

Condition 43

Condition 43 Construction Lighting

No lighting for use during excavation of materials or construction of the IWMF within the site shall be erected or installed until details of the location, height, design, sensors and luminance have been submitted to and approved in writing by the Waste Planning Authority. The lighting details shall be such that no lighting shall exceed 5 lux maintained average luminance. The lighting details with respect to excavation of materials shall be such that the lighting shall not be illuminated outside the hours of 0700 and 1830 Monday to Friday and 0700 and 1300 Saturday and at no time on Sundays, Bank or Public Holidays except for security and safety lighting activated by sensors. The lighting details with respect to construction of the IWMF shall be such that the lighting shall not be illuminated outside the hours of 0700 and 1900 Monday to Sunday and at no time on, Bank or Public Holidays except for security and safety lighting activated by sensors. The details shall ensure the lighting is designed to minimise the potential nuisance of light spillage from the boundaries of the site. The lighting shall thereafter be erected, installed and operated in accordance with the approved details.

Reason: In the interests of residential and local amenity and protection of the environment and in the interest of protecting biodiversity and in the interests of highway safety and to comply with MLP policies S1, S10, S12, DM1, WLP policies W3A, W8A, W10E and W10F, BCS policies CS5 and CS8 and BDLP policies RLP 36, RLP 62, RLP 65 and RLP 90.

Lighting for use during excavation

Owing to the transient nature of the earthworks operations, i.e. its phased and sequential development across the IWMF site, standard plant mounted lighting will be used (in line with the adjacent quarrying operations). Excavation operations will principally take place below surrounding ground level. The maintained average illuminance at existing ground level is not expected to exceed the maximum 5 lux.

Lighting for use during excavation and construction of the IWMF

The proposed construction lighting scheme comprises 6m high lighting columns within the main construction area, with additional low level lighting around the accommodation compound. The proposed lighting scheme has been designed to comply with the requirements of the planning consent with regard to both the maximum average maintained lighting levels and the hours of operation.

Within the main construction site there are 16 lighting columns proposed, with a total of 59, 400W luminaires (from two up to four luminaires per column). 9 of these lighting columns are to be installed at the bottom of the excavated area (at a level of approximately +35.0m AOD) and 7 of these to be installed at a level of approximately +48.0m AOD. The level of the ground surrounding the site (referred to hereafter as 'existing ground level') is also at a level of approximately +48.0m to +50.0m AOD.

The wattage of the luminaires and the height of lighting columns have both been selected to provide adequate background illuminance and illuminance for health and safety considerations. The use of shorter lighting columns would severely affect the overall quality of lighting achievable and would necessitate additional columns to compensate. Calculations show that for the 6m high columns proposed, light spillage from each column rapidly diminishes over a relatively short distance which will help minimise the impact on the surrounding area.

The floodlights themselves will be black and have a dry powder, die-cast aluminium body and front frame with a toughened glass diffuser. The lights have been selected for their suitability to illuminate large areas such as

construction sites and car parks. Attached are the technical datasheets of the selected luminaires. (Hilclare Rio AFRH400TL for the 16 lighting columns and Hilclare Amigo WLAH70TLO for the accommodation compound).

Lighting calculations according attached lighting scheme P18536R2a predict an overall maintained average illuminance of approximately 8 lux for the level of +35.0m AOD and approximately 4 lux for the level of +48.0m AOD, this lower figure being due to reduced light breakout at existing ground level. Even when allowing for the use of additional task specific lighting within the excavation, the maintained average illuminance at existing ground level is not expected to exceed the maximum 5 lux restriction for this development.

The proposed lighting equipment and scheme layout have been chosen for their ability to produce a compliant design whilst meeting the requirements of the planning consent.

Attachments

Lighting scheme_P18536R2a; Hilclare Rio_Data Sheet; and,Hilclare Amigo_Data Sheet