

Experience working in Old Churches

St Giles Church, Standlake, Oxfordshire

St Giles's is a substantial Grade II* Church, comprising a large chancel, nave and north and south transepts from the early 13th Century, early 14th Century north and south aisles, and a mid 14th Century tower. Some elements including the west wall of the nave with broad pilaster-buttresses, and the chancel arch are thought to date back to the church's origins in the 12th Century.



Darke & Taylor were employed in 2009 to design, specify and install new heaters and lighting at the Church. This was a project that required the company to provide systems that delivered the performance and comfort expected of modern technology, whilst remaining sympathetic to the historical environment in which they were installed.

St Olaves Church, Hart Street, London

St Olave's survives as a rare example of the mediaeval churches that existed before the Great Fire of London in 1666. The flames came within 100 metres or so of the building but then the wind changed direction, saving a number of churches on the eastern side of the City. The church was severely damaged in the bombing of World War II, but enough of the fabric and original masonry was spared to permit the building to be lovingly restored in the 1950s and to continue its life and work into the second half of the 20th century and now the 21st.



During 2011 Darke & Taylor were employed to install an ambitious lighting scheme that was designed to highlight some of the oldest and most interesting elements of the church, and also to provide suitable lighting for the programme of concerts, recitals and other artistic events held at the church.

St Georges Church, Bloomsbury, London

St George's Bloomsbury is the sixth and final London church designed by the leading architect of the English Baroque, Nicholas Hawksmoor. Originally consecrated in 1731, St George's was reopened to the public in 2006 following a five year restoration initiated and managed by the World Monuments Fund Britain.



In 2009 Darke & Taylor became part of the project team that were employed to establish a lighting identity for the Church, and were responsible for installing a lighting scheme that enhanced architectural features, created a visual identity in keeping with the iconic nature of the building and provided enough light for church goers. This required very careful workmanship to ensure that the fabric of this Grade I Listed building was not damaged during the installation.

More information regarding the project can be found in the article from Lighting Magazine below:

lighting

Faith in light

February 2011 | By Lauren Vanderkar



When the most striking feature of a project is a 300-year-old chandelier, the challenge is to properly light the space without diminishing its impact. Lauren Vanderkar reports

St George's Church is the sixth and final London church designed by English Baroque architect Nicholas Hawksmoor - a former assistant to Sir Christopher Wren. The church was originally consecrated in 1731 and has been an ever-present feature of Bloomsbury's history since, featuring in stories by Dickens and engravings by Hogarth.

But for many years the church seemed to be consumed by the expanding city around it, and funding for maintenance became increasingly difficult to find despite its Grade 1 listed status.

In 2002, St George's was added to the Watch List of 100 Most Endangered Sites around the world by the World Monument Fund (WMF) and funding was sought to restore the church.

In the same year, WMF Britain started a programme of restoration work that focused on re-establishing the church and its Hawksmoor heritage. The work included a reorientation of the church's interior features by 90 degrees, taking it back to Hawksmoor's original layout.

The works also included proposals for some feature lighting, but these proposals were not implemented by the project team at the time because they were not considered complementary to the interior restoration.

The brief

In 2009 Hoare Lea Lighting was asked by WMF, on behalf of St George's Church Parochial Church Council, to re-establish a lighting identity.

As a member of a multi-disciplinary team including the client, specialist contractors and the Diocesan Advisory Committee, Hoare Lea was asked to create a sympathetic and characteristic lighting impression. Specifically, the company had to design a scheme that enhanced architectural features, created a visual identity in keeping with the iconic nature of the building and provided enough light for churchgoers.

Luminaires also had to be hidden from view but easy to maintain by church staff. It was essential that the brief was met without diminishing the impact of the new central feature of the church - an 18th-century brass chandelier on long loan from the Victoria & Albert Museum.

The Hoare Lea Lighting design was based on three principal ideas. The first was to provide illumination to seating areas while allowing the chandelier to form the centrepiece. Second, a sense of space and drama had to be created, with a visual hierarchy of luminance. Finally, it was crucial to devise a solution that could easily be maintained by church staff.

"Central to the brief was the concept of our lighting impressions forming the backdrop to the newly conserved and electrified brass chandelier," says Jonathan Rush, executive lighting designer at Hoare Lea. "There was a strong emphasis on highlighting elements in an intuitive way so no feature held greater presence than the chandelier itself, while giving the church a depth and texture not previously seen."

Solutions

A design proposal was developed that included a high level lighting element, the Corona, that would be suspended above the chandelier to illuminate the nave.

The Corona included downlighting from adjustable 65W IRC AR-111 projectors, and uplighting to the restored plaster ceiling from a ring of 2700K white LEDs. The downlight was focused to highlight the apse, the pulpit and the font, and to supply focal illumination for the seating areas.

There was a strong emphasis on highlighting elements in an intuitive way so no feature held greater presence than the chandelier itself" Jonathan Rush, Hoare Lea

Many forms were explored for the central Corona feature, from those reflecting iconic religious imagery to more contemporary styling. In the end a simple circular form was chosen, driven largely by the maintenance challenge proposed in the brief. There was intense debate among the project team about the appropriate size of the corona.

"The corona had to be wider than the V&A chandelier so it would fit around it, but its maximum diameter was up for debate," explains Rush. "We all recognised that there was a point, visually, where the diameter of the element could illuminate the space effectively while not creating a dominant feature within the context of the church - so the chandelier would be the focus, not our lighting."

Communication

As in many projects, proper communication between all parties was key. At St George's, the Diocese wanted to explore the possibility of a larger diameter for the Corona than originally proposed, with the view that this could separate the two elements. Numerous sketches and layouts were drawn up by the design team so a decision could be made.

The height of the Corona was the subject of another debate. Rush says: "The first issue was one of technical requirements. If the LED uplight from the corona was too close to the ceiling, it would create a ring of light and not provide an even wash. If the distance between the chandelier and corona was too little, the projected downlight from the corona would hit the chandelier and cause notable shadowing on the floor.

"The CAD sections demonstrated that one of the key concerns was maintaining views of the altar and the decorative ceiling rose above. A height was settled on that would provide the best of both, though the raise and lower system did allow adjustment on site if necessary."

A separately controllable, double electric winching system allows the chandelier to be lowered and the Corona,

by nature of its circular form, to pass over the lowered chandelier to a maintainable height.

"At the proposed mounting heights, it would have been impossible for church staff to maintain the lighting," adds Rush. "It was in our interest, as well as the client's and the church's, to find a solution for maintaining both suspended elements."

Niche lighting

The church's night-time character and texture was enhanced by highlighting elements in the niches around the edge of the space. This framed the central space and gave the church an evening identity - one which would open up new revenue streams from evening concerts and services.

The upper galleries were seldom used by the church because they were previously unlit. Hoare Lea proposed a linear wash to the ceiling that provided a feature from the central space and provided enough reflected light for visitors to carry out simple visual tasks, such as reading a programme.

In the tower base, sculptures in the entrance niche and upper floor balcony were illuminated by ceiling-mounted 65W IRC AR-111 projectors.

The decorative ceiling of the apse was uplit by surface-mounted 35W halogen spotlights, and the parquetry of the wooden reredos was downlit with 2700K LED projectors mounted on the high level column tops. Surface-mounted 35W halogen spotlights on custom-made base plates were installed behind the reredos columns to uplight the dome of the reredos.

Great care was taken to ensure that the surface-mounted lights did not heat the wooden finish by either projected or conducted heat. Mounting positions were tested over a short period and cork bases were fitted to limit contact between metal and wooden surfaces.

The entire lighting system was linked to the church's existing Lutron Graphic Eye control system, which allowed for a number of uploaded lighting scenes. Care was taken to ensure that scenes were not too complex for the church's day-to-day activities, while leaving some flexibility for special occasions.

Evening identity

Externally a new lighting concept was developed to create an evening identity in the surrounding cityscape. The church had never enjoyed a presence in the evening environment, and this made it less attractive as an evening venue.

Hoare Lea used the external lighting to 'brand' the restored church. The scheme would provide a presence on the streetscape with illumination to the main entrance portico, and a wider presence would be achieved with illumination to the tower.

The tower is illuminated from the lower roof level with medium and narrow beam metal halide projectors. The medium beam creates a background wash to the tower and the sculptures of lions and unicorns, while the narrow beam highlights London's only sculpture of King George I at the top of the steeple.

The internal portico columns are uplit with 35W metal halide inground uplighters and the roof is with 70W metal halide uplights mounted in the portico window reveals. This creates a dramatic effect to the portico, provides subtle wayfinding illumination for visitors, and highlights the window reveals from inside - adding another visual layer.

The restoration work has transformed St George's. Not only is it a thriving parish church in the heart of Bloomsbury, it is also a popular concert venue and centre for community arts and education.

David Gundry, project director at World Monuments Fund Britain, says "the lighting design has contributed to the rejuvenation of the church by helping to enhance the appreciation of Hawksmoor's vision, create a comfortable environment for parishioners and casual visitors alike, improve safety and maintenance around the building while also extending the hours in which the church can be used."

Churchwarden Julian Sharpe adds: "The experience of those visiting and worshipping in the church has been

transformed by this imaginative yet eminently practical lighting scheme.”

PROJECT DETAILS

ELECTRICAL CONTRACTOR: DARKE & TAYLOR LIGHTING DESIGN: HOARE LEA LIGHTING

SUPPLIERS: AC/DC LIGHTING, LIGHT

PROJECTS, LOUIS POULSEN, MEYER

LIGHTING, OPTELMA, LUTRON

RAISE AND LOWER EQUIPMENT:

R&L SYSTEMS

CONSULTING STRUCTURAL

ENGINEERS: SINCLAIR JOHNSTON

AND PARTNERS

