

Gloucester Cathedral: Lady Chapel Repairs (1 of 3 projects funded)

Awarded £235,000 in June 2014 and a further £185,415 in March 2015

The need

This two-phase project was for conservation and repairs to the southern elevation masonry and glazing of the 15th-century Lady Chapel, the need for which had been identified in the 2009 and 2014 Quinquennial Inspections. There were serious issues of damp, humidity and water penetration which were eroding the stone and damaging important stained glass: the Lady Chapel includes windows by Christopher Whall and a new Tom Denny window commemorating First World War poet Ivor Gurney.

Outcomes

The masonry on the external walls of the Lady chapel is now beautifully restored: there are no loose pieces and thus no risk of a member of the public being injured by falling masonry. Through working on this project, the team at Gloucester cathedral developed a tool to help them prioritise projects, the Project Priorities Pipeline, which subsequently helped them to identify cost savings, keep a critical eye on the QI and involve the Friends of the Cathedral in project planning, which has assisted with fundraising. By running this project at the same time as other high-level repairs, the cathedral saved approximately £100,000 as a result of economies of scale on labour and site set-up. Further external repair work, and the conservation and re-presentation of the interior, has since been undertaken as part of the cathedral's Project Pilgrim, supported by a Heritage Lottery Fund grant of more than £4 million. The First World War Fund grant gave the cathedral the confidence in bidding for further work with the HLF, and having the credibility of government funding helped them raise an additional £1.6 million of match funding.

Economic and social impact

This project supported traditional stonemasonry techniques, including setting-out, carving and glazing work. The project supported four trainee stonemasons. Two of the trainees obtained their Cathedral Workshop Fellowship Foundation Degrees through working on the projects at the Cathedral. One of these trainees, James Bayliss, was also Highly Commended in the Duke of Gloucester Award for Excellence in Stonemasonry 2017.

There has been considerable publicity and community interest in the repair works, which has led the Cathedral to improve their communication channels to key internal members, congregation and visitors. Ten scaffold tours to the Lady Chapel generated around £6,000 for the Cathedral.

Works completed and timescale

Work began in August 2014. The in-house works team undertook the masonry repairs and Chapel Studio Stained Glass, Hertfordshire, removed, repaired, re-leaded and re-fitted the stained-glass. The works were completed in March 2016. The award of funding for the second phase of works to follow directly on from the first phase allowed the cathedral to make cost savings on contracting this work.



External masonry repairs on the Lady Chapel of Gloucester Cathedral.
Photo credit: Gloucester Cathedral.



One of the stonemasons working on new stonework for the external walls. Photo credit: Gloucester Cathedral.

The Cathedral

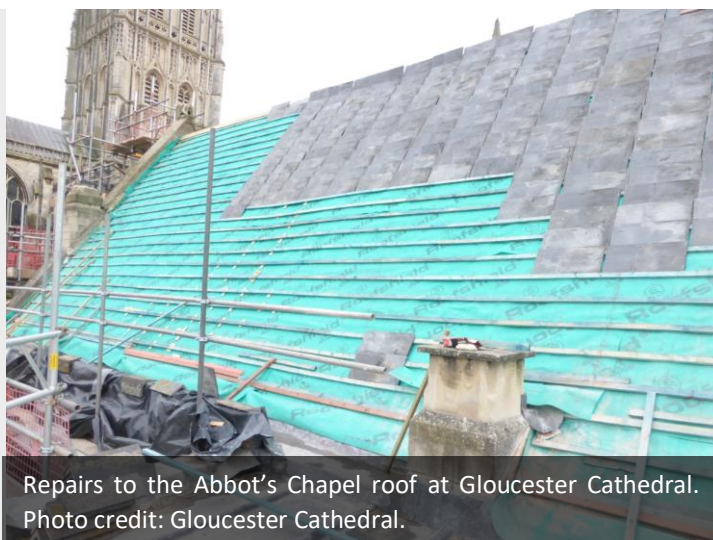
Gloucester Cathedral is architecturally hugely varied, consisting of a Norman nucleus dating from 1089 with additions in every style of Gothic architecture. The cathedral has in the region of 400,000 people that come each year to visit or take part in its services, events and activities.

Gloucester Cathedral: High-level repairs (2 of 3 projects funded)

Awarded £486,000 in July 2016, underspend of £135,000 because of economies of scale

The need

The roof of the nave and the former Abbot's Chapel were actively leaking and causing damage to the fabric within. The Abbot's Chapel roof, slated in Cotswold stone, was experiencing water penetration through the valley areas and deterioration of the timber roof structure, while the installation of solar panels to the south side of the nave roof as part of the HLF-supported Project Pilgrim presented an opportunity to access this area. Repairs here constituted the last major area of roof repair needed to render the cathedral watertight. The work was urgent and directly affected the cathedral's ability not only to stay safe and open but to preserve the internal works to be done under Project Pilgrim.



Repairs to the Abbot's Chapel roof at Gloucester Cathedral. Photo credit: Gloucester Cathedral.

Outcomes

The repairs to the roofs mean that the building is now watertight and weather-proof. The southwest pinnacle is stable, remedying a dangerous situation above a public area, and the repairs to the nave roof meant that solar panels could be installed there as part of the parallel Project Pilgrim. Gloucester is the oldest cathedral in the world to have solar panels and they now generate over 25% of the energy for the building, saving money on energy bills. Due to running this project at the same time as HLF-funded work, the cathedral saved a considerable amount through economies of scale on labour and site set-up; an underspend of £135,000 was released back to the First World War fund and was re-allocated by the fund's Expert Panel to projects at Wells and Worcester Cathedrals which were facing unforeseen extra costs for repair needs only discovered once high-level access was possible.

Economic and social impact

This project supported traditional stonemasonry techniques, including setting-out, carving and glazing work. The project supported four trainee stonemasons. Two of the trainees obtained their Cathedral Workshop Fellowship Foundation Degrees through working on the projects at the Cathedral. One of these trainees, James Bayliss, was also Highly Commended in the Duke of Gloucester Award for Excellence in Stonemasonry 2017.

The solar panels on the nave roof generated considerable publicity for the cathedral and attracted large numbers of visitors from green and sustainability groups. The projects helped crystallise the Cathedral's thinking about their First World War commemorations and enabled them to focus on planning a wide range of interesting events.



Solar panels installed on the nave roof at Gloucester Cathedral as part of Project Pilgrim. Photo credit: Gloucester Cathedral.

Works completed and timescale

This work began in August 2016. The roofs were re-laid and strengthened, there were some minor carpentry repairs to the roof structure and the nave gutters were re-lined. The southwestern pinnacle of the nave west front, which was unstable and at risk of falling, was also repaired, correcting defects caused by a lightning strike. The works were completed in March 2018.

The Cathedral

See previous project summary.

Gloucester Cathedral: Drainage repairs (3 of 3 projects funded)

Awarded £50,000 in November 2016

The need

Shortcomings in the below-ground drainage within the cathedral precinct had recently been identified at the time of the application. A detailed survey had identified numerous blockages, cracks and fractures. The main threat was to the Lady Chapel, where the lack of effective surface water disposal, including several disconnected rainwater drains, was contributing to a known and longstanding damp issue. While previous grants from this fund and work under the HLF-supported Project Pilgrim were remedying high-level defects, action on drainage, including replacing downpipes, works to manholes and adjustments to the foul water drainage system, was also needed to ensure that the whole water drainage system could operate effectively.

The need for this work was not known at the time the HLF bid was completed or at the time of earlier applications to this Fund. Because it was already undertaking major capital fundraising appeals for Project Pilgrim and musical activities, the cathedral was unable to raise matching funds towards this less 'glamorous' but essential project.

Outcomes

The works have led to a considerable improvement in the ability of the system to dispose of surface water efficiently, helping with the overall drying out of the cathedral fabric. This should be particularly noticeable in the crypt below the eastern ambulatories and in the the Lady Chapel. It has reduced the risk of subsidence and improved the outdoor space, making it less boggy.

Economic and social impact

While this was a relatively small project, undertaking it at this point has reduced the risk of much more expensive repairs being needed later, and has protected the investment of previous grants by this fund and the HLF in repairs to the Lady Chapel. Overall, there has been considerable publicity and community interest in the various repair projects going on at the cathedral. The interest from the public has led the cathedral team to improve their communication channels to key internal members, congregation and visitors and helped crystallise thinking about their First World War commemorations, enabling them to focus on planning a wide range of interesting events.

Works completed and timescale

Work began in November 2016 with investigations by Severn Trent Water Company, installing a new inspection chamber and associated archaeology. The bulk of the project consisted in the removal of blockages from the pipework, addressing damaged pipework and the renewal of the main surface around the Lady Chapel and College Green. The works were completed in March 2018.

The Cathedral

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The drainage works in progress at Gloucester Cathedral. Photo credit: Gloucester Cathedral.