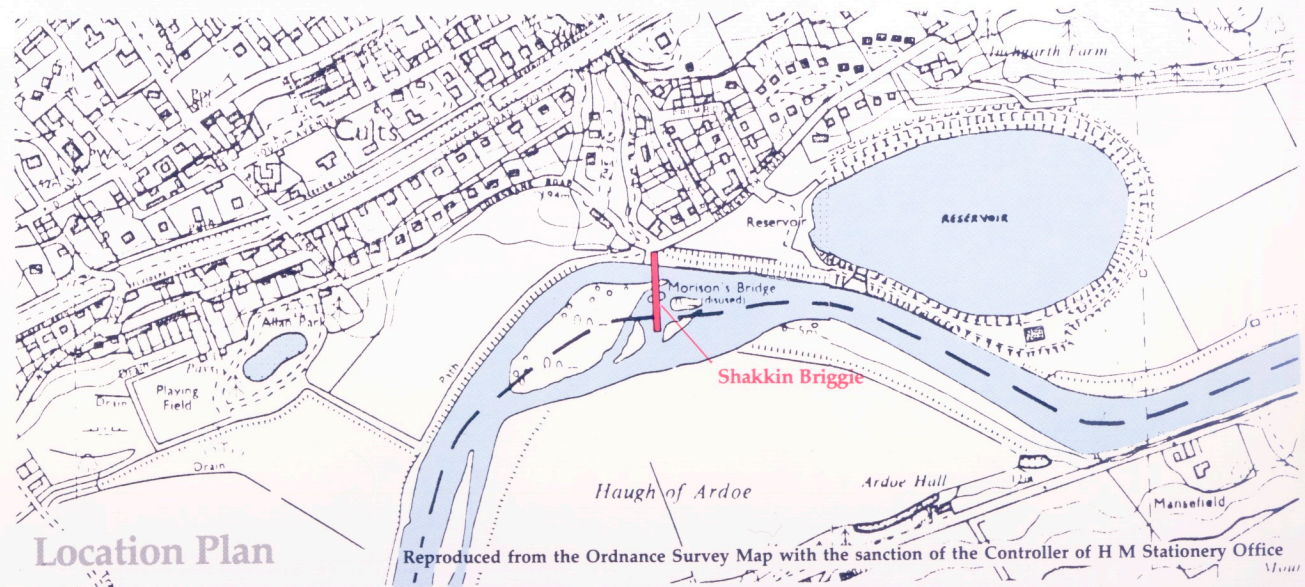
The inherent lightness of form of the suspension construction, the classical column style and lattice railing combined to produce a structure that not only performed a very useful service but also had a most pleasing appearance. However, the light suspension construction also gave it considerable flexibility and allowed quite a lot of movement as people crossed it — so the Shakkin' Briggie got its popular name.

TOP RIGHT

The Bridge at the turn of the century — Reproduced by kind permission of the Aberdeen University Library from the George Washington Wilson Collection.

FRONT and BACK COVERS

The Bridge in the late seventies — Photographs courtesy of City Planning Department.



The Challenges

The goal is to restore the Shakkin' Briggie and to construct a new span to complete the crossing. A number of objectives form the key challenges to be met in reaching this goal.

Legal

Form a Trust to take legal responsibility for the Bridge.

Invite the local authority to acquire a statutory title that can be conveyed to the Trust.

Obtain a right of access on the southern bank.

Obtain consents for the extension to the southern bank.

Funding

Obtain grants for restoration, without competing with the funding of social charities. Also sponsorship and assistance in kind.

Engineering

Remove, refurbish, test and re-hang suspension links.

Fabricate and install replacement decking.

Design and install low cost but aesthetically acceptable extension to the south bank.

Environment

Restore any temporary works.

Ensure fishing and wildlife is not disturbed.

Construct suitable picnic area.

Construct car park.

Connect into natural walkway system.



Dr Morison painted by James Giles RSA — reproduced by permission of the University of Aberdeen.

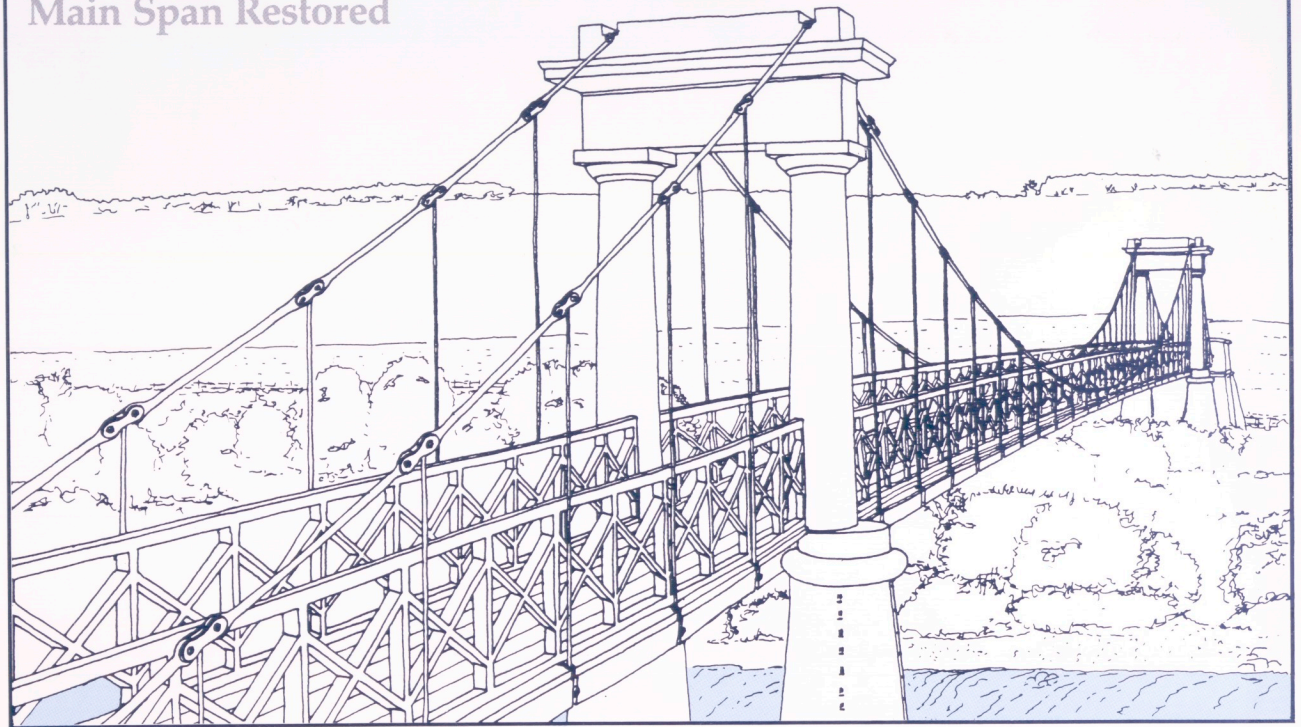
The Architect and Builders

The Shakkin' Briggie was Architect John Smith's only solo effort in suspension bridge design. He had previously helped design the towers and approaches of the Wellington Bridge for Captain Samuel Brown — the pioneer suspension bridge builder. He went on to be Aberdeen's City Architect and made his name mainly in civic and domestic works, although he did help Thomas Telford design the Bridge of Don, and also collaborated in the widening of the Bridge of Dee.

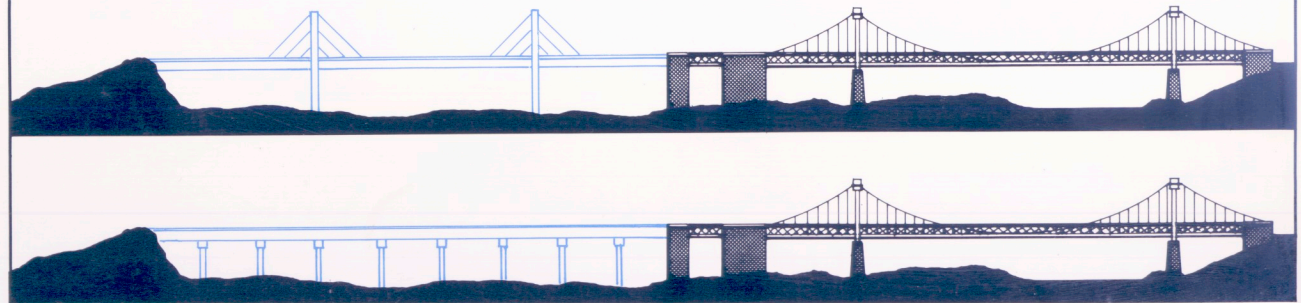
Dr. Morison first discussed his bridge not with the Architect but with local Cults builder George Barclay, who was an elder of his kirk. Barclay's most curious claim to fame was as an inventor of a patent cast iron chest used to protect recent burials from grave robbers. However, his main skill was as a joiner and his eventual role in the bridge building was to make the deck and railings.

Barclay's timber work, not surprisingly, has needed replacement over the years but the most durable parts were the work of George Donaldson, who constructed the footings and piers, and John Duffus & Company, prominent Aberdeen iron-founders, who cast the towers, chain rods, hangers, etc.

Main Span Restored



Possible Extensions



Summary

The Shakkin' Briggie footbridge is a Grade A listed building with strong local historic connections.

The Bridge is now derelict but could be restored.

A Project Team has established a plan to restore the Bridge and construct a new span to complete a crossing, at an estimated cost in the order of £770,000, [at end 1990 prices], over three years.

A trust is needed to direct the restoration and ensure preservation of the Bridge.

The support of many public and private bodies is needed for funds and other forms of assistance. The Aberdeen City Local Plan pledges the District Council's support.

The Project Team

As well as formulating a proposal and plan for restoration a Project Team has, over the last few years, established:

There is no apparent claimant to ownership of the bridge.

The footings of the bridge appear sound below water.

The stone piers and cast pillars appear basically sound.

A section of the bridge decking timbers are in the custody of the City of Aberdeen District Council.

The Bridge's History

1836 — Dr. Morison decides to build a bridge to give a safe way across the River Dee for the 700 Banchory-Devenick church parishioners who lived on the Cults and Murtle estates.

1837 — The bridge is opened.

1840 — Dr. Morison settles a capital sum on the Kirk Session, '... to maintain and uphold in time coming..'

1845 — Dr. Morison dies and the bridge 'belongs' to the Kirk Session.

1890 — Element of parish north of the river ceded to the Peterculter parish by Act of Parliament.

1845-1920 — The bridge continues to be repaired and maintained by the Kirk Session. Early in the period extra spans are constructed to bridge a gap as the south bank shifts.

1921-1922 — Major reconstruction by the Kirk Session and others.

1922-1960's — Continuing problems with the erosion of the south bank.

Late 1960's — River cuts a secondary channel to the south of the bridge which needs action to fill in.

1970's-1980's — Secondary channel forms again and the approach spans at the south end are eventually undermined and swept away making the bridge unusable.

1984 — Local Authority removes most of the decking to make the bridge safe.

The People

The Reverend Dr. George Morison was a notable innovator and benefactor as well as a minister of religion. Born in 1758 at Elsick, some seven miles due south of the bridge, he was the fifth son of Robert Morison, Aberdeen's Provost during the '45 rising.

George Morison graduated from Marischal College as a Master of Arts in 1776 and, typical of a younger son of those days, joined the church. He ministered first at Oyne before being admitted to Banchory-Devenick in 1785. In 1824 King's College made him a Doctor of Divinity.

Married in 1786 to Margaret, Dr. Morison had no children, a problem shared with his elder brother Thomas which led to Dr. Morison inheriting from Thomas when he died. However, before inheriting the wealth of his family estate he had begun his good works with the introduction of a vaccination programme in the parish. Later, he took steps to buy, at some cost, and to distribute meal during the famine of 1800. He also formed a savings bank for his parishioners.

Money from the family estate enabled Dr. Morison to help build or endow schools at Portlethen and Fintray as well as in his own parish. He also helped to endow the church at Portlethen near his Elsick estate. Undoubtedly, though, his biggest and most famous item of spending for public benefit was for the building of the Shakkin' Briggie. This cost £1400, a large sum in those days.

Case for Restoration

Architectural and Historical Significance.

Fine architectural design.

John Smith, Aberdeen's first City Architect's, only suspension bridge.

Early example of its type of bridge.

A memorial to the Rev. Dr. George Morison and part of local church history.

Grade A listed building, in a Conservation Area.

Local Associations

Key landmark for Cults and Aberdeen, with sentimental associations.

Recreational and Tourist Potential

A pleasant walk across the river that can integrate with the footpath network.

Improves river access for fishing.

Observation platform for river wildlife.

Landmark feature.

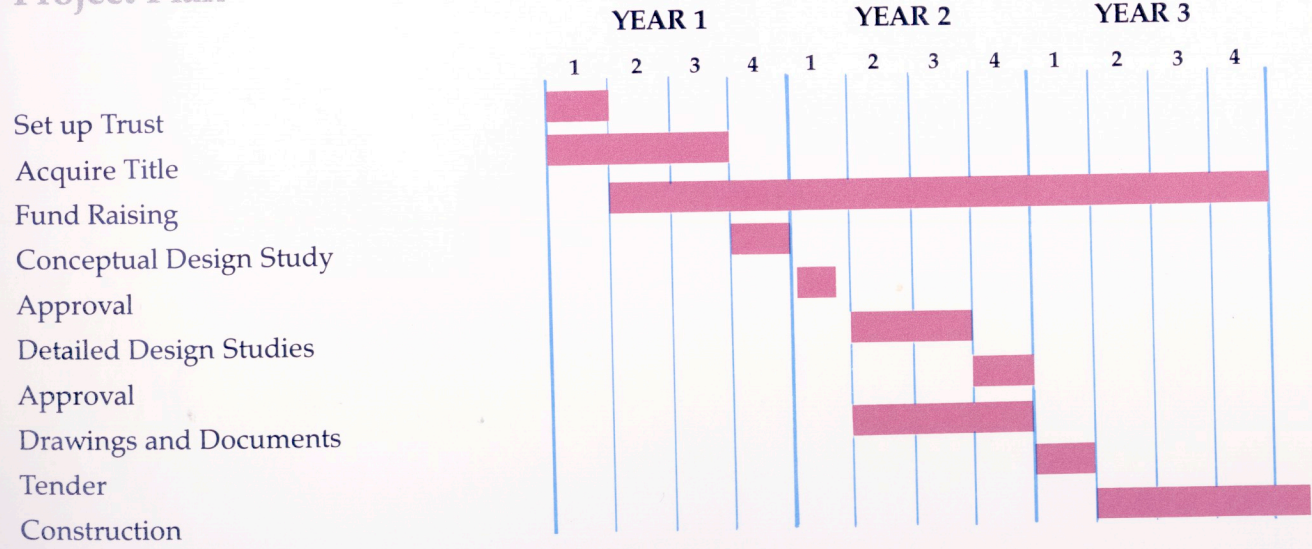
Cost Estimate

PRE-FEASIBILITY STUDY*	5,000
FEASIBILITY STUDY & CONCEPTUAL DESIGN	20,000
DETAILED DESIGN	50,000
MAIN SPAN RESTORATION	300,000
EXTENSION LINK	400,000
	£775,000

Order of magnitude cost estimated based on the costs of similar projects. The estimate is at end-1990 prices.

*presently being funded by Grampian Enterprise Limited.

Project Plan



The River

Rivers are always changing and the Dee is no different. Since time immemorial the Dee has not only seen seasonal changes in flows and levels, but has also slowly shifted its bed, particularly in the stretch from Murtle to Ardoe. Human intervention has battled to protect farm land from these problems and the course of the river has been extensively trained with embankments and armouring.

When the bridge was constructed the south bank consisted of an embankment that protected the meadows of Ardoe from all but the worst of floods, and it remained that way for 180 years. However, floods in 1955 started to erode the embankment, starting at first up-stream of the bridge but moving east at a time of spate until the 1960's when the approaches and southern end of the bridge were threatened and remedial work was carried out. By the 1980's the bridge became stranded when a strong channel became established to its south. At the same time a large shingle island had formed between this new channel and the original northern one, and it is here that the south end of the bridge now rests.

If the movement of the river has caused the 'stranding' of the bridge it is the river in seasonal spate that has caused its dereliction. In 1876 a spate carried a large salmon fishers' bothy down-river to strike the bridge but fortunately it did little damage. Neither did the half mile wide flood of 1913, but a spate in 1920 caused extensive damage to the approach spans and decking generally. This and later damage was repaired until the river movement cut the bridge off. Then, with no interest being shown in the preservation of the right of way, subsequent spates and the general ravages of the elements destroyed the southern approach span and caused the deterioration of the decking of the suspension spans.



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