

Project name	Swansea Bay Technology Centre		
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1. INTRODUCTION

The following strategy statement is provided for planning purposes to describe proposals for the temporary external construction lighting for the proposed Swansea Bay Technology Centre with the specific intention of expressing methods for the reduction of obtrusive light.

The proposal is to provide an external construction lighting scheme which is as unobtrusive as possible, which complies with guidelines for the reduction of light pollution and to satisfy the local planners and the local community.

The external construction lighting scheme will be arranged to create a safe external environment by providing artificial lighting in the hours of darkness, whilst minimising the affect neighbouring areas. This report and associated drawing focuses on lighting to the site access/egress points, contractor offices, welfare areas, car parking, storage areas, washout/skip area.

The external lighting proposed shall be restricted to the perimeter of the site to ensure all light output is focused within the site and to limit spill off site.

2. CODES OF PRACTICE

The external construction lighting scheme has taken into consideration the following guidance documents:

- ILE Guidance Notes for the Reduction of Obtrusive Light
- CIBSE Lighting Guide 1(LG1) – The Industrial Environment
- BS EN 12464 Part 2 – Lighting of Work Places – Outdoor Work Places
- BS5489 – COP for Design of Road Lighting

The ILE Guide for the Reduction of Obtrusive Light is the primary document used by most local councils and planning departments to categorise the provision of external lighting.

The temporary external construction lighting will achieve minimum recommended light levels as appropriate for the activities undertaken in each area. Over-lighting areas will be avoided in order to reduce the potential light spill off site.

3. STRATEGY

3.1 Lighting Type

All areas around the site office and pedestrian routes of the site shall be illuminated using wall mounted luminaires fixed to perimeter site hoarding, facing inwards towards the site. Entrance/egress, washout/skips, storage areas and car parking will be lit with temporary post-top luminaires positioned at the edge of the site and directed inwards towards the site.

The wall mounted luminaires will be a combination of asymmetric distribution for pedestrian access and downward throw distribution for the luminaires above each access door. Back shields will be provided where backward light spill cannot be avoided by luminaire selection or positioning on opaque hoarding.

The post top luminaires will use a warm white light lamp source with highly directional optics or baffle/louvre as necessary to prevent upward and backward light spill onto sensitive areas.

Temporary construction lighting that is internal to the new development shall be positioned away from windows to reduce light spill to the external environment.

3.2 Lighting Control

The external lighting controls as a minimum will consist of photocell and time clock arrangements. A photocell and timeclock will control the main lighting areas separately to allow the different areas to be switched independently.

Where possible, curfews will be applied to the construction lighting luminaires. A number of the fitting shall remain on after 23.00 hours to provide security on the site during these hours of darkness. A manual override facility will be provided to override any automatic controls to give the end user more flexibility and control, particularly acknowledging the potential for out-of-hours work.

An option could be to provide a dimming feature on all luminaires so that lighting levels can be reduced to further reduce risk of obtrusive light and still provide a safe environment.

4. CONCLUSION

The above methods of lighting and control are proven methods for reducing light spill over the site boundary onto neighbouring areas and also to reduce sky glow from upward light distribution. The purpose of the lighting scheme is ultimately to provide a safe and secure environment for the site during construction works and also to minimise or eliminate any negative impact on the existing environment.