

Amenity and Minimising Obtrusive Lighting

Planning Policy Advice: Consultative Draft

November 2019

Public Consultation

Status of this Planning Policy Advice

This document is a consultative draft version of Planning Policy Advice: Amenity and Minimising Obtrusive Lighting. Following consultation, the document will be revised to respond to the feedback received and reported to Council for approval. Once approved, it will be a material consideration in the determination of relevant planning applications.

All the policies of the Orkney Local Development Plan will be afforded equal weight in the determination of planning applications; if a proposal is contrary to any single policy then it does not accord with the Plan.

Consultation Period

This consultative draft document has been published for a 6 week period of public consultation from 7 November to 19 December 2019.

How to Comment

Representations can be made by email to devplan@orkney.gov.uk or by post to the following address:

The Planning Manager,
Development and Marine Planning,
Development and Infrastructure,
Orkney Islands Council,
School Place,
Kirkwall, KW15 1NY.

Contacting the Council

Should you wish to discuss any aspect of this consultative draft Guidance, please contact Susan Shearer by calling 01865873535, extension 2533.

<https://www.orkney.gov.uk/>

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Contents

Public Consultation	2
1. Introduction.....	4
2. General Amenity.....	7
3. Residential Amenity	8
Residential Amenity Criterion 1 - The Creation and Protection of Dedicated Outside Space	9
Residential Amenity Criterion 2 – Privacy in the Home.....	10
Residential Amenity Criterion 3 – The Right to Light.....	12
4. Artificial External Lighting.....	14

1. Introduction

1.01. This Planning Policy Advice (PPA) has been drafted to support Policy 1 – Criteria for All Development and Policy 2 – Design of the Orkney Local Development Plan, April 2017. Both policies seek to preserve existing amenity and ensure the amenity of users is of an acceptable standard. Policy 2 also looks to ensure that new external lighting is designed to minimise light pollution.

1.02. Amenity in planning terms is the positive element or elements that contribute to the overall character and / or enjoyment of an area by residents, visitors and other users. For example, open spaces, trees, historic buildings and the inter-relationship between them, or less tangible factors such as the feeling of tranquilly.

1.03. The most common form of amenity that is considered in planning is residential amenity. It is important to protect existing residential amenity and ensure new development has appropriate levels of residential amenity to ensure Orkney's homes help improve people's quality of life now and in the future.

1.04. Light pollution or obtrusive lighting from artificial lighting can have a negative effect on the amenity of a location. It can be a source of annoyance to surrounding users, be harmful to the environment, waste energy and have a negative impact on observers of the night sky.

How to use this Planning Policy Advice

1.05. The relevant policies of the Orkney Local Development Plan 2017 are Policy 1 – Criteria for All Development and Policy 2 – Design. The content of this PPA is material for planning applications that are located within Orkney’s towns, villages, rural settlements and the open countryside.

Policy 1 – Criteria for All Development

Development will be supported where:

- I. It is sited and designed taking into consideration the location and the wider townscape, landscape and coastal character;
- II. The proposed density of the development is appropriate to the location;
- III. It is not prejudicial to the effective development of, or existing use of, the wider area;
- IV. The amenity of the surrounding area is preserved and there are no unacceptable adverse impacts on the amenity of adjacent and nearby properties/users;
- V. It would not create an unacceptable burden on existing infrastructure and services that cannot be resolved;
- VI. It does not result in an unacceptable level of risk to public health and safety;
- VII. It is resource efficient and utilises sustainable construction technologies, techniques and materials and, where practicable, low and zero carbon generating technologies are installed;
- VIII. It facilitates the prevention, reuse, recycling, energy recovery and disposal of waste, including where relevant, the use of Site Waste Management Plans;
- IX. It protects and where possible enhances and promotes access to natural heritage, including green infrastructure, landscape and the wider environment; and
- X. It protects and where possible enhances Orkney’s cultural heritage resources.

Policy 2 – Design

Where relevant, proposals must demonstrate, through consideration of scale, massing, form, proportions, plot size/density, materials, layout and landscaping, that it complies with the following fundamental principles:

- I. It reinforces the distinctive identity of Orkney’s built environment and is sympathetic to the character of its local area;
- II. It has a positive or neutral effect on the appearance and amenity of the area;
- III. It facilitates easy wayfinding to and around the development and is appropriately connected to pedestrian, vehicular and public transport routes, encouraging and prioritising pedestrian access;
- IV. It allows for future conversion, extension or adaptation to other uses;
- V. It promotes sustainable design, minimising use of energy and materials at all stages of the development, and maximises opportunities for shelter; and
- VI. All external lighting is designed to minimise light pollution.

2. General Amenity

When considering proposals for new development, it must be demonstrated that the existing amenity value of a location and the surrounding area will be effectively preserved or enhanced. Development which has an unacceptable adverse impact on amenity will not be supported.

2.01. Amenity in planning refers to the positive element or elements that contribute to the overall character or enjoyment of an area. Amenity value is the pleasant or satisfactory aspects of a location, which contributes to its character and the overall enjoyment of users, residents or visitors.

2.02. When considering new development proposals, it is important to protect how existing users enjoy a location by ensuring there is no adverse disturbance between existing and proposed users and their activities, through one or any combination of noise, vibration, smell, fumes, smoke, soot, ash, dust, grit, privacy, proximity, excessive traffic movement, loss of natural day lighting or any other form of disturbance.

3. Residential Amenity

New development that has an unacceptable adverse impact on existing residential amenity will not be supported. Additionally, all new residential units will only be acceptable if they include well-designed and there are acceptable levels of residential amenity for existing and future residents.

3.01. The definition of residential amenity in the context of this guidance is considered to be the benefit enjoyed from internal and external spaces of the private home; which depends on the quality of these spaces. The level of enjoyment is also dependent on a number of factors, including location, size, orientation, sounds, noise, accessibility and enclosure.

3.02. Residential amenity allows individuals to carry out household and leisure activities. This can include gardening, drying clothes, playing with children, fresh air and other hobbies. In simple terms, private amenity space is often considered as space that is outside, where one can relax.

3.03. A development proposal to create new residential units will have to demonstrate through the final design or a design statement how they have successfully considered the following Residential Amenity Criteria in the creation and protection of residential amenity. Residential amenity will not be considered in isolation from other material considerations such as innovative design and the creation of new places. There may be special cases where exemptions to the criteria will be required when considering the characteristics of the development and its surroundings. For example, when bringing an unused listed building into a residential use or the erection of specialist housing such as sheltered housing.

3.04. A final design will respect the character, general amenity and the residential amenity of the surrounding location.

3.05. For the purpose of this PPA, residential units include houses and flats that are proposed through new build development and the conversion of existing buildings (includes Listed Buildings or buildings in a Conservation Area) and the sub-division of an existing domestic curtilage to create a new house.

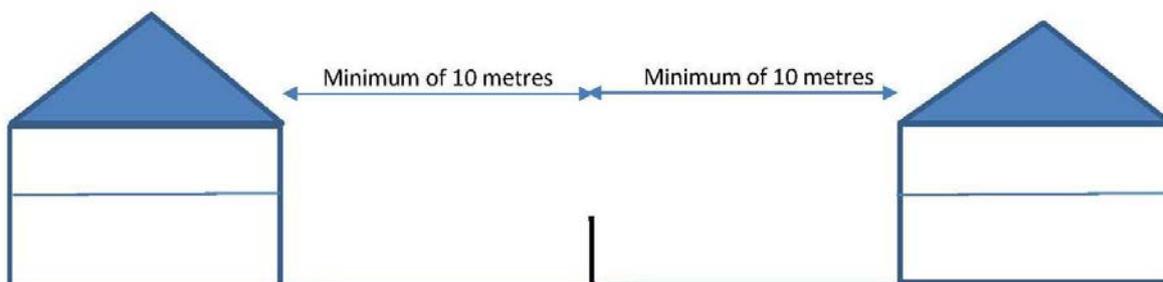
3.06. "Main Habitable Rooms" is a term that is used in this PPA and includes living rooms, dining rooms, kitchens, bedrooms and any other room that it considered to be frequently used by the occupants for general living purposes. This definition excludes halls, landings, bathrooms, utility rooms and garages. Within the PPA reference will be made to both main habitable rooms and main habitable room windows.

Residential Amenity Criterion 1 - The Creation and Protection of Dedicated Outside Space

For Housing Development

C1.01. All housing development is required to have dedicated outside space or garden ground to meet the recreational and domestic needs of the residents. This space should provide for passive recreational activity such as sitting out, entertainment or for active recreational activity such as play space, gardening and for the drying of clothes. These activities should generally be located in the private or enclosed garden ground at the rear of the property with the front garden ground generally having a more public character. As the public facing, principal elevations of properties will be more visible, the location of such items such as refuse bins and recycling storage, cycle storage or heating systems such as gas bottles and air source heat pumps should be situated at the side or rear of the house; or in an outbuilding or garage.

C1.02. To create and maintain rear garden privacy, the minimum rear garden depth should be at least 10 metres from the garden boundary. To maintain future residential amenity, if land to the rear of the site is allocated for housing, or in the opinion of the planning authority has the potential for further housing development, this 10-metre requirement should be used. There may be material considerations why private garden ground cannot be created or protected in this manner. In these cases, the design or the design statement will have to demonstrate how the existing private garden has been protected or recreated in another location within the curtilage and / or how the private garden ground has been recreated in another location with the curtilage. In these cases, the direct overlook from existing or proposed "main habitable room windows" should be considered when locating these private garden areas so as to minimise their impact.



Picture 1 - Demonstrating the 10-metre back garden rule.

C1.03. To maintain and create garden privacy consideration should be given in the design to existing features of the site such as topography, trees and shrubs as well as the proposed use of new planting and appropriate fencing. Note that these features could negatively affect the provision of sunlight and daylight.

C1.04. Areas within the curtilage that are occupied by garages, outbuildings, car parking and footpaths are not considered to be dedicated outside space for residential amenity.

C1.05. The size of outside amenity space will be dependent on the character of the development and the location, with ratios of builtform to outside space matching that of the neighbouring properties. In the open countryside location, it will be expected that the density is lower with larger outside amenity space than in the centre of Orkney's urban areas such as Kirkwall, Stromness or one of Orkney's villages. The size of outside amenity space should be appropriate to the size of the residential unit that is being proposed or protected. For example, larger outside amenity spaces will be expected for a 3 to 4-bedroom house than a 1-bedroom house.

For Flatted Development

C1.06. For all flatted residential development it is expected that there will be communal or private outside amenity space for the proposed occupants within the curtilage of the building for the sole use of the new residents. This area will provide space for passive recreational activities such as sitting outside, for active recreational activity such as play space and for functional activities such as the drying of clothes. Bin and recycling storage, car parking areas, garages and bicycle storage should not be situated within the outside amenity space. These features should be located conveniently for occupants but must not have a negative effect on the visual amenity of the development.

C1.07. An element of the outside amenity space should be private, in a location where overlooking from proposed or existing living room windows is limited, and where sunlight can be maximized. Ground floor flats could be designed with their own dedicated outside space that can be accessed directly from their homes.

C1.08. In the urban cores of Kirkwall and Stromness, the redevelopment of sites and the conversion of historic buildings to form flatted development may not allow for outside amenity space. In these cases, the application must discuss the material weight of other aspects of the development and critically how the proposed new residential will be able to access public open spaces within 300metres and by means of either walking or cycling. Whilst access to public open space is not generally considered to be a suitable alternative to private amenity space, in certain situations it may be acceptable on balance if a strong argument can be made.

Residential Amenity Criterion 2 – Privacy in the Home

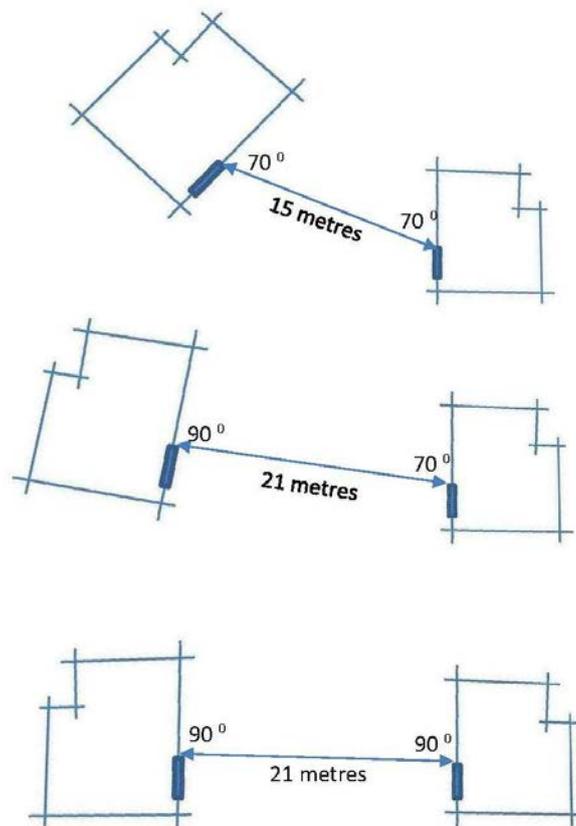
C2.01. This criterion seeks to maintain and create privacy within the residential unit itself. Privacy in the home is a necessity; individual houses and flats must be designed and sited in such a way that provides maximum amount of privacy for the occupants and at the same time avoids over-shadowing.

C2.02. Generally, this is achieved by not allowing any combination of main habitable room windows on any elevation, whether existing or proposed, on ground or first floors to directly face each within 21 metres. For a third storey this distance increases to 28 metres.

C2.03. This minimum distance between main habitable room windows may be reduced depending upon the angle of view. The table below (table 1) provides an indication of distances and picture 2 demonstrates the reductions dependent upon the horizontal angle included between the shortest line joining any part of a living room window.

Degrees	90	80	70	60	50	40	30	20	10	0
90	21	21	21	21	15	12	8	6	4	2
80	21	21	21	15	12	8	6	4	2	
70	21	21	15	12	8	6	4	2		
60	21	15	12	8	6	4	2			
50	15	12	8	6	4	2				
40	12	8	6	4	2					
30	8	6	4	2						
20	6	4	2							
10	4	2								
0	2									

Table 1- Distances between main habitable room windows.



Picture 2 - Distances between main habitable room windows.

C2.04. Notwithstanding these general standards, the Council recognises that adherence to minimum distances can discourage innovative design and reinforces the use of standard layouts. These standards may be relaxed; and privacy in the home maintained and protected by the use of innovative solutions that consider varying floor levels and gradients, staggering facing habitable room windows, using obscure glazing and restricted openings, moving a main habitable room to another location within the residential unit, the use of upward-directional windows such as rooflights in upper storeys, the positioning of outbuildings, the erection of fencing and the planting of mature trees and shrubs.

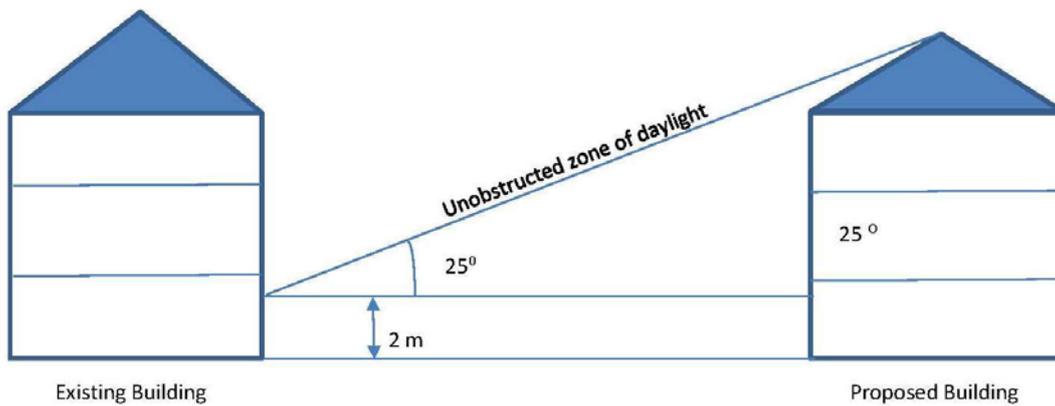
C2.05. The Council will not normally impose these standards on proposed residential units when they face either proposed or existing residential units across a public road.

Residential Amenity Criterion 3 – The Right to Light

C3.01. Existing and proposed residential development should benefit from an appropriate level of daylight, sunlight and minimise overshadowing. The Council will not support development that have a detrimental effect on daylighting, sunlighting or causes an unacceptable amount of overshadowing to another residential property's private outside space.

C3.02. Daylight is defined as the amount of natural light that enters a home to provide satisfactory illumination of main habitable rooms between sun rise and sunset. Sunlight refers to direct sunshine. All new development should be designed to maximise the benefits of sunlight and the benefits of solar gain. Overshadowing of a neighbouring residential property's private outside space should be avoided so that residents can enjoy direct sunlight in these spaces.

C3.03. Quantitative standards are difficult to apply as cases can vary. The BRE publication of Site Layout Planning for Daylight and Sunlight provides guidance on good practice. One of the main standards used to inform design and a planning judgement is that no facing building breaks a 25-degree angle from the horizontal at a point 2 metres above floor level (the normal height of windows). This will achieve adequate levels of daylight and reduce other buildings being overbearing.



Picture 3 - The 25-degree rule for daylighting.

C3.04. In some circumstances where a development is considered to potentially cause an excessive loss of daylight, sunlight and / or overshadowing, an applicant will be required to complete an assessment using the methods that are set out in the Building Research Establishment (BRE) Report 'Site Layout Planning for Daylight and Sunlight: A Guide to Good Practice' so as to demonstrate that the development will have a negative effect daylighting and sunlighting.

4. Artificial External Lighting

New artificial lighting, including the illumination of advertisements should be designed to not be obtrusive so that the amenity of surrounding users and the wider landscape/townscape setting is protected.

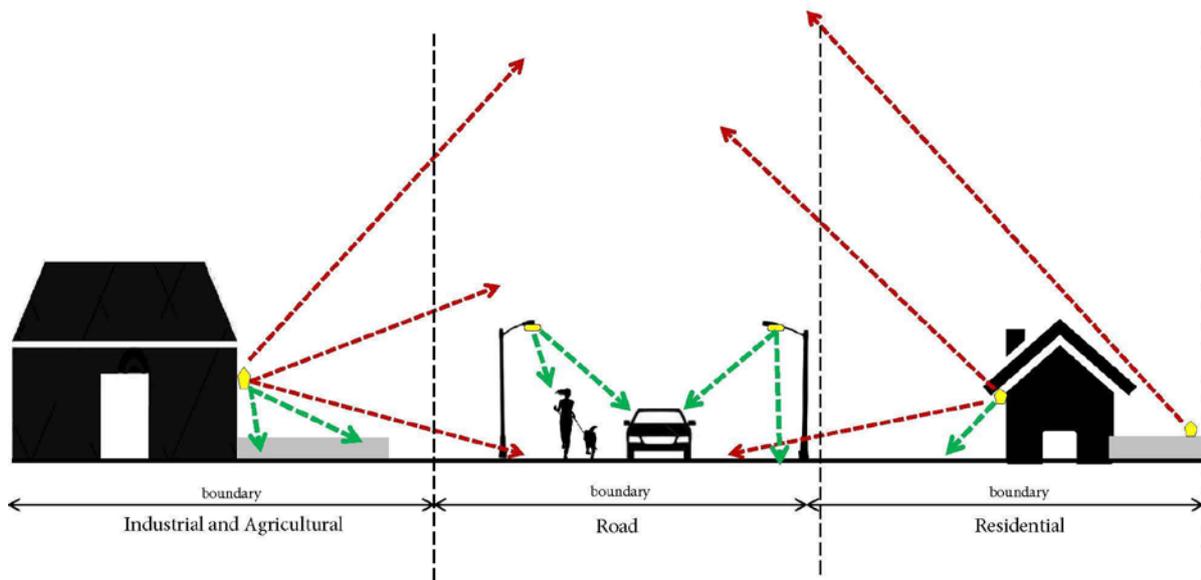
All artificial lighting should be directed to the required task with minimal or no upward spread or light spill; with the brightness appropriate to the task that the lighting is required for. Artificial lighting should be designed to be turned off or dimmed when not required.

C4.01. Artificial lighting can provide benefits socially and economically, but excessive and poorly designed artificial lighting can become a source of annoyance to surrounding users, be harmful to the natural environment, waste energy and detract from the enjoyment of the night sky. The best solution is to get the right light in the right place at the right time.

C4.02. Light pollution has a definition through the Environmental Protection Act 1990 as a statutory nuisance. This is when artificial lighting interferes unreasonably with how a neighbour enjoys their property, for example when a neighbour to the artificial light source requires black out blinds in a bedroom so that it is dark enough to sleep. Environmental Health at the Council administers the powers within this Act.

C4.03. The Council acknowledges that not all artificial lighting or changes to existing artificial lighting requires planning permission but advises developers to positively consider reducing energy consumption and obtrusive external lighting; that will protect Orkney's night sky.

C4.04. Picture 4 depicts the difference between appropriate and useful artificial light (in green, that is directed downwards and is kept within the boundary of a property) and stray artificial light (in red, that may be directed upward and stray onto neighbouring properties). Stray artificial lighting can have a negative effect on the amenity of surrounding users and the wider landscape / townscape setting; and cause obtrusive light.



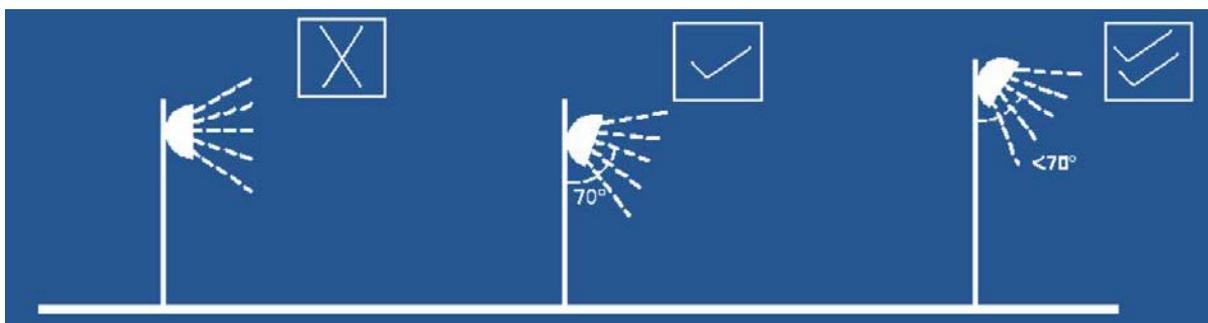
Picture 4 - Depicting the difference between appropriate and useful artificial light.

The Artificial Lighting Criteria

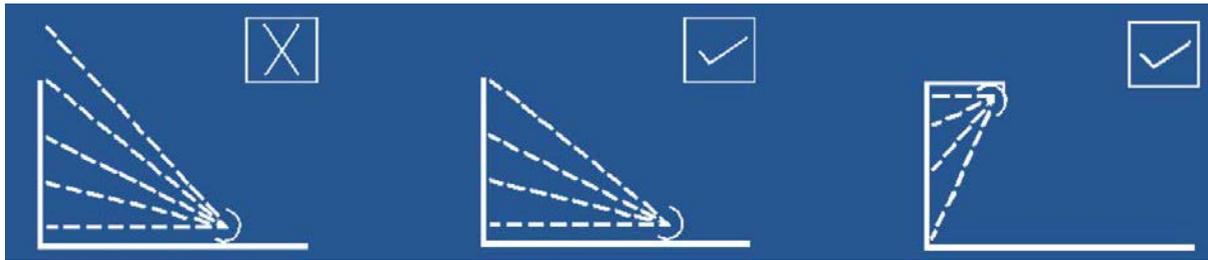
Below are 4 criteria that new artificial lighting should comply with to reduce obtrusive lighting, safeguard the amenity of surrounding users and protect the wider landscape / townscape setting.

Artificial Light Criterion 1 - Lighting Angle

This is the angle to which lighting is distributed or emitted. The main beam angle should be kept below 70 degrees. The higher, the light is fixed from the ground, the lower the angle should be kept below 70 degrees. This angle must not disturb surrounding users by spilling onto their property. Light spread could be reduced by fitting shields and hoods to ensure the required area is lit. The diagrams below depict this.



Luminaire aiming angles.



Facade Illumination.

Artificial Light Criterion 2 - Energy Efficient

The initial question to ask is the proposed lighting necessary and could the development proceed without it? Energy efficient artificial lighting should consider costs, energy use and colour rendering. Artificial lighting especially task lighting should be designed so that it can be turned off when not required through the use of passive infra-red detectors, timers and / or on / off switches.

Artificial Light Criterion 3 - Security Lighting

Security lighting should be fitted with passive infrastructure detectors and / or timing devices to make sure they minimise nuisance to neighbours and surrounding users and are not triggered by passing traffic or pedestrians outside the proposed site.

Artificial Lighting Criterion 4 – The Location

The artificial lighting design should consider and respect the location of the proposed development and ensure that the lighting design is appropriate. Artificial lighting design should consider if the location is urban or rural; and whether it is located within a designation such as a historic conservation area or within the Hoy and West Mainland National Scenic Area. As a general rule, it would be expected to have a more illumination in an urban location as compared to a rural location; for artificial lighting to respect the historic nature of a conservation area (i.e. limited artificial lighting or non, for example there is a general presumption against external shop front lighting in a conservation area) and for artificial lighting to respect the landscape features and setting of the Hoy and West Mainland National Scenic Area.

The Lighting Design Process

The Scottish Government's publication of Controlling Light Pollution and Reducing Lighting Energy Consumption that can be found at:

<https://www.webarchive.org.uk/wayback/archive/20180517215630/http://www.gov.scot/Publications/2007/03/14164512/0>

Annex A of this document details the lighting design process. Depending on the size, type and location of a proposed development, the Council may request evidence that the process set in this document has been followed in the design of the proposed artificial lighting scheme.



Other useful guidance can be found on the Institute of Lighting Professionals' website at <https://www.theilp.org.uk/home/>