

Street Lighting - Questions and Answers

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1 Benefits of Good Street Lighting

Q Why is street lighting provided?

Studies have shown the benefits of good street lighting as an aid to road safety and as a crime prevention measure. There is also evidence of the benefit of lighting in improving the amenity and commercial viability of an area.

Q What are the road safety benefits?

It has long been recognised that good public lighting can improve road safety. In most industrialised countries nighttime accidents account for about half of all accidents, even though traffic flows are much lower at night. In addition nighttime accidents tend to be more severe.

In today's crowded driving conditions, the driving task at night is very complex and it is essential that drivers have good visual recognition of the hazards ahead. It is not surprising, therefore, that there is strong evidence that good street lighting can cut nighttime accidents by up to 30%, giving tangible benefits to society which are much greater than the cost of the lighting itself.

Q How can good lighting help to reduce crime and the fear of crime?

Research has shown that certain groups of people suffer a disproportionate amount of crime, in particular, households which have been victimised, women and young people out after dark and the elderly, especially those subject to vandalism and disorderly behaviour.

A common factor linking crimes committed against these groups is that they commonly occur after dark, so it comes as no surprise that research by criminologists carried out into lighting and crime has shown that targeted public lighting improvements can make the biggest impact on crime reduction.

The ways in which street lighting improvements can reduce crime are far from simple. Lighting improves visibility and increases opportunities for social surveillance by encouraging more street use by residents. It also improves community confidence and civic pride and signals to residents that the local authority and its partners are investing in the area. These factors combine to work to decrease crime by deterring offenders and the effects spill over to reducing crime during the day as well as after dark.

Over the past decade, approximately 16 lighting and crime evaluations have been carried out in major towns and cities in England, Wales and Scotland. Recent evaluations have shown that better lighting can reduce overall crime by 40%. There was also evidence of diffusion of benefits, with the benefits of lighting in one area leading to crime reductions in immediately adjacent areas.

2 Reporting Faulty Lights

Q. How do we report a faulty streetlight?

Faults involving streetlights are usually caused by the failure of the lamp or other electrical component. In a minority of cases the fault may be due to the failure of the electricity supply, vandalism or accident damage.

Step 1 When reporting a faulty streetlight, please have the following information to hand:-

- Name of the street in which the light is actually situated
- The City / Town / Parish name
- The location of the light , e.g. house number nearest to streetlight
- The streetlight number - a number plate usually located at a height of 3 metres on the column shaft.
- Description of the fault, e.g. lamp out, dim, timing, on during day, etc.

Step 2 Either Phone our Call Centre on 0845 1133311 or logon to

<http://maps.cheshire.gov.uk/cheshirecc.interactivemapping.web.internet/Default.aspx#aTabTop3>

The County Council carries out its own night inspections at a frequency of, once every four weeks in summer and once every two weeks in winter, so we might already be aware of the fault.

Whilst the majority of lights are the responsibility of the County Council, some are the responsibility of District or Parish Councils. If this is the case, we will usually be able to pass the report on for you.

Q. When will it be fixed?

Faults are passed to our Contractor the following working day and are normally investigated within 5 working days of the Contractor receiving the information. The vast majority of repairs are carried out at the first visit, but those involving electricity supply failure, damage to the column itself or failure of specialised equipment may take longer to repair.

In emergency situations, the contractor will attend site within 2 hours of the report, to make the equipment safe. Further repairs will be carried out as soon as practicable.

Q. Can faults be given priority?

The Contractor concentrates his repairs in certain areas each day, thereby covering the whole county in a week. Driving into other areas to attend one or two faults, results in less repairs being carried out overall and so is avoided. If, however, the risk to the public is deemed high enough when the fault is reported, every endeavour will be made to carry out repairs as quickly as possible

Q. It is now several days since the fault was reported.

Normally the Contractor should investigate the fault within 5 working days. If, however, particular difficulties have arisen such as damage to the electricity supply cable, the actual repair may take longer. When asked, we will check the progress of the repair and inform you as to the why the light is not yet working.

Q. Why are so many lights faulty for so long?

Occasionally, an electricity supply failure perhaps caused by a damaged cable can affect a large number of lights. In order to effect repairs, the electricity companies may need to temporarily switch-off the supply to properties in the area. In such situations, 7 days notice has to be given to domestic customers and 14 days to commercial customers, thus delaying the work.

Q. The light has been visited, but has not yet been repaired

The most likely cause of the light not being repaired on the first visit is the failure of the electricity supply. Such repairs can only be carried out by the electricity company. The County Council reports such faults promptly to the electricity company, requesting a speedy repair.

Q What are the operational hours of a streetlight?

The standard method of controlling the operational hours is by photo-electric cell, which switches the lamp on automatically at dusk and off at dawn. Burning hours equate to some 4,100 hours per annum.

In the 24 hour society in which we now live, is it considered essential to operate streetlights throughout the night. This enhances security for people and property, reduces nighttime traffic accidents and assists emergency services

3 New Lighting and the Positioning of Columns

Q. Can I have new or improved lighting?

The County Council does not have a duty to provide street lighting, but does so in the interests of safety. Developers for example, are now required to provide lighting on all new developments which are to be adopted and thereafter maintained at public expense.

At the present time there is no available funding for new or improved lighting on existing highways, unless linked to a traffic safety scheme. The criterion for carrying out such safety schemes involving lighting is based on traffic accident statistics. If the road has a good accident record, it will not normally qualify.

If you consider lighting in your area should be provided or improved for safety reasons, you should make a request in writing. Your request should be made directly to the County Council, but, depending where you live, you may also wish to send a copy to the local Parish or Town Council, with whom we consult. They will then inform us of any requests they wish to support.

It should be noted that District Councils and Parish Councils also have powers to install streetlights. However the County Council has to approve any lights installed on the Highway.

Q. Can I have a light re-sited?

The re-siting of lighting columns, whilst not impossible, is often difficult. The spacing between adjacent lights is crucial for achieving the correct lighting levels on the road. Moving one light could result in the over-lighting and under-lighting of adjacent road surfaces, thereby compromising safety. Each request is individually investigated and where necessary, consulted on, with no guarantee of a favourable outcome.

It should be noted that the cost of moving a street light will normally fall on the person requesting the work.

Q. A light is shining onto my house.

Street lighting is installed for the benefit of society and is designed to light the surrounds to a road, as well as the road itself; so that road users can see potential hazards, such as children. It is not possible to eliminate light intrusion fully, as to do so would render the streetlight non-functional. If a streetlight is causing problems due to excessive intrusion of light, we will investigate and try to find an acceptable solution to the problem. It may be that a simple change of lantern, to a more modern type, may relieve the problem

Q. We have lived on this new development for some time now. Why are the streetlights not yet working?

Developers normally have an Agreement with the County Council to construct new roads to a standard suitable for future adoption. Streetlights are normally erected and commissioned in stages, as the estate is built. In some cases, houses may become occupied before streetlights are connected. The responsibility for the lights at this stage rests with the Developer. Prior to adoption of the new highway, the lights will be comprehensively inspected and if found to be satisfactory, ownership and responsibility will be transferred to the County Council.

Where no agreement is entered into with the County Council, future ownership and responsibility will remain with the Developer and/or the residents.

4 Structural Replacement Programmes

Q Why are the lighting columns in my area being replaced?

Lighting columns can be replaced for a number of reasons, for example, changes to the geometry of the road or accident damage. The County Council also carries out an annual structural replacement programme, to replace columns which are considered to be at the end of their useful lives.

Q. Why are the new street lights in different positions to the old ones?

The spacing of the old columns generally does not meet the requirements of the current British Standard. This usually results in more lighting columns being installed, reducing the spacing between them.

Q. Is there a policy about where lighting columns are located?

There are many factors which have to be taken into account when determining where lighting columns should be situated. Lighting schemes are designed to the current European/British Standards which takes into account physical features such as road widths and bends. The class of road and volume of nighttime traffic has a direct bearing on the design, as does the location of the electricity cables, from which we take the power.

Once a scheme has been designed and installed, there is only limited scope for altering the spacing between lighting columns. The Council aims to position columns sensitively, but sometimes the geometry of roads makes this difficult. If you feel that the position of a new streetlight will cause you problems, we will investigate, but we cannot guarantee to find a solution.

Once the column spacings have been set, we normally site them at the back of footways or in verges. This minimises obstruction of the footway and damage to columns caused by vehicles.

Q. Why is there a delay between putting up new streetlights and taking out the old ones?

We normally rely on the electricity companies to connect the new columns to the electricity supply and disconnect the old ones. The timescales involved mean that it may take some time to get the new lights working and the old ones taken away.

Q. There is an excavated hole adjacent to the new street lighting column?

The electricity company have excavated the hole and it is awaiting either their jointing team or their reinstatement team. The hole will be reinstated to existing ground level.

Q. How do I get more information about the works?

Please call our staff on **01244 603521**

5 Lights Affected by Trees

Q. What authority does the County Council have to issue tree pruning notices?

The County Council, as Highway Authority, has a duty under the Highways Act 1980 to ensure that foliage does not overhang the highway, so as to endanger or obstruct the passage of vehicles or pedestrians, or obstruct or interfere with the view of drivers of vehicles or the light from a public lamp.

Q. Who is responsible for pruning private trees?

The owner/occupier of the property in which the tree, hedge or shrub is situated is responsible for ensuring that the foliage is properly maintained. The County Council cannot fund the pruning of private trees from around established streetlights.

In the case of newly installed streetlights, the County Council will fund the initial pruning of any tree found to be obstructing the column. Thereafter, it will be the responsibility of the owner/occupier of the property to maintain the necessary clearances.

Q. Rather than prune the foliage, why can't the streetlight be moved?

This might be possible as an alternative, but the County Council would have to make an assessment. If it were possible, the owner/occupier of the property would still be responsible for the costs involved.

Q. The tree has been overgrowing the highway for a considerable time. Why must it be pruned now?

The County Council manages all adopted highways in Cheshire and there are literally tens of thousands of trees along their length. Dealing with overgrown trees is an ongoing program and a long term goal.

Q. What about an instance where the tree was planted prior to the streetlight being erected?

Streetlights are provided to make our highways safe for users and so the County Council has the authority to place streetlights anywhere on the highway. Once a streetlight has been erected, the County Council has a duty to maintain lighting levels and so must enforce the pruning of foliage that interferes with the light, regardless of the size and age of the tree.

As previously stated, the County Council will fund the initial pruning of any tree found to be obstructing a newly installed column.

Q. Can you visit me to point out what I need to do and the likely cost?

The Highways Service does not have anyone qualified to give such advice. The letter, however, gives details of what clearances are required and your own tree specialist will be able to advise you of costs and the best way to prune your tree.

Q. Can I pay you to cut the tree for me?

The County Council does not directly employ a tree contractor, but Jarvis Highway Maintenance Limited is our term maintenance contractor and may be able to recommend a tree contractor, or organise the work for you. You can contact Jarvis on 01606 720402. I would, however strongly recommend that you obtain at least three quotations for the work, to ensure the best price.

Q. My tree is subject to a Tree Preservation Order. Does that mean I cannot prune it?

If a danger is being caused, then pruning must take place regardless of whether the tree is subject to a Tree Preservation Order, or is within a Building Conservation Area. You are, however, advised to contact the tree officer at your Borough or City Council and advise them that you intend to carry out work in compliance with this letter. While this would not preclude you from carrying out the work, your local planning department may wish to place restrictions on any pruning other than that which is necessary to ensure safety.

Q. The tree is sited on the boundary of my property and the highway. Who is the owner?

The County Council does not plant trees on boundaries, but always sites them clearly on highway property, for instance, in verges. Trees sited on boundaries will have been planted by householders and are private trees, belonging to the owner/occupier of the property.

Q. The tree is sited on the boundary of my property and my neighbour's property. Who is the owner?

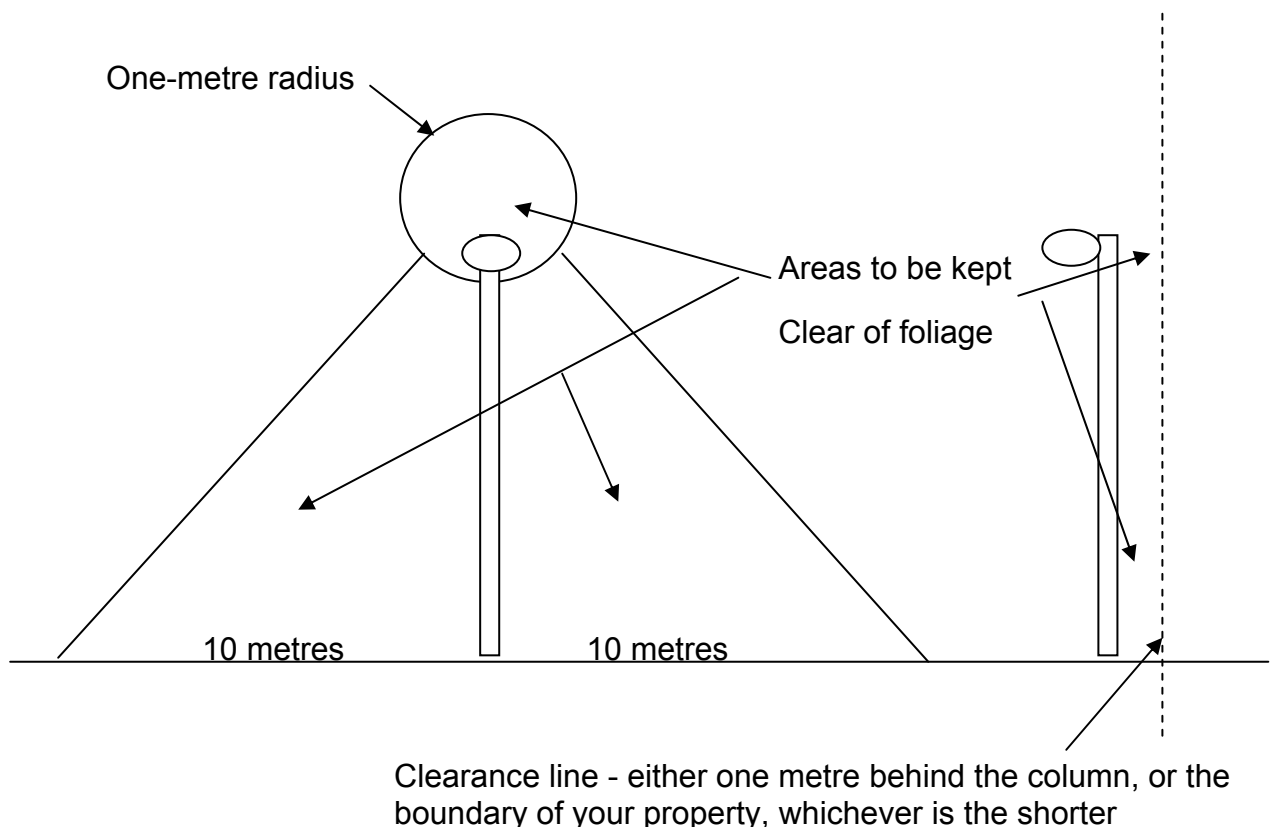
If the tree is planted exactly on the boundary, it will usually belong to the property owner responsible for that particular boundary. It is recommended that you check your deeds and speak to your neighbour.

Q. Have you a guide to the clearances you require?

As a guide, clearance across the width of the footway should be one metre back behind the column, or to the boundary of your property whichever is the shorter. Where the column is located in a grass service strip, the boundary of your property should be taken as two metres back from the road. Foliage should also be cleared to a one-metre radius around and above the lantern.

Along the length of the highway, foliage should be cleared to allow light to fall unhindered to the ground at least ten metres away.

The following drawing gives further guidance:-



Will you also please ensure that any hedge, tree or shrub does not endanger or obstruct the passage of vehicles or pedestrians, or obstruct or interfere with the view of drivers of vehicles, or the view of a traffic sign. It would also be appreciated if you could maintain appropriate clearances in the future.

6 Facts about Street Lighting

Q How many streetlights are there?

The Institution of Lighting Engineers in its leaflet "Protecting a Vital Asset, 2000" determined that there were approximately 6.2 million lighting columns in public ownership in the UK. Of this number some 84,000 are in Cheshire.

Q What is the cost of operating a streetlight?

Street lighting lamps vary in both size and power consumption, depending on whether they are lighting a residential area, main road or town centre. The average annual cost of operating a streetlight, inclusive of energy costs and maintenance is between £30 and £50 per annum.

Q. How much energy does a streetlight use?

Typically, streetlights on main roads contain a 150 watt lamp, while those on residential roads contain a 50 watt lamp. In simple terms, the electricity consumed by an 'average' streetlight will cost £16 per annum, or just 4.5 pence per night.

Q. How are streetlights supplied with electricity?

Lighting columns are normally supplied from the same underground electricity networks which feed your home, these being owned by the electricity companies. Where electricity companies have no networks, for example in rural areas, the County Council provides its own cables, which accounts for some 15% of the cables feeding lighting columns.

Q. Why is the light from some streetlights yellow/orange?

Lamps used for street lighting purposes are gas discharge lamps, which are much more efficient than the 'light bulbs' you may use in your house. The elements contained within lamps give colour to the light emitted and the Lighting Engineer has a large choice of lamps from which to select.

The low pressure sodium lamp is the most energy efficient, but has the drawback that its strong yellow/orange colour makes it difficult to tell the true colours of cars and other objects. High pressure sodium lamps emit a pale, honey coloured light, which gives better colour rendering of the street scene. More recent technological developments have produced discharge lamps which emit white light and as the efficiency and life expectancy of these lamps improves, they are likely to become the future choice for street lighting.

Q. Is there any legislation governing the provision of street lighting?

A local authority does not have a duty to provide street lighting; however once provided, the local authority does have a duty to maintain the system in a safe condition. The standards for street lighting are laid down in British Standard: BS.5489 and European Standard BS EN 13201.

Q. Can I fix a Sign to a Lighting Column?

Unofficial signs, pictures, letters or other marks are not allowed on highways for safety reasons. However, a Police-recognised 'Home Watch' scheme is able to obtain approved signs; the group running the scheme may then erect them in places or on lamp posts approved by the Area Highway Team

Although not specifically approved, short term temporary signs and banners for the benefit of the community are accepted and may be placed by community groups, with the permission of the Area Highways Team. They must be removed immediately after the event.

However, such attachments must not be made to lighting columns without consent. Lighting columns are made from a fairly light gauge steel and the column manufacturers do not recommend the fixing of any object which may cause stress to the column. The fixing of any signs needs to be done in such a way as to prevent theft of the sign or damage to the column.

7 Links for Further Information

<http://www.cheshire.gov.uk/roads/Policies/streetlightingpolicy.htm>

<http://www.ile.org.uk/>

<http://www.dark-skies.org/about.htm>