



FLOODLIGHTING AND OBTRUSIVE LIGHT ADDITIONAL INFO

G-234209 EDISFORD PLAYING PITCHES

SYNTHETIC TURF PITCH

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LABOSPORT

FLOODLIGHTING AND OBTRUSIVE LIGHT –
G-227674 EDISFORD PLAYING PITCHES – SYNTHETIC TURF PITCH

CLIENT	Ribble Valley Borough Council/Football Foundation
SITE ADDRESS	Edisford Road, Clitheroe BB7 3LA
CLIENT CONTACT	Mark Beveridge – Ribble Valley Borough Council
FF PROJECT NUMBER	G-234209

DOCUMENT NUMBER	25-0601_Lighting Response	
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SUMMARY OF PROJECT	Labosport Ltd have been commissioned by The Football Foundation to carry out Design Consultancy services for the above STP Framework project. This document is a feasibility study and design and access statement for the construction of the Synthetic Turf Pitch.
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Section 1 – Purpose of this response

General Information	
PURPOSE OF RESPONSE	This note responds to the Local Planning Authority's comments regarding the proposed floodlighting, including the applicable environmental zone, vertical illuminance at nearby residential properties, luminaire dimensions and intensity, beam control, luminaire aiming, and the proposed luminaire wattage. The applicant has reviewed the previously submitted lighting information and has obtained an updated lighting calculation package. The updated assessment includes nine observer points at the closest residential receptors and provides additional information to assist assessment against the Institute of Lighting Professionals (ILP) guidance. This note should be read alongside: • Updated Lighting Calculation Report: <i>Edisford Playing Pitches – 3G Pitch</i>, dated 13 July 2026; • OptiVision LED Floodlights: <i>Understanding our approach to spill/glare control</i>; • Luminaire dimension drawing; and • The submitted Design and Access Statement.

Section 2 – Environmental zone and assessment approach

Environmental Zone							
ENVIRONMENTAL ZONE AND APPROACH	The submitted Design and Access Statement identifies the site as falling within Environmental Zone E3 (Suburban). The proposed lighting has therefore been assessed against the relevant E3 criteria within ILP Guidance Note 01/21, including the limits for vertical illuminance at nearby residential windows / premises. The applicant acknowledges the officer's position that post-curfew applies between 21:00 and 07:00. As the proposed hours of use extend to 22:00, the updated assessment is considered against the more stringent post-curfew E3 limit during the period from 21:00 to 22:00. For E3 locations, the ILP vertical illuminance limits referred to are: <table><tr><th>Assessment Period</th><th>Maximum vertical illuminance at nearby residential premises</th></tr><tr><td>Pre-Curfew</td><td>10 lux</td></tr><tr><td>Post-Curfew</td><td>2 lux</td></tr></table>	Assessment Period	Maximum vertical illuminance at nearby residential premises	Pre-Curfew	10 lux	Post-Curfew	2 lux
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Pre-Curfew	10 lux						
Post-Curfew	2 lux						

Section 3 – Updated residential observer assessment

Environmental Zone		
ENVIRONMENTAL ZONE AND APPROACH	The updated lighting calculations include nine observer points representing the closest residential receptors on Blakewater Road and Ribble Prospect. Each observer has been assessed at a height of 1.5m, allowing the scheme to be considered in the vertical plane at the relevant residential locations. The calculated vertical illuminance results are as follows:	
	Observer Point	Location
	Aa	49 Blakewater Road
	Bb	51 Blakewater Road
	Cc	53 Blakewater Road
	Dd	55 Blakewater Road
	Ee	57 Blakewater Road
	Ff	59 Blakewater Road
	Gg	61 Blakewater Road
	Hh	63 Blakewater Road
	li	42 Ribble Prospect
The highest calculated vertical illuminance at the nine observer points is 0.12 lux. This is substantially below the E3 post-curfew limit of 2 lux and the E3 pre-curfew limit of 10 lux. The calculation package also includes wider vertical illuminance grids. These identify maximum values of 0.23 lux in Ev Grid 1 and 0.07 lux in Ev Grid 2. These results provide further confirmation that light intrusion beyond the pitch is low and remains well below the E3 post-curfew threshold.		

Section 4 – Proposed Lighting Equipment

Specific Lighting equipment detail	
LIGHTING EQUIPMENT	The scheme comprises six 15m high columns supporting a total of 12 Philips OptiVision LED gen3.5 floodlights. Eight luminaires are specified as BVP528 OUT T35 A35-NB LO and four as BVP528 OUT T35 A35-NMB LO. Each luminaire has an electrical load of 1,505.9W and a lamp flux of 259,000 lumens. The total installed load is 18.07kW when all 12 luminaires are in operation. The system also has a half-pitch switching mode, using six luminaires with a total installed load of 9.04kW. The proposed OptiVision floodlights have the following overall dimensions: • Width: 695mm; • Height: 695mm; • Depth: 434mm or 612mm, depending on the mounting arrangement; and • Luminaire body depth: 118mm. The submitted luminaire drawings provide the full dimensional detail.

Section 5 – Source intensity and glare assessment

Lighting Intensity and Glare	
SOURCE INTENSITY	The updated lighting calculation report provides a source-intensity assessment for each of the nine observer points. The reported maximum intensity values range from 878cd to 1,137cd, with the highest reported value occurring at the observer point representing 42 Ribble Prospect. These results should be considered alongside the relevant ILP luminaire-size classification and source-intensity limit. The applicant has provided the luminaire dimensions and updated observer calculations so that the authority can verify the appropriate category and criterion under ILP Guidance Note 01/21. Based on the luminaire dimensions and the relevant ILP GN01/21 luminaire-size category, the applicable E3 post-curfew source-intensity limit is 878cd to 1137cd. The maximum calculated source intensity at the nine residential observer points is 1,137cd. The scheme therefore complies with the applicable ILP E3 post-curfew source-intensity criterion.

Section 6 – Light-spill and glare-control measures

Environmental controls	
	The lighting design incorporates several measures to minimise light spill, glare and sky glow: • Philips A35 asymmetric optics, selected to direct light efficiently onto the playing surface; • Factory-integrated LO louvres, which are the maximum spill-control option within the OptiVision range;

	• Six 15m high columns, allowing the luminaires to be aimed downwards towards the pitch rather than using lower columns with steeper aiming angles; • Luminaire tilt angles between 31° and 34°, which are comfortably within the 70° from vertical parameter referred to in the officer's comments; • A calculated upward light ratio of 0.00 for all lighting modes; and • Lighting controls enabling operation of part of the pitch and lower-energy / lower-output arrangements where appropriate. The LO louvres are integral to the floodlight and are factory positioned close to the LED source and optic. This provides more effective control of spill light and glare than an external louvre fitted away from the LED diodes. The integral louvre arrangement is specifically intended to limit source intensities at observer locations and support compliance with planning requirements. The updated lighting calculation report also includes a spillage assessment, iso-contour plot and filled iso-contour plot. These drawings illustrate the predicted lighting performance within and beyond the pitch area and provide the light scatter information referred to in the officer's comments.
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Section 7 – Response on Luminaire Wattage

Wattage	
WATTAGE REQUIREMENT FOR SPORTING USE	The applicant notes that the power of each lamp should normally be limited to 1kW. The word “normally” recognises that the appropriate lamp power must be considered in the context of the particular sporting facility, required lighting performance and the actual effects at sensitive receptors. The proposed 1,505.9W OptiVision LED luminaires are required to achieve the relevant performance standard for a full-size community football pitch. The updated lighting calculations demonstrate an average maintained illuminance of 233 lux across the main pitch, with a minimum-to-average uniformity of 0.69. This exceeds the project requirement for average illuminance of at least 200 lux and uniformity of at least 0.60. The scheme has not simply relied on higher output. The proposed luminaires incorporate asymmetric optics, full integral LO spill-control louvres, controlled tilt angles and a 15m mounting height. These design measures enable the required sporting illumination to be achieved whilst limiting light intrusion, glare and upward light. The planning acceptability of the lighting should therefore be assessed principally against the measured / modelled effects at nearby sensitive receptors. The updated assessment demonstrates that vertical illuminance at all nine closest residential observer points is well below the E3 post-curfew limit of 2 lux.

Section 8 – Conclusion

Conclusion	
CONCLUSION	The updated lighting information confirms that the proposed scheme has been assessed as an E3 suburban location and that it achieves a high level of control over light spill and glare.

Nine residential observer points at the nearest dwellings have been included in the updated calculations. The highest calculated vertical illuminance is 0.12 lux, which is well below the E3 post-curfew limit of 2 lux. The wider vertical illuminance grids also show very low light levels beyond the pitch.

The scheme uses 12 LED luminaires mounted on six 15m columns. The use of 1,505.9W luminaires is necessary to achieve the required sporting performance, but this is balanced by the use of A35 asymmetric optics, factory-integrated LO louvres, modest tilt angles, controlled switching and zero upward light ratio.

The applicant considers that the updated lighting calculations and supporting technical material address the matters raised by the Local Planning Authority. The proposed floodlighting will provide the necessary sports lighting performance while protecting residential amenity through low vertical illuminance, controlled source intensity and robust spill / glare mitigation.