6 LIGHTING STRATEGY

6.1 Introduction

All of the landscape elements - street furniture, planting, signage, surfaces and spaces - need to work at night. The lighting should be designed as an integral part of the landscape, street furniture and signage design and in some cases be integrated into these functions. Poole's Harbour situation offers the chance to create a "nightscape" of international uniqueness.

Lighting, in terms of the choice of lighting columns and units and the colour/intensity of light, is an important streetscape element in creating identity and connectivity between the new and existing parts of Poole. It is a major provision of the Streetscape Manual that a unified range of lighting should be used throughout the Regeneration Area. This should extend along major link routes into the existing town.

A "Lighting Strategy Proposal" covering all aspects of lighting discussed in this chapter (including light pollution and lighting in accordance with the "Pools of Light" strategy) must be submitted as part of the planning application to show how the requirements of this Chapter will be delivered.

LIGHTING STRATEGY

6.2 Strategy Objectives

- **To add legibility and continuity of treatment to the public realm.**
- **To provide safe well lit streets without disturbing local wildlife or residents through light pollution.**
- **To reduce clutter – by using the minimum number of columns necessary to achieve the optimum lighting distribution for a particular space.**
- **To be responsive to the seasons and time of day and night aiding morning and night time legibility across the town.**
- **To highlight existing landmark structures, new structures and specific environments for 'effect lighting'.**
- **To link spaces through the use of light, thereby assisting legibility.**
- **To be varied rather than consistent where appropriate and provide a sense of drama.**
- **To use lighting to minimise crime and intimidating behaviour.**
- **To use lighting columns for information, artworks and banners.**

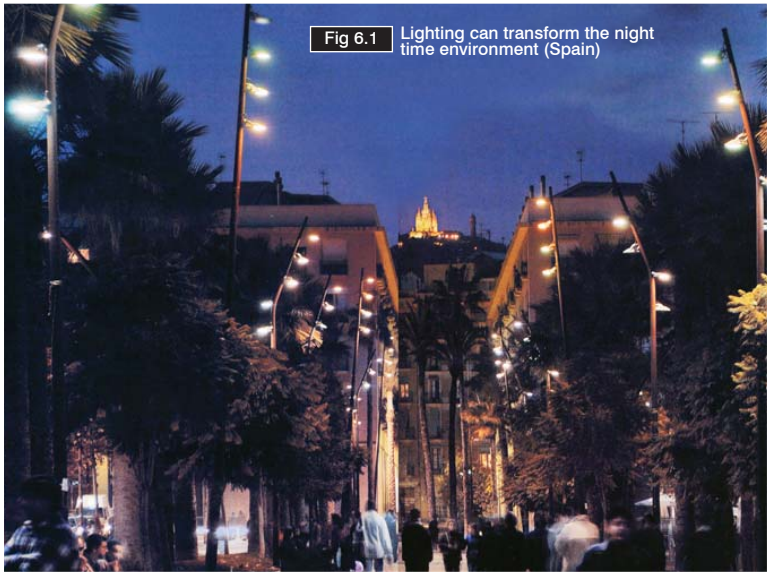

Fig 6.1 Lighting can transform the night time environment (Spain)

6.3 Guidance

Lighting columns and light systems are large and repeated elements in the street scene and thus can have a profound impact on the appearance and distinctive character of a place. The opportunity offered by the regeneration, with the introduction of a large number of new lighting elements makes the choice of lighting system of major importance to the public realm.

6.3.1 Introduction

In the past Poole, along with many other towns, used custom-made elements. This is economically questionable today, but the possibility of some elements of 'bespoke' lighting will be examined in cooperation with developers.

Fig 6.2 Poole's existing Quay shows the attractiveness of night-time lighting

This edition of the Manual does not identify a specific range of lighting products, but this will be included in future editions following a separate study. This guidance document will supplement and update the provisions of this Manual. It will include the following:

- Identification of a range or ranges of lighting columns and lamps for use in different situations throughout the regeneration Area.
- Specification of any bespoke elements of lighting provision.
- The relation of lighting to trees and CCTV.
- The process of designing integrated lighting schemes by means of teamwork between designers and artists, manufacturers and suppliers, and the Borough Council.

6.3.2 "Pools of Light" Lighting Strategy

This is one of the three major themes to come from the public consultation process (see section 1.6.4). The 'Pools of Light' Lighting Strategy has several elements, all of which need to be addressed and incorporated in each developer's Lighting Strategy proposals:-

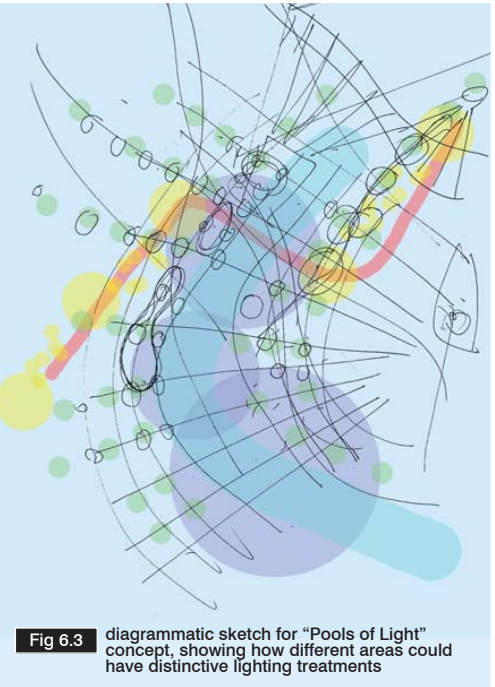

Fig 6.3 diagrammatic sketch for "Pools of Light" concept, showing how different areas could have distinctive lighting treatments

1 **Focal lighting** – applied to buildings and as feature of new public open spaces and quaysides.

2 **Distinctive path route lighting** – a connecting feature on major path routes, providing an identifiable line of lighting (e.g. as Fig 6.13, 6.15 & 6.16) that guides people through the area and links the Regeneration Area to the existing town at night time.

3 **Overlapping fields of light** – the use of zones of light of different colour/intensity in all forms of lighting that is used to identify different parts of the town and is intended to work at different urban scales; from the doorway to the Harbour. In this way the lighting is subtly echoing lights reflected in water.

4 **Lighting in artwork** – art-based lighting should form a significant part of proposals for new open spaces. An illustrative lighting concept called "**Light Pools**" designed for use in the large Hamworthy open space is described at 6.7 below. This concept is favoured by the Council, but is not the only one that will be acceptable.

Lighting has been considered under three headings– high level, pedestrian level and focal lighting. All these different types of lighting should be considered together with reference to the Pools of Light concept.

'Pools of Light' should be seen as both a lighting strategy and an artwork concept which aims to reinforce the network of spaces and aid legibility whilst adding to the quality of the night-time environment.

Fig 6.4 focal lighting adds distinction to buildings and assists orientation

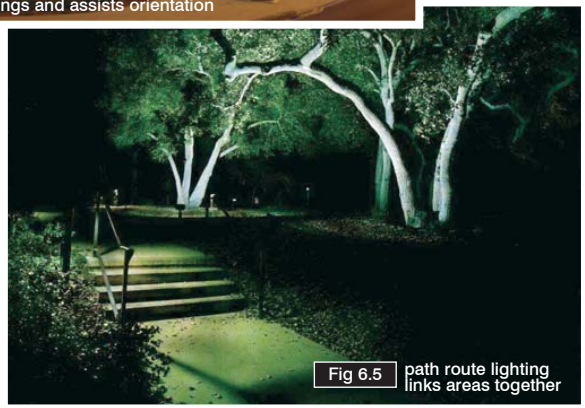

Fig 6.5 path route lighting links areas together

The major pedestrian circulation routes should be lit with lines of cool white light, whilst special areas would become 'pools' of either warmer or coloured light. Special areas might include important route junctions or meeting places and on a smaller scale, pools of light could highlight benches or sculptures. In this manner Poole would have a unique night-time character.

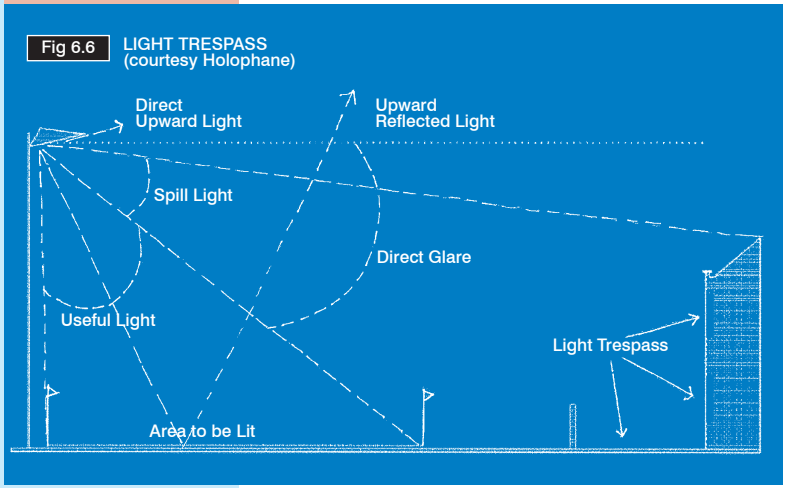

Fig 6.6 LIGHT TRESPASS (courtesy Holophane)

6.3.3 Lighting-General design considerations

MUST

- The different aspects of the 'Pools of Light' lighting concept must be incorporated into the quayside promenades, major pedestrian routes and pedestrian links to the existing town.
- In designing lighting proposals due consideration must be given to pedestrian safety, durability, drainage, litter and cleansing, the effects of vehicle use and the cost and convenience of maintenance.
- On access roads and quayside promenade spaces lights must be fixed to buildings wherever possible in order to reduce clutter.
- Lighting must be used to enhance legibility by the use of distinctive lighting linking the quayside promenade with major pedestrian routes and links back into the existing town and Quay.
- All quayside lighting must be designed to avoid confusion to vessels passing through the town at night.
- The visual impact of lighting installations by day must be considered, especially where they contribute to the signage strategy.
- Consideration to light pollution (overspill) and methods of pollution control must be demonstrated in the lighting design, including the installation of artwork with lighting.
- Design life of 60 years for columns and 20 years for lanterns/ luminaires should be achieved.
- Energy use and longevity must be considered at the design stage of the lighting.
- Some lighting standards can make it difficult to achieve 'feature lighting'. Justification for divergence from accepted standards must to be provided in such situations.

SHOULD

- White light should be used throughout unless it contributes to a specific design feature.
- Wherever possible other street furniture elements should share columns provided for the lighting.
- Designed fixings should be used for this purpose and the use of Jubilee clips avoided.

COULD

- The lighting column installation arrangement depends on the carriageway type and width and classification/importance. Reference to the Application section provides further guidance of this subject. In general terms columns could be installed either as:

  (1) Single sided arrangements

  (2) Staggered

  (3) Opposite one another.

6.4 High Level Lighting (10 - 12m)

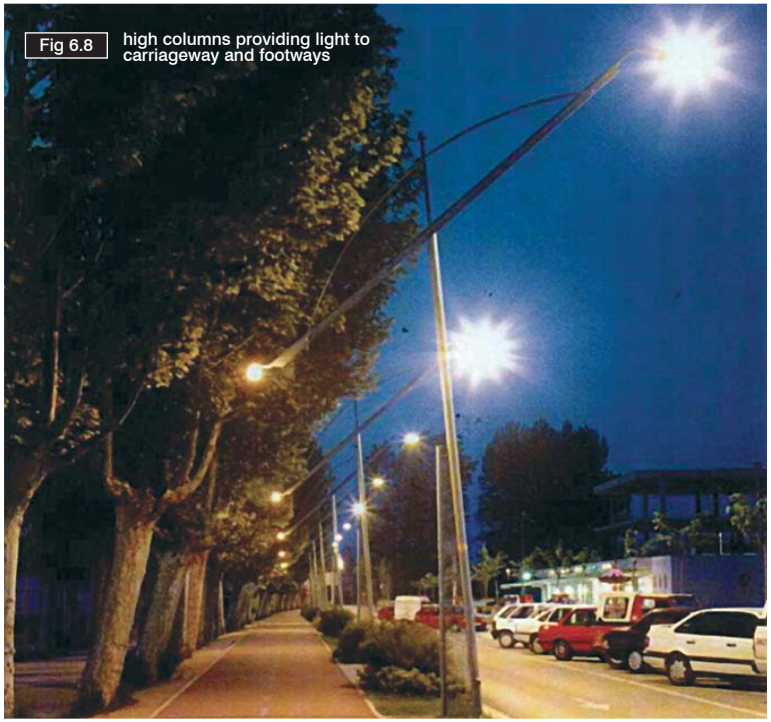

Fig 6.8 high columns providing light to carriageway and footways

6.4.1 Introduction

High level lighting is often provided by lighting columns and large lamps sizes. This is very economic but can be bland and difficult to manipulate subtly. However, on a major road, consistency is important and therefore this method of lighting should be used.

6.4.2 General design considerations

MUST

- High level lighting to roads must achieve the minimum statutory requirements with other light sources providing supplementary lighting and modelling. The lights must be optically controlled so to project light down to the street only and avoid light pollution.

Fig 6.9 high columns combined with wall mounted lights provide light to all areas

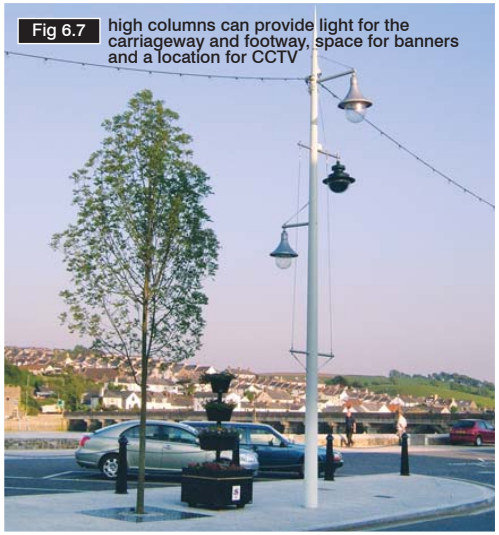

Fig 6.7 high columns can provide light for the carriageway and footway, space for banners and a location for CCTV

- Consideration must be given in relation to trees especially on the tree lined 'boulevards' to avoid/reduce conflict with uniform light distribution. One possibility is to use long-arm lighting such as that shown in Fig 6.8.
- High level lighting proposals must be co-ordinated with 'Pools of Light' and other creative/feature lighting proposals.

SHOULD

West Quay Road. Road lighting columns should be approximately 40.0m apart and 10.0m high.

On the quaysides general lighting should be provided fixed from buildings to reduce clutter.

In addition, on the new Quay, it will be necessary to provide column lights to mark/illuminate the quays. These should be 6.0m in height, placed as shown in Fig 8.26.

6.5 Pedestrian Level Lighting (Medium-level [5m] & low level)

Many spaces will fall within a ‘Pool of Light’ and the pedestrian level lighting will supplement light being received from the other two components (High level and Focal).

6.5.1 Introduction

Many spaces will fall within a ‘Pool of Light’ and the pedestrian level lighting will supplement light being received from the other two components (High level and Focal). The pedestrian level lighting should be conceived as a muted thread of white neutral light which passes through the ‘Pools of Light’ untouched.

Fig 6.11 low level lighting should be at the right scale for the area

Fig 6.10 in pedestrian streets and on the quaysides, lower columns can be used

Fig 6.13 low level and floor lighting can create atmosphere

6.5.2 General design considerations

MUST

- Low level lighting is more vulnerable and must be robustly designed and maintained/repaired appropriately.
- White light should be used to provide threads of neutral light through the streetscape where pedestrian routes exist.
- Low level lighting proposals must be co-ordinated with 'Pools of Light' and other creative/feature lighting proposals.

Fig 6.12 wall mounted lights can reduce clutter

SHOULD

- Medium Level Lighting bringing the light lower should be used to provide a more intimate lighting environment, where the lighting can be more controlled. Without having lots of fittings the lighting may be inconsistent but is suitable in pedestrian areas.
- Low Level Lighting should be used to inform routes.

COULD

- Ground level lighting fittings could be integrated into street furniture as well as the pavement.
- Ambient light from buildings could be considered but must not be relied upon as continuous tenancy cannot be guaranteed.

6.6 Guidance | Focal and Decorative Lighting

Focal lighting is the primary tool for delivering the 'Pools of Light' theme, but it must not detract from its use in other situations such as façade lighting.

Fig 6.14 lighting adds character to the RNLI building

MUST

Focal lighting schemes, designed by professional lighting designers, and visual artists must be provided for all focal spaces and key landmark buildings as part of the 'Pools of Light' concept.

SHOULD

Directional Focal lighting should be primarily achieved through flood and spotlighting. Other light-sources such as neon, fibre optics, cold cathode and LEDs can be used where the light itself is the focus.

Key structures such as notable buildings and Bridges should have a strategy prepared specifically for them relating to the 'Pools of Light' strategy.

Where light fittings are attached to buildings they should be fixed in sympathy with the architectural features and disguised from the street.

- Designs should normally include provision for trees to be focally lit where appropriate (Fig 6.15).

COULD

- 'Pools of Light' could work on the micro level with individual elements emitting or containing their own 'Pool of Light'.
- 'Pools of Light' could be applied to temporary events.

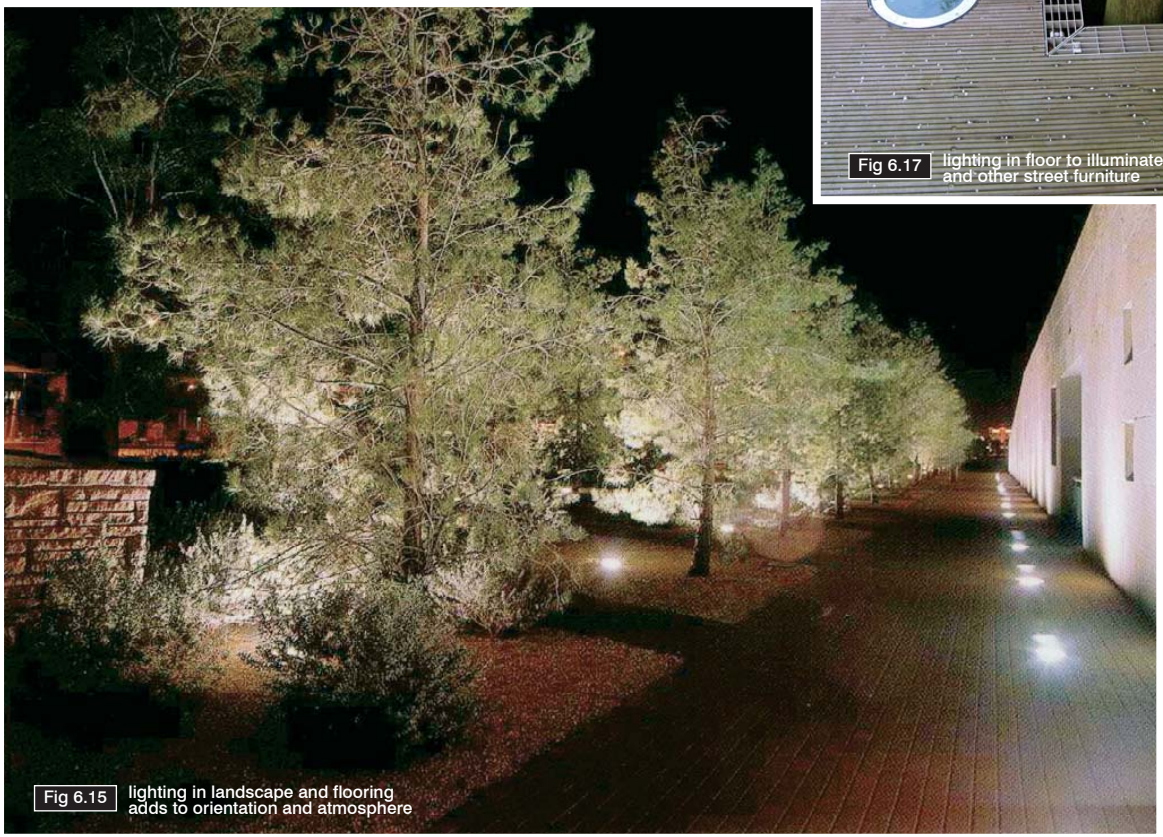

Fig 6.15 lighting in landscape and flooring adds to orientation and atmosphere

Fig 6.17 lighting in floor to illuminate trees and other street furniture

Fig 6.16 floor lighting aids orientation