

PREVENTING LIGHT POLLUTION: 10 NORFOLK CASE STUDIES

STREET LIGHTING CASES

1. Case Study: Scole Bypass

(Ensuring that new Street Lights comply with ELZ Policy)

Norfolk County Council's Environmental Lighting Zones' policy commits the County Council to use lamps with a 'cut off distribution' for street lighting in areas classified as Rural Dark Landscape. The original lighting on roundabouts at either end of the Scole bypass was fully shielded (flat glass, full cut off lamps). However when extra lights were added CPRE Norfolk noticed that some of the lighting fitments had changed. Partially shielded 'shallow bowl' fitments had been installed which spill much of their light to the surrounding countryside and contravene the ELZ policy.

CPRE Norfolk brought the matter to the attention of the County Council's Street Lighting Engineer who then contacted Amey (the NCC PFI street lighting contractor). Recognising their mistake and the impact on light pollution that would occur, the shallow bowl lights were replaced with fully shielded luminaires.

2. Case Study: Pulham Crossroads

(Removal of Street Lights in a Rural Dark Landscape)

The 'Pulham Crossroads' road junction on the A140 was a recognised road accident blackspot until in 2009, Norfolk County Council invested 1.5 million pounds putting in a new roundabout at the junction to improve road safety.

In an effort to minimise light pollution in the area, the County Council also proposed that street lighting be removed at the junction as part of the works. CPRE Norfolk backed this proposal and despite local protests the roundabout is unlit.

The roundabout scheme has been a great success and accident rates at the junction have been reduced significantly.

3. Case Study: Cawston

(Encouraging councils to erect street lighting that complies with CPRE recommendations)

A survey by CPRE Norfolk in 2015 demonstrated that many parish councils in Norfolk value dark landscapes and dark skies and choose not to have street lights. CPRE Norfolk recognises this important contribution that unlit villages make to the character of the countryside.

A number of parish councils, that already have street lighting, have made positive choices to replace outdated lamps and fitments with those that reduce light pollution and retain as much of the rural darkness as possible.

Norfolk County Council is responsible for some of the street lighting in Cawston and in 2009 they changed a number of the street lights in the village to white light, full cut off, flat glass fitments (fully shielded). We recognised this good practice by presenting the County Council's lighting team with a CPRE Norfolk Award in 2009.

PLANNING CASES

4. Case Study: The Sugar Beat Pub / Restaurant, Swainsthorpe

(Liaison with a District Council to ensure that our recommendations for lighting were included as a condition for the granting of planning permission)

Although many planning applications do not refer to outdoor lighting, there is always a chance that lighting will be part of the development. Even when lighting is mentioned in the design plans for a development, its impact on the environment may not have been carefully considered. Therefore CPRE Norfolk always recommends conditions of approval pertaining to environmentally sensitive lighting when responding to planning applications and advises individuals, amenity societies and local councils to do the same.*

For example, in 2013, the Sugar Beat Eating House in Swainsthorpe submitted a planning application for a building conversion with exterior lighting. Upon inspection of the plans, it was seen that the lighting proposed was likely to involve orange sodium lamps operated by dusk to dawn sensors (switched on all night).

After discussions with a Conservation Officer at South Norfolk District Council, CPRE Norfolk asked that a condition be attached to the planning approval to require the provision of environmentally sensitive outdoor lighting in line with our recommendations. This condition resulted in the developer installing white, shielded lighting that points downwards and is only switched on when the premises are open.

*A Standard Light Pollution Clause is available for groups to use when responding to planning applications. See www.cprenorfolk.org.uk/campaigns/light-pollution

5. Case Study: New Poultry Units, Field Lane, Hempnall

(A parish council using the CPRE Norfolk Standard Light Pollution Clause to ensure exterior lighting is limited)

Poultry and pig units are often accompanied by dusk to dawn exterior sodium lighting. These lights produce sky glow and urbanise the countryside, not only at the site on which they are located but also over a much wider area. They are often visible over a considerable distance at night.

When an application was made for 2 large poultry units at Field Lane, Hempnall the Parish Council's use of the CPRE Norfolk Standard Light Pollution Clause ensured that a lighting condition was attached by South Norfolk Council. This resulted in the farmer erecting PIR (movement sensor) white LED lights instead of sodium lights. Furthermore, when the reasons for the lighting condition were explained to the farmer, he was very willing to comply with the CPRE Norfolk recommendations.

Hempnall Parish Council is one of the parish and town councils in Norfolk that has adopted the CPRE Norfolk Standard Light Pollution Clause and it attaches the wording to all planning applications upon which it is consulted.

RESIDENT ISSUES

6. Case Study: Morris Street Car Park, Sheringham Conservation Area

(Resolving problems of light pollution for local residents)

A Sheringham resident contacted CPRE Norfolk in March 2014 about intrusive new lighting installed by North Norfolk District Council on the Morris Street Car Park. Light from the sodium lamps was intruding into the houses of local residents due to poor shielding and placement. As the residents rightly pointed out, this was a conservation area of town and particularly deserved protection from light pollution.

We took up the case with the relevant Officer at North Norfolk District Council and recommended full cut off, flat glass fitments with white, low energy lights. The Council complied willingly and the replacements were fitted in June 2014.

As a result, the residents wrote to thank CPRE Norfolk for their intervention and inform us that the replacement lights lit the car park but did not *“overspill into our houses and our street”*.

CASES INVOLVING OTHER ORGANISATIONS RESPONSIBLE FOR LIGHTING

7. Case Study: Norfolk Property Services - Lighting for Schools

CPRE Norfolk has liaised closely with Norfolk Property Services (NPS) in order to explain why outdoor lighting can cause problems, especially in rural areas.

As a result, NPS, who oversee much of Norfolk County Council's building work, has ensured that exterior lighting at a number of school sites, including new classroom developments at Hempnall and Saxlingham Primary Schools, complies with CPRE Norfolk recommendations. The school extensions use well shielded lamp fittings, low energy white light sources and operate with a curfew (timer switch).

CPRE Norfolk will continue to consult with NPS in the hope that CPRE Norfolk lighting recommendations can be adopted for all new school lighting across the county.

8. Case Study: Norfolk Environmental Waste Services

When May Gurney took on the maintenance contract for Norfolk Environmental Waste Services (NEWS) waste and recycling centres in 2008 they installed 'dusk to dawn' sodium lights on numerous sites across the county. CPRE Norfolk made the point that in rural areas this outdoor lighting contravened Norfolk County Council's adopted Environmental Lighting Zones' policy to which NEWS should be compliant (see case study 1). As a result of our intervention NEWS insisted that May Gurney replace the dusk to dawn lights with movement sensor white lights. This improved lighting scheme was awarded a CPRE Norfolk Award.

9. Case Study: Norfolk Constabulary - Secured By Design

'Secured By Design' (SBD) refers to a set of national police guidelines for developers that aim to reduce opportunities for crime in housing estates, commercial premises and car parks. By designing in security from the outset and considering issues such as locks, fencing, landscaping, CCTV and lighting, it is hoped that crime can be minimised.

Nevertheless, evidence frequently shows that security lighting is not actually a useful tool in crime reduction and CPRE Norfolk argued that new developments should not necessarily have to adopt security lighting (especially dusk to dawn lights) to achieve SBD status in Norfolk, especially in rural areas where the impacts of permanent lighting on the dark environment are most pronounced.

Following discussions, Norfolk Constabulary supported this view. This was first exemplified in a small housing scheme in Burston which was awarded SBD status in 2010 without a requirement for permanent dusk to dawn site lighting. Instead, accreditation

was given with the only lighting on the development being movement controlled (PIR) lights. These only illuminate when approached and stay on for a short period of time.

Soon afterwards (2011) Norfolk Police authorised the replacement of dusk to dawn bollard lighting by PIR movement sensor lights at another SBD small housing scheme in Denton (South Norfolk). This did not affect the development's SBD status. The Secured By Design Officer called the change "*another success story*" adding, "*the amount of time the area will be illuminated has been significantly reduced*".

NATIONAL CONSULTATIONS

10. Case Study: Highways Agency - TD34 Consultation

Street lighting on motorways and trunk roads in England (including the A11 and A47 in Norfolk) is managed by the Highways Agency. In June 2014, CPRE Norfolk attended a meeting in Bristol when the light pollution elements of a new national specification for road lighting on trunk roads and motorways (TD 34) were discussed and formulated. David Hook, Light Pollution Campaign Coordinator for CPRE Norfolk who attended the meeting, and Emma Marrington, Senior Rural Policy Campaigner for CPRE, then jointly produced a written representation relating to the specification, on behalf of CPRE.

TD 34 is due to be adopted in 2015 and one of its aims is to ensure that all lighting on trunk roads and motorways is provided by full cut off, flat glass luminaries. The new specification will also mean that new and replacement lighting on trunk roads and motorways will incorporate dimming technology enabling lighting levels to be significantly reduced when the roads are not busy.

This engagement with the Highways Agency means that not only are CPRE Norfolk influencing the type of lighting on Norfolk's trunk roads but are also having an influence on lighting decisions nationally. Significantly, the importance of protecting dark landscapes is now contained within the text of TD 34.

For further advice on lighting issues, please contact David Hook, CPRE Norfolk Light Pollution Campaign Co-ordinator, on hookd47@yahoo.com / 01508 498187.

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Every effort has been made to ensure that the information contained within is accurate.
We will happily correct any factual errors or omissions in later versions.