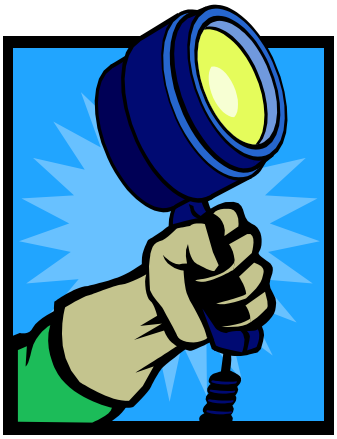
Floodlighting of Churches



General principles and technical specifications

These notes have been prepared by the Diocesan Advisory Committee to help PCCs in considering proposals for floodlighting their Church. The first part concerns general principles and the second is a technical checklist that should be taken into account by the PCC, their Architect and the electrical contractor.

General

Before floodlighting was thought of, architects and master masons took advantage of natural sunlight to emphasize a building's form and beauty by the nuances of light and shade. It is therefore appropriate in suitable cases to use modern technology to emphasize these aspects during the hours of darkness to allow a beautiful building to stand out even more distinctly from its surroundings.

Additionally, the upward lighting can further explore the shape, form, details and texture of the structure not seen in daylight. Floodlighting can therefore be an enhancement of the setting and an expression of pride and confidence in the beauty of a building.

However, there are concerns over the indiscriminate use of floodlighting and PCCs should be aware of these in proposing their case. The major concern is environmental. Almost all electrical energy used in Britain derives from coal or oil-fired power stations and for every ton of coal or oil burned about two tons of carbon dioxide is produced. Carbon dioxide is a major greenhouse gas contributing to global warming, so any unnecessary use of electricity adds to this.

The Churchyard, or 'God's acre', has, in these days of increasingly mechanized farming, become an important haven for wildlife. Floodlighting the Church can greatly increase light levels in the Churchyard and can upset the natural rhythm of light and dark. This in turn can upset the natural balance of wildlife there, both diurnal and nocturnal.

In some special cases the PCC, in weighing up the balance, may wish to consider another alternative - to decide against floodlighting deliberately in order to make an environmental point. This would be effective only where the Church is of high quality in an area already well lit, with perhaps some inferior buildings floodlit close by. The darkened Church would therefore stand out as being different. This course of action would only be effective if accompanied by well publicised reasons.

In considering applications for the installation of floodlighting, the DAC will consider each case upon its own merits, but the parish will be expected to establish a good case for its desirability. In considering each case the following points are those upon which the DAC will expect to be satisfied before passing on a recommendation for approval to the Chancellor of the Diocese.

i. Is the building outstanding? (The DAC asks that an architectural assessment of the building should accompany each application.)
ii. Does the building make a special visual contribution to its surroundings, or is it a landmark visible from a distance?
iii. Is the area in which the building stands already well lit by street lighting or floodlighting?
iv. If the area is already well lit and there is nearby floodlighting or other buildings, would this be a suitable case for deliberately not floodlighting to make the environmental point?
v. Is there a security aspect to the desire to floodlight? If so, in what proportion of the whole is it, and could security be achieved by other means?

Technical

- Each floodlighting proposal has to have a detailed designer strategy. This is to include important aspects of the Church and its position in the locality/county.
- Choice of colour, type and size of lamps and lighting fittings have to be clearly identified to ensure that the correct illumination is obtained.
- The lighting levels expected have to be clearly stated and wherever possible illumination data for each of the main surfaces provided, computer generated if possible.
- Details of any spire lighting have to be clearly identified.
- Any quotations have to include for running out of cables and temporary installing of lighting fittings, to obtain the best position and angle of floodlights before final positioning, to obtain the best illumination and reduction of glare and night sky pollution.
- Careful consideration has to be given to reducing glare to adjacent properties.
- Careful consideration has to be given to floodlights which are close to roadways and could dazzle passing motorists. This also applies to members of the congregation either leaving or entering the Church.
- Where dazzle may be a problem consideration should be given to the installation of uplighters recessed in the ground to reduce glare.
- For each scheme a detailed schedule of floodlighting fittings should be provided.
- Photomatic data has to be provided to check the floodlights for intensity and calculations of lighting levels require checking.
- Details of mechanical specifications, windage, weight, IP ratings and test house approvals for fittings proposed to be used have to be given to ensure that the equipment will have a long life.

- Barn doors should be fitted to each lighting fitting, to ensure that any glare/night sky pollution is kept to an absolute minimum.
- The time switch has to be in series with the photo-cell to ensure that the lighting does not come on before dusk. Alternatively a special timer has to be used.

Security

Metal guards are to be provided around floodlights and, wherever possible, floodlights are to be installed in a metal box, covered with soil and grass. Let into the ground the fixture causes minimum obtrusion in the Churchyard.