

ROCHESTER  
BRIDGE TRUST  
REVIEW  
2015-2017



# WELCOME FROM THE SENIOR WARDEN

**I**t is an honour to be elected to serve as Senior Warden. I joined the Court of Wardens and Assistants in 2007, and although my ten years with the Rochester Bridge Trust are brief compared to the charity's more than 600-year history, I feel privileged to have the honour to serve this ancient institution.

The Rochester Bridge Trust is a unique survivor of the medieval system of providing bridges. It is the only major independent bridge trust still serving its original purpose – to provide river crossings free of charge to the public.

For many centuries after the fall of the Roman Empire, the task of maintaining Rochester Bridge fell to parishes and manors across a large part of Kent and Medway. The responsibilities were laid out in the Bridge Work List, the earliest surviving copy of which appears in the Textus Roffensis, a 12th century register of the Bishop of Rochester. In 1399, following construction of the medieval crossing, letters patent of Richard II formed these parishes into a Commonalty and charged them to elect two Wardens to oversee maintenance and repair of the bridge. Reforms in the reign of Elizabeth I and again in 1908 saw an increasing number of Assistants elected to support the Wardens. In 1999 a new Charity Commission scheme established the Court arrangements we have today.

There are now 12 members of the Court. Three are nominated by Medway Council, two by Kent County Council, one by Maidstone Borough

Council and six are appointed from the community by the Trust. Two of the members are then elected from the Court to serve as the Junior and Senior Wardens.



Philip Filmer, the Junior Warden, was nominated by Medway Council and has a background in building and civil engineering. I am a quantity surveyor and Fellow of the Royal Institution of Chartered Surveyors and was appointed to the Court following public advertisement. Collectively the Assistant Wardens have experience in engineering, finance, property management, investments, transport planning, agriculture, history, academic research and more.

The Wardens are elected to serve for two years, with members of the Court elected on four or five-year terms. We are supported by a small team of salaried staff.

We hope this review gives an insight into the work of the Rochester Bridge Trust over the past two financial years (1 April 2015 to 31 March 2017) and that you enjoy reading it. If you would like to read the full annual reports and financial statements these can be found on our website at [www.rbt.org.uk](http://www.rbt.org.uk).

# ABOUT THE TRUST

**T**he Rochester Bridge Trust was established in 1399, following construction of the medieval bridge, but this was not the first bridge on the site.

Soon after the Roman conquest under Claudius in 43 AD, the first bridge was built on the main road running from London to Dover. Consisting of nine stone piers, deep foundations and a flat timber roadway, this is believed to have been the first major Roman bridge in Britain. It stood, although much repaired, for 12 centuries. Then in 1381 a flood finally swept away the crossing.

The medieval bridge was built 100 yards upstream of its predecessor, close to where the Bridge Chapel still stands. It was a stone arch bridge consisting of 12 piers and a roadway paved with ragstone, with one opening crossed by a wooden drawbridge. The crossing was designed by the foremost architect of the day, Henry Yevele. Construction was organised and paid for by Sir John de Cobham and Sir Robert Knolles, who persuaded other benefactors to give land and property for its perpetual maintenance – they were, in effect, the founders of the Rochester Bridge Trust. Income from these endowments has been used to maintain the river crossing ever since.

The medieval bridge required continual maintenance. In the late 18th century a large-scale modernisation programme was carried out, widening the bridge and creating a great central arch to ease the passage of road and river traffic.

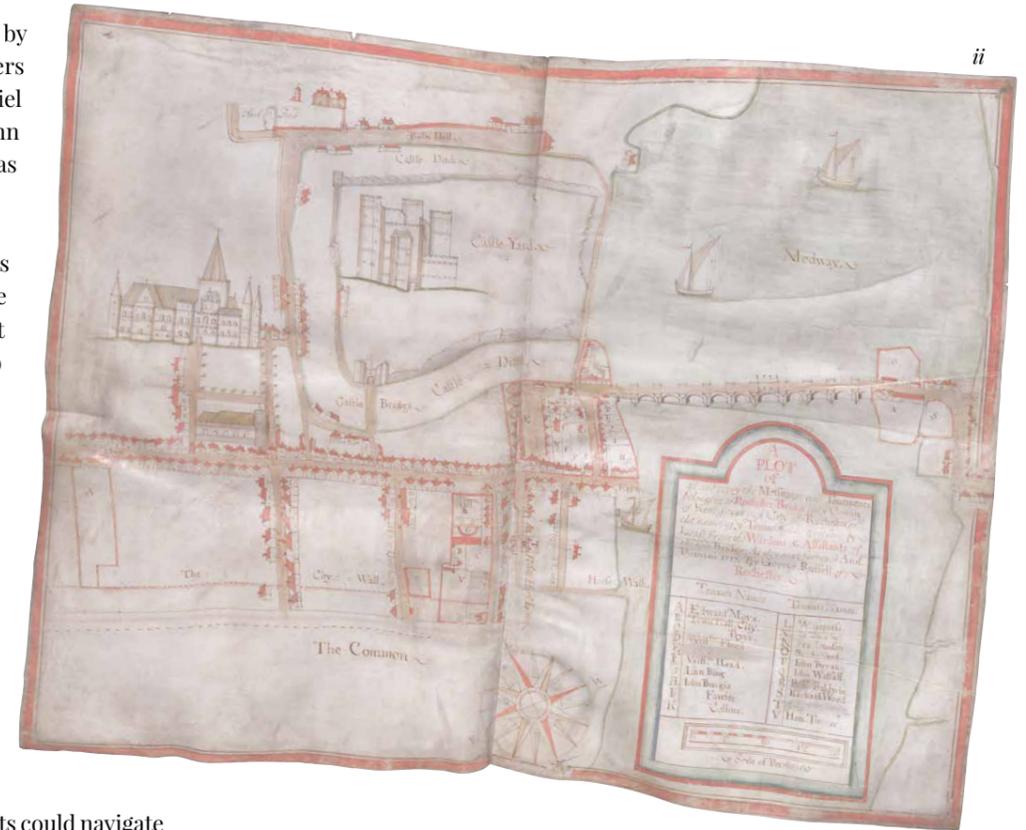
This work was led by leading civil engineers of the day – Daniel Alexander, John Rennie and Thomas Telford.

Modernisation was not enough. In the 1850s the Trust used its funds to completely replace the bridge with a cast-iron Victorian structure that took the bridge back to the site of the original Roman crossing. The new bridge had three arches and a swing bridge over a ship's passage so that boats with fixed masts could navigate upriver. It was designed by eminent engineer Sir William Cubitt. At the same time, the Trust used much of the stone from the old medieval bridge to build Rochester Esplanade and the river walls.

Just 50 years after the Victorian bridge's completion, a number of collisions from river traffic meant it was in need of refurbishment and by 1909 it had suffered so much damage that a major renovation was required.

What is today known as the Old Bridge is the result of major alterations to the Victorian crossing. The roadway was raised and the cast iron arches under the bridge were replaced with steel bowstring trusses above, the swing bridge across the ship's passage was permanently closed. Once again, this work was carried out at no cost to the public – the expenditure being funded from the proceeds of the original medieval endowment.

Around half a century later more work was needed, as the Old Bridge struggled to provide enough capacity to meet the increasing needs of



ii: 1717 map of Rochester, depicting the medieval bridge, drawn by George Russell

modern road traffic. This time, the Trust utilised the foundations of a disused railway bridge as a base to build the New Bridge. Between the two road crossings a further Service Bridge was also created. These are the three structures the Trust owns and cares for today.

The three bridges undergo a constant programme of inspection, care and maintenance. In parallel, the land, buildings and structures of the property estate are repaired, improved and developed so that they may continue to generate the resources which fund the Trust's work. The careful management and improvement of all the assets builds on six centuries of history to ensure a bridge will continue to link Rochester and Strood for the next 600 years and beyond.

The Trust's vision is that a safe and well-maintained crossing of the River Medway at Rochester will be provided in perpetuity. It aims to provide Rochester Bridge in an efficient way and apply any surplus funds to support education and conservation projects in the fields of engineering and heritage.

Achieving the vision and mission without any recourse to public funds requires the Trust to ensure it continues to exercise its values of independence, leadership and a focus on the long-term. This is achieved through strong risk management, prudent financial control and an investment in quality throughout all aspects of the Trust's work.

It is necessary to take a very long-term view of liabilities and assets given the lifespan of a major estuary bridge and the need for thorough maintenance and care to extend that life for as long as possible.

Financial planning for such a long time period of well over 100 years is a complex issue and the support of a specialist actuary is engaged. This advice is used to inform the approach to investments in both property and financial instruments. The robust approach ensures a resilient cash flow and the accumulation of reserves necessary to meet maintenance costs and ultimate replacements for the bridges, and to fund other charitable work.

# THE BRIDGES

*i: The Old Bridge, the Service Bridge and the New Bridge*

*ii: A bird's eye view of the bridges, including the rail bridge not owned by the Trust*



The Trust is committed to maintaining its bridges and other assets to the very highest standards in terms of their structures, utility and appearance. The consulting engineering firm Arcadis (UK) provides structural engineering advice and supervises all work carried out on the bridges.

As the primary charitable objective is to provide crossings of the Medway for all road users, including cyclists and pedestrians, the Trust goes to great lengths to minimise the duration and extent of any footway and carriageway closures. For the safety of the public and our contractors, and to carry out invasive repairs, sometimes lane or footway closures are unavoidable, but wherever practicable works

are carried out at night or during off-peak periods. Although these working arrangements can attract additional cost, by carrying out many tasks simultaneously the expense is managed and the local disruption is minimised as far as possible.

Unfortunately the Trust has no influence over the traffic signal junctions at each end of the bridges or the connecting highways but it is able to control the activities carried out by statutory undertakers on the bridges themselves to ensure their work does not unduly disrupt travel.

Routine care and maintenance of the bridges is carried out for the Trust by contractor FM Conway, under a five-year term maintenance contract. Conway's staff will be seen working on the bridge throughout

the week on highway, footway and structure cleaning and repairs; drainage maintenance; and street lighting maintenance. Ensuring good day-to-day maintenance can prevent or postpone the need for major intervention.

The Old Bridge is Grade II listed and particular care is needed to respect and preserve the heritage of the structure. In 2016 it was necessary to rebuild a wall which forms the front of the workshops under the Old Bridge on the Strood bank, to repair cracking and deterioration. Working closely with the local conservation officer, the design of the repair and the choice of materials was developed using plans and photographs from the archives and sample panels of different types of brick to ensure the work was as sensitive to the original structure as possible.

This year the Trust has also invested in new instrumentation, powered by solar energy, which automatically monitors the changes to the bridges as a result of fluctuations in temperature and measures the level of the river. This data will help to improve further the understanding of the behaviour and structural health of the bridges.



Although the main structures of the bridges remain sound, some elements have reached the end of their useful life and a project is under way to prepare for renewal or renovation of these. This work, which is planned to begin late in 2018 subject to various approvals and successful tendering, will deliver new street lighting, parapets and surfacing for the New Bridge; renovation of the ornate lighting, expansion joints and surfacing on the Old Bridge; and repairs and improvements to the appearance of Rochester Esplanade and the river walls. All of this work is being carefully planned to keep any disruption to a minimum.



**The Roman bridge**  
*circa AD43-1381*

The Roman bridge crossed the River Medway on the line of Watling Street, the main Roman road running from London to Richborough and Dover on the Kent coast. It was built soon after the Roman conquest.

**The medieval bridge**  
*1391-1856*

Following the findings of a royal commission, it took four years for the medieval stone crossing to be constructed as a replacement to the Roman bridge. The Rochester Bridge Trust was founded at this time.



**The Victorian bridge**  
*1856-1914*

A cast-iron arch bridge, this was one of several designs considered when it was realised the medieval bridge could no longer meet the needs of river and road traffic. At this time the swing bridge was also installed.



**The Old Bridge**  
*1914-present*

Between 1910 and 1914 the Victorian bridge was reconstructed to become the striking, well-loved, crossing we have today.



**The New Bridge**  
*1970-present*

An increase in road traffic saw the need arise for a second river crossing, and so the New Bridge was built using the foundations of a former railway bridge.



*iii & iv: FM Conway at work*

*v: From the top: the Roman bridge, the medieval bridge, the Victorian bridge, the Old Bridge, the New Bridge*

Children have taken part in a range of activities, including a tour of the bridges



# LOOKING TO THE FUTURE

**I**n order to ensure there continues to be a bridge at Rochester for the next 600 years, the Trust recognises the importance of developing the next generation of civil engineers.

The Trust has a long history of supporting education. Over a century ago, it supported young people by establishing and funding both Maidstone Girls Grammar School and Rochester Grammar School, and providing major funding for the boys' grammar schools. In more recent times the Trust founded the Bridge Wardens' College and endowed Chairs of Microbiology and Bridge and Tunnel Engineering at Kent higher education institutions.

The Bridge Wardens' Arkwright Scholars programme supports academically outstanding young

people with an interest in civil engineering by providing them and their schools with additional funding and providing access to career and development opportunities, such as site visits and networking events. Nine scholars have so far benefitted from the Trust's mentoring and support. Four are studying for A-levels, four are at major UK universities studying civil engineering and one has completed his first class master's degree and is now working towards a doctorate. More information about their progress can be found on the education website.

In 2016 the Trust appointed two part-time Education Officers to extend its engineering education activities to a greater number of young people. A wide range of events and resources has been delivered and more projects are in development



i: Education mascot Langdon the Lion regularly attends events



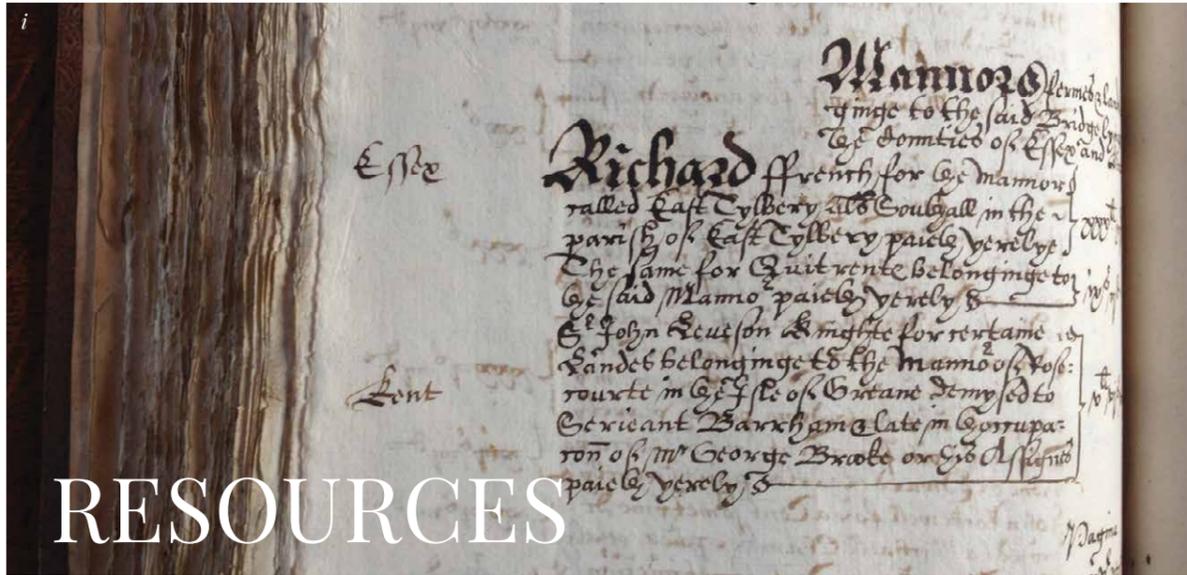
which will help to engage primary and secondary school aged children in the potential of civil engineering. The book of lesson plans, Learning about Bridges, continues to be given out free to schools and community groups, and mascot Langdon the Lion is a hit with children of all ages.

To access the Trust's free learning materials and find out more about education events visit [www.rochesterbridgetrust.org.uk](http://www.rochesterbridgetrust.org.uk).



i: Documents signed by kings and queens are stored in the Trust's archives

ii: Robert Rowe was the first named Bridge Warden, he is named in this account roll dated 1399-1400



# RESOURCES

The investments of the Trust are divided between direct property holdings and various financial instruments. The balance between the two is currently approximately 60 per cent direct property and 40 per cent financial.

During the late 14th and early 15th centuries, Sir John de Cobham, Sir Thomas Langley and other benefactors endowed the Trust with money, land and property in London,

Essex and Kent. The income from interest, granting leases and licences and from development of properties was used to fund the repair and maintenance of Rochester Bridge, and it continues to do so today.

The Rochester Bridge Trust estate remained virtually unchanged from medieval times until the late 19th century, when the Charity Commission granted the Trust powers to buy and sell land. Although many of the properties have since

been sold and new investments made in their place, some of the original endowment still remains. The property estate is managed for the Trust by Savills Plc.

Many new properties have been added to the portfolio over the years and in 2016 the Trust made a major new purchase of the Springthorpe Estate in Lincolnshire. This is a traditional estate of arable farms and the Trust has invested over £300,000 into capital repairs and

iii: The Shorts Scion Floatplane is a work in progress in the MAPSL workshop

improvements to the farmhouses and buildings to assist the tenants and preserve the long-term value of the estate. Elsewhere on the agricultural holdings there have been upgrades to electrical supplies, general repairs and a major programme of roof and structural repairs to a range of listed outbuildings.

There are a number of commercial buildings on the portfolio including shops, factories, warehouses, an airfield and a bus garage. In 2016, the Trust was very pleased to enter into a long-term lease with an Italian-owned company, DiaSorin SpA. The company, whose products include medical diagnostic kits, had been a sub-tenant in the property at Dartford for several years but now holds a lease directly from the Trust. Residential properties are owned in Kent, West Sussex, Cambridgeshire

and Lincolnshire and all are let to produce income.

The trustees have a duty to use their investment property holdings to maximise funds for delivering the specific primary charitable purposes and for no other purpose. From time to time a site will be identified which may be suitable for development which would raise funds for the charity and an application for planning permission will be made which takes account of local and national planning policies. Various applications were made directly or under option or promotion agreements with development partners and a number of other schemes are in preparation.

The majority of financial investments are managed for the Trust by Rathbone Investments and there

is a balanced portfolio of funds, individual stocks and fixed income products. Some indirect property fund holdings and cash are directly managed by the Trust.

Recent turbulence in the economy and the uncertain geopolitical climate makes it difficult to predict future financial performance but strong management and the diversity of the investment portfolio puts the Trust in the best possible position to take a very long-term view of its financial position given the extended periods between major expenditure.

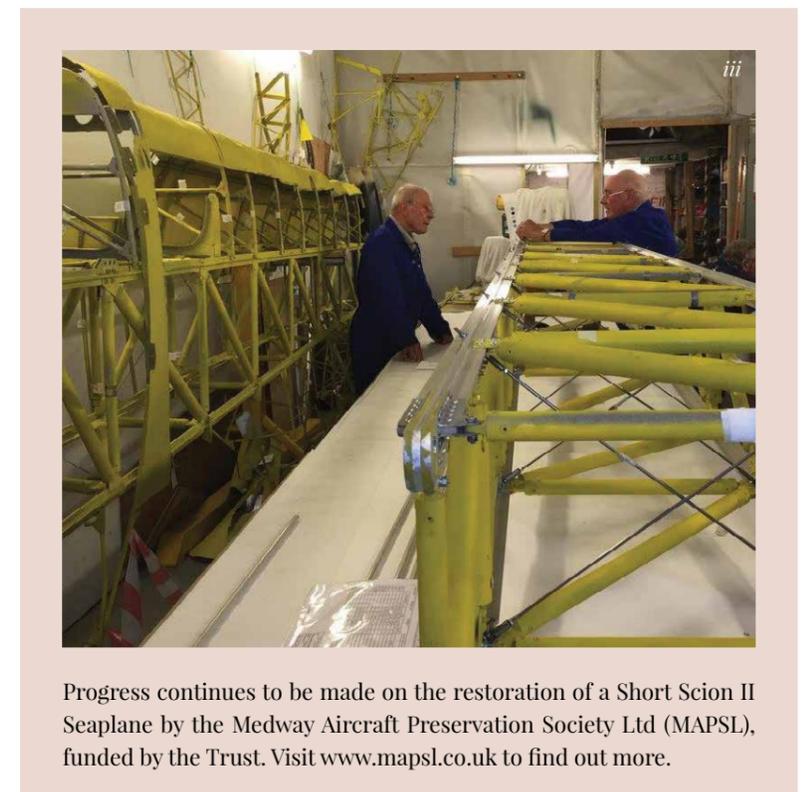
The cost of civil engineering works is rising very quickly, having almost doubled in the first decade of the 21st century alone, and it is essential that the Trust works hard to maximise its income to protect its reserve position for the long term.

	2015/2016	2016/2017
Expenditure on bridge maintenance	£1.34m	£2.01m
Expenditure on investment property (essential repairs and improvements)	£0.78m	£1.43m
Expenditure on grants and other charitable activities	£0.20m	£0.23m
Incoming funds (mainly investment income and rents)	£3.27m	£3.65m

# GRANTS

The Trust offers grants to charitable organisations in Kent and areas close to its landholdings elsewhere. Grants are primarily made for engineering and historical research, promotion of engineering education and historic building restoration.

Grants have been awarded to a variety of organisations, including projects at Eastgate House, Fort Amherst, Rochester Cathedral, Rochester Guildhall Museum and other churches and Maidstone Museum, and research linked to the anniversary of the Dutch Raid. Further funding went towards education projects.



Progress continues to be made on the restoration of a Short Scion II Seaplane by the Medway Aircraft Preservation Society Ltd (MAPSL), funded by the Trust. Visit [www.mapsl.co.uk](http://www.mapsl.co.uk) to find out more.

# ARCHIVES AND ART

*i: The archives contain many pictures of the medieval bridge*



ince the construction of the medieval bridge in the last decade of the 14th century, the records of Rochester Bridge have been maintained at the Bridge Chamber.

*ii: A 1699 map of Langdon Manor Farm*

The archives began with 14th century wardens' account rolls and estate records, and continue to be added to with records arising from the current business of the Rochester Bridge Trust. Included among the documents are parchments, coloured estate maps and legal documents bearing royal seals, including those of Henry VI and Elizabeth I. Many paintings, prints and photographs are also preserved, illustrating the rich history of the Rochester Bridge Trust.

The archive catalogue is available to search on the Trust's website and is extensively used by historical and family history researchers. Images of several important manuscripts can also be viewed online, as well as a wide variety of historic estate maps.



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