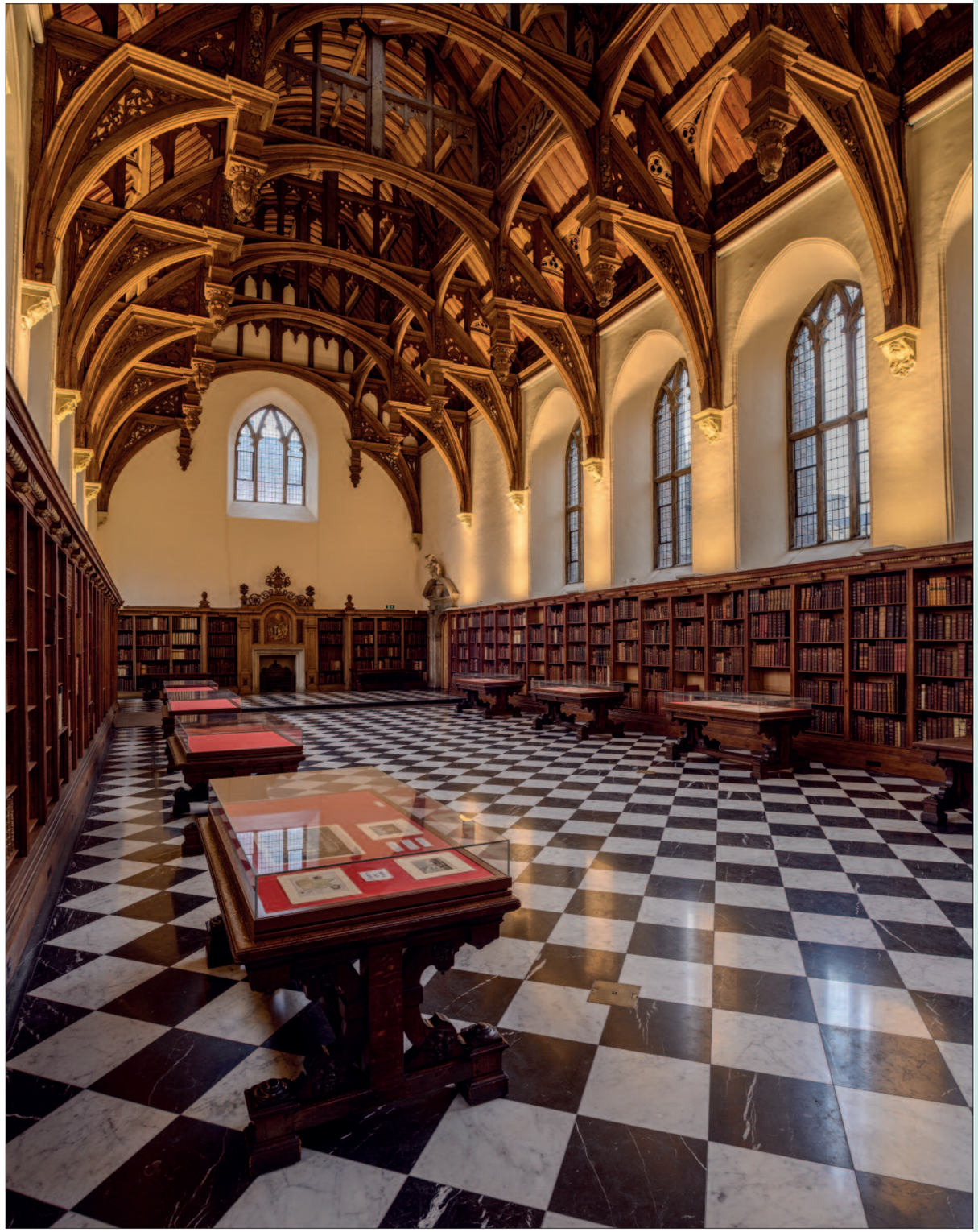
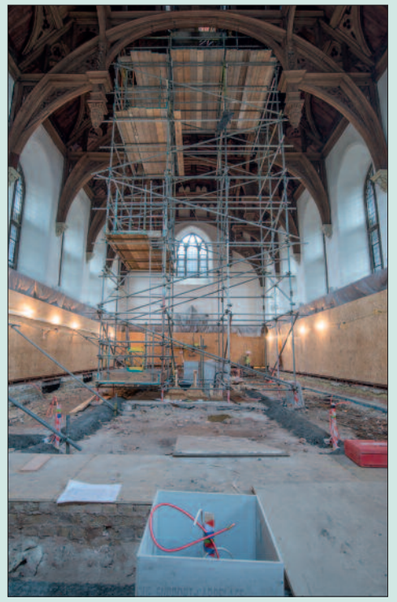


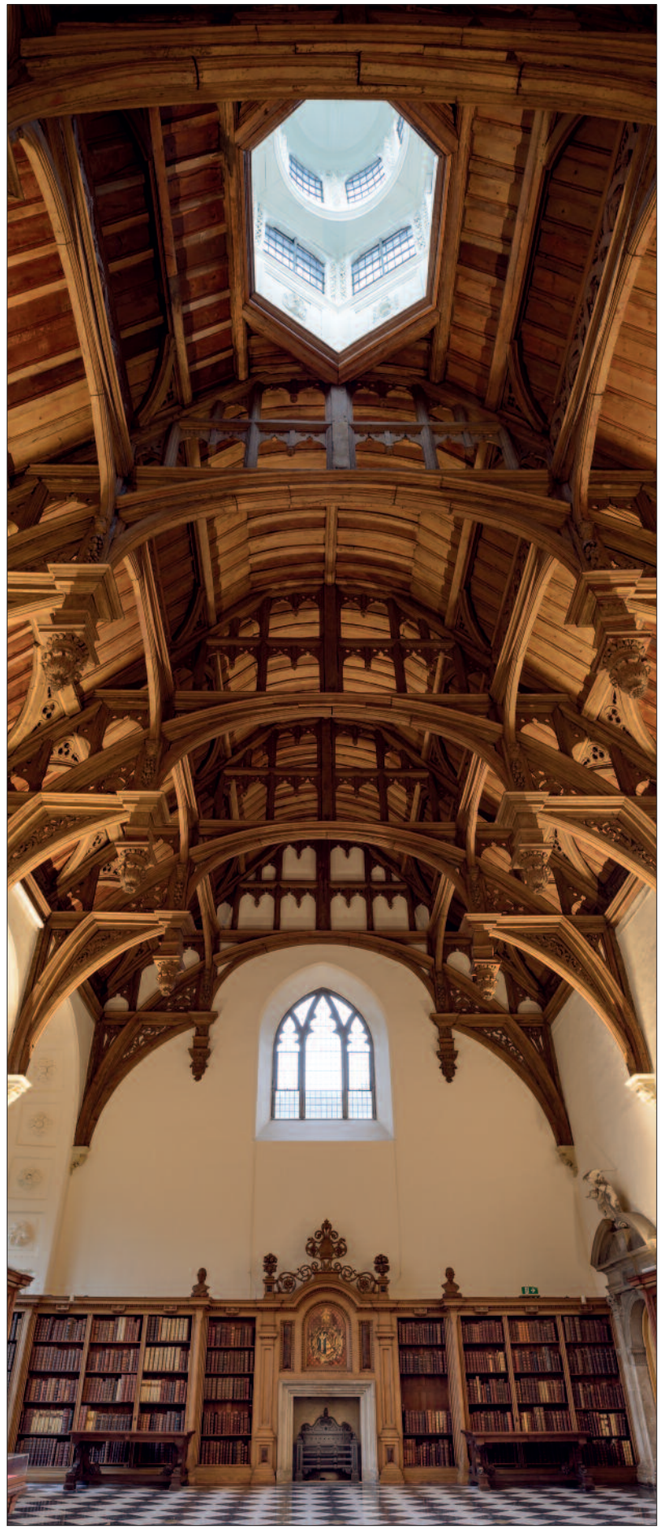
LAMBETH PALACE: THE GREAT HALL REPAIR PROJECT

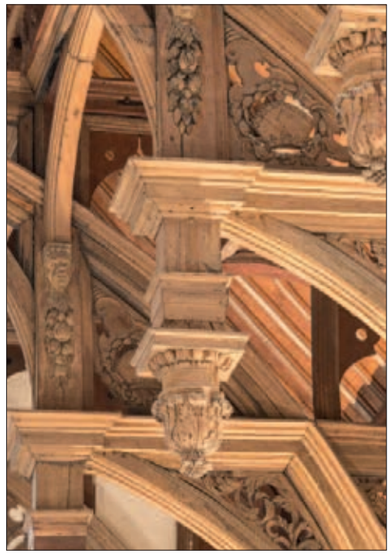
by Simon L Ablett, Ablett Architects Ltd



'…walked and viewed the new hall, a new old-fashion hall as much as possible. Begun, and means left for the ending of it, by Bishop Juxon.'

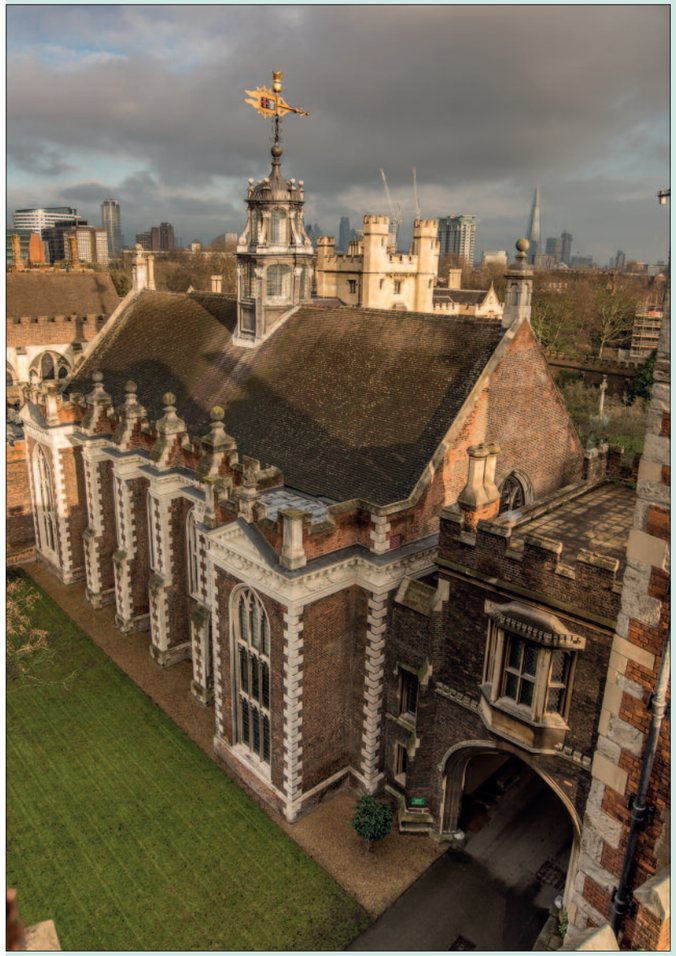
So wrote Samuel Pepys after a visit to the Great Hall at Lambeth Palace in July 1665. During the Commonwealth the Medieval Hall had been very badly damaged and on the restoration of the monarchy Archbishop Juxon found a 'heap of ruins' and had spent £10,000 on rebuilding the Great Hall. Juxon's Hall would seem to replicate the overall size of the previous and with gothic pointed windows and a lantern, but it was embellished with classical details such as a cornice and frieze of garlands to the river front and much classical detailing internally, including to the magnificent hammerbeam roof. **>**





The Great Hall remained unchanged until the major alterations to the Palace buildings undertaken between 1829 and 1833 according to plans by the architect Edward Blore. These included the demolition of large parts of the Palace buildings and the construction of a new Bath stone residence in perpendicular gothic style, a range of service buildings concealed behind a tall screen wall and the altering of the entrance sequence to bypass the Great Hall and convert it into the Palace Library. This work included the removal of the south-west door, the screens passage and all of the wall panelling. Bookcases were introduced to accommodate the books which were moved from the upper cloister which was then converted into a picture gallery. Blore also removed the tiled floor and dais and introduced a suspended timber floor with large heating pipes in ducts, all powered by a furnace located in the corner of the cloister, which was probably constantly stoked.

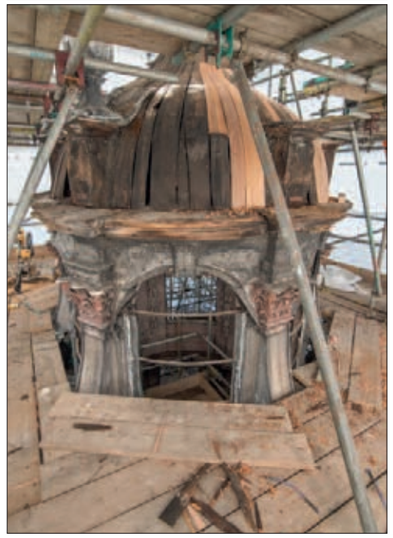
This arrangement survived until the Second World War, when the Great Hall, along with other parts of the Palace, was badly damaged. The extensive post War repair and re-ordering work was overseen by architects Seeley and Paget. In the Great Hall the projecting side wings of Blore's bookcases were removed and substituted by the two long cases we see today, the suspended timber floor was replaced by concrete finished with cork tiling and the dais was rebuilt. Unfortunately the dais didn't last long as further works in the 1980's infilled the lower floor area to provide underfloor heating and the (now level) floor was refinished with more cork tiles. The heating

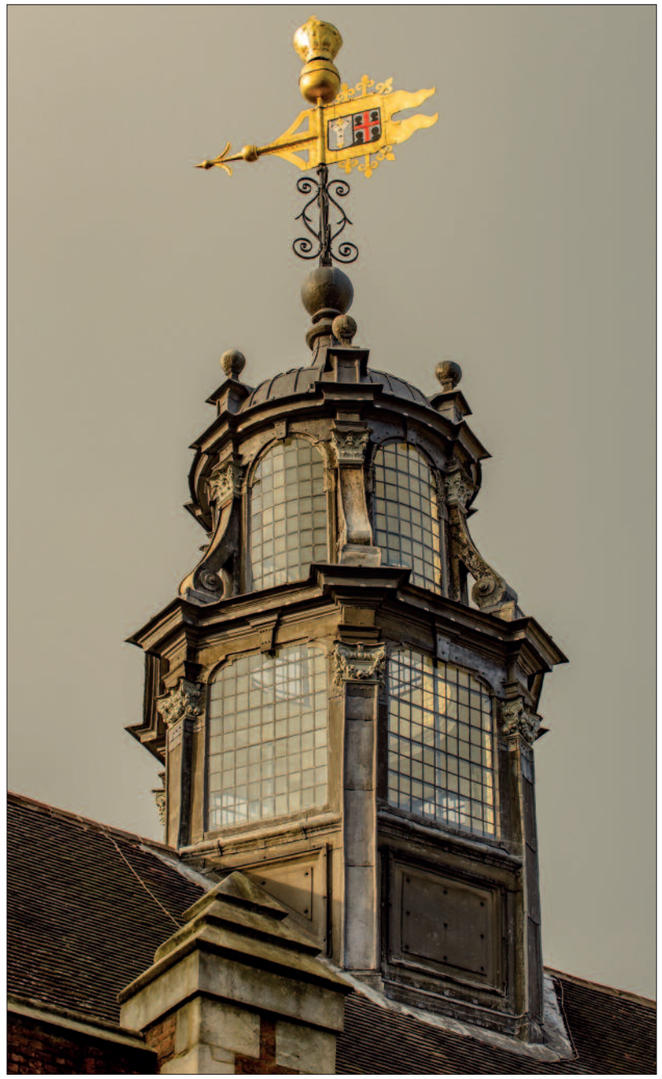


system didn't perform well and around five years ago it became completely blocked and ineffective, putting at risk part of the internationally important collection of the Library of the Church of England.

With the lack of gentle heating, poor ventilation below and behind the bookcases, as well as rising damp to the walls and leaking asphalt gutters, the conditions resulted in a black mould outbreak to a number of the books and major repairs were needed.

The recommended scope of works for the project was informed by my Quinquennial Inspection, a steeplejack survey, archival research, a structural engineer's report and an archaeological desk top assessment. The project, funded by the Church Commissioners, started on site in November 2014 and was practically complete in September 2015. The approach, with the exception of the removal of the twentieth century concrete floor, **>**





has been undertaken with a 'light touch', repairing and conserving where necessary using traditional methods and materials, but also with the aim of transforming the previously gloomy interior.

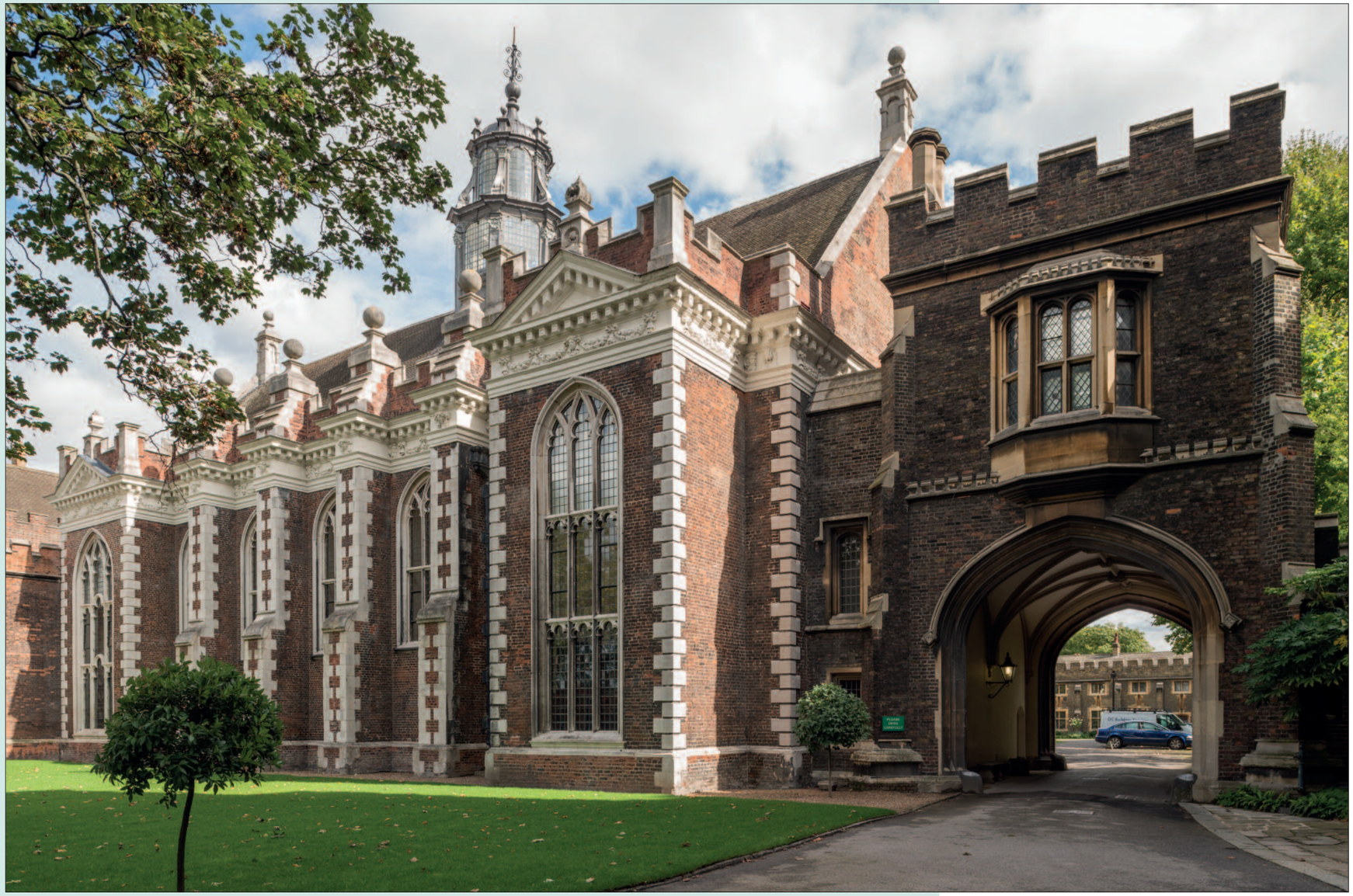
The steeplejack survey had shown that the lead to the landmark two tier lantern was in poor condition. The dome and the flashings of the upper cornice mouldings were especially poor, with splits and slumping and explaining the water ingress. The overall approach has been to preserve as much of the existing lead as possible, but introducing new to enable thermal movement and at particularly exposed locations and junctions. All key weathering lead work at high level was replaced with sand cast lead with sheet sizes in accordance with current recommendations and discrete ventilation was introduced, all ensuring that historic fabric is protected. A challenging issue was how to provide a decent fixing for the smaller sheets to the dome roof, as the existing sheets were grossly oversized. The thin curved cedar boards didn't offer any decent fixings and so a second layer of cedar boarding was provided. There was inevitably repair work needed to the timber frame and joinery mouldings and to the glazing. Other leadwork included new lead lined gutters to replace the asphalt, with new storm overflows, and the repair and refixing of three magnificent dated lead hopper heads with Juxon's Arms and initials.

The mitre at the top of the weathervane is probably much earlier than the remainder but it was in very poor condition. Repairing to prolong its life would have been very interventionist and would have resulted in loss of much original fabric so I took the decision to preserve the mitre for display and to have a coppersmith make a replica. Repairs to metal work was undertaken as well as paint analysis and this influenced the colouring of the Archbishops Pallant and Juxon's Arms; the rest was regilded.

The masonry repair works concentrated on the upper areas subject to the most weathering, such as the upper north and south gables and parts of the east and west elevations with brick replacement and repointing work. The stone gable finials were taken down and rebuilt with numerous corroding cramps cut out. The steel mesh with hard cement flaunching to the top of the west stone cornice was removed and replaced by a lead sheet with a discrete lead drip to the outer edge. Trials were undertaken to inform the best methods to clean the heavy pollution which concealed the fine carved details of the frieze, but also disguised stone decay and many open joints. Following stone indent work, which included replacement of only areas in very poor condition, the frieze was lime shelter coated to provide some resistance to London pollution and weathering. This work has had a major visual impact, allowing it to be more readily seen whilst protecting the fine detailing. With a stone mason there were two apprentices on site throughout much of the contract, working on stone indents (including cutting out hundreds of corroding cramps), templates, bankering and fixing.

To understand the extent of possible below ground archaeology trial pits were undertaken internally and before the contract was awarded. During the excavation works to remove the modern floor the brickwork of Blore's heating ducts were uncovered and recorded as well as fragments of carved Bath stone – these were very probably remnants of Blore's Drawing Room bay window that had been entirely destroyed in the War and had been imported as rubble fill for the 1940's concrete floor.

The entire floor was replaced with a foamed glass and limecrete slab during which some unexpected ducts were found. The new floor, >



which includes the restoration of the dais, has an underfloor low temperature hot water heating system controlled by a conservation system suitable for the preservation of the books whilst being able to be boosted for Palace and Library events. The system is monitored by a computer with multiple temperature and humidity sensors and trace heating tapes behind the bookcases activate when temperatures fall. Ventilation below and behind the bookcases has been improved and new electric blinds provided to the windows. All of the electrics were renewed.

The most dramatic change is the new marble floor tiling, inspired by two prints dated 1806 in the collection. The square slabs have been laid diagonally with specially made aged brass floor boxes with data and electrics. Paint analysis to the interior of the lantern showed that it had originally been uniformly decorated across all architectural features and the decision to restore the colouring to all of the joinery has the beneficial effect of unifying the 1940's repairs with the original seventeenth century work. Overall this allows the light to reflect at the apex of the magnificent roof, which is accentuated by LED floodlights mounted on the top of the 1948 bookcases.

Inevitably the undertaking of any major repair project in the centre of a high profile occupied site, with restricted access and a small site compound, along with winter weather affecting work and particularly the progress of scaffolders, has its challenges. Never the less it was possible for a number of visits by staff and other interested groups, including the Friends of Lambeth Palace Library. The books were brought back from store prior to Christmas. ■

PROJECT TEAM

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Structural Engineer:
The Morton Partnership

Quantity Surveyor:
Sawyer and Fisher

Consulting Engineers:
EngDesign Ltd

Conservation Heating Engineer:
Colebrooke Consulting Ltd

CDM Co-ordinator:
Moran Architects Ltd

Archaeologist:
Cambrian Archaeological Projects Ltd

Main Contractor:
William Anelay Ltd

Paint Analysis:
Helen Hughes

Floor grilles and boxes:
Great British Lighting

Weathervane:
G.D. Armitage Ltd

Joinery:
Hare & Ransom

Glazing:
Martin Johnson & Co

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