



James Wickham
Gerald Eve
72 Welbeck Street
London
W1G 0AY

20 July 2016

Dear Mr Wickham,

Re: Twickenham Stadium East Stand Extension, Richmond-upon-Thames – Light Pollution

Point 2 Surveyors Ltd have been instructed to consider the potential light pollution effects of the proposed East Stand Extension at Twickenham Stadium and this report provides a qualitative assessment of the position.

Relevant Guidance

The Institute of Lighting Professionals (ILP) provide useful guidance on light pollution in their 'Guidance Notes for the Reduction of Obtrusive Light' (2011), and breaks down the types of light pollution as follows:

Sky Glow – the brightening of the night sky;

Light Intrusion – the spilling of light beyond the boundary of the property or area being lit;

Glare – the uncomfortable brightness of a light source when viewed against a darker background; and

Building Luminance – the increase in brightness of the general area.

The National Planning Policy Framework (2012) states that *"By encouraging good design, planning policies and decisions should limit the impact of light pollution from artificial light on local amenity..."*

Furthermore, the London Plan (2011) states *"The lighting of the public realm also needs careful consideration to ensure places and spaces are appropriately lit, and there is an appropriate balance between issues of safety and security and reducing light pollution."*

Considerations

The first consideration must be whether there is the potential for unacceptable levels of light spill from the proposed East Stand Extension. The operational use of the East Stand is proposed to be limited to Match Days and Non-Major Event Day events only. It is understood the building will not be in 24-hour use and will therefore have similar levels of light spill to a standard commercial office building when in use.

A review of 2015 Non Major Event Days at Twickenham Stadium undertaken by Momentum Transport Planning has identified that 71.4% of Non-Major Event days finished before 9pm, with the majority of events taking place in June and July when daylight hours are at their peak. Furthermore, the majority of Match Day events (i.e. Rugby or NFL matches) take place in the afternoon, with only limited evening fixtures throughout the course of the year.

It can therefore be concluded that the operational hours for the Proposed East Stand Extension will generally be during daylight hours, with limited operation during nightfall where there could be the potential for light spill from the building.

When considering the level of light spill from the current Stadium building, given the 24-hour operational use of the South Stand with hotel and gym facilities, it is evident that any light pollution from the proposed East Stand Extension will be much less than the current level of light spill from the existing South Stand and should therefore be considered acceptable.



The proposed East Stand Extension will incorporate a task lighting strategy that compliments the existing street lighting to ensure that there is an appropriate balance between the right level of external lighting for safety and security, whilst minimising the extent of light spill from the building. Given the nearest residential dwelling is over 35 metres away from the proposed East Stand Extension a quantitative technical assessment is not considered necessary in this instance.

Conclusion

The operation of the proposed East Stand Extension will generally be limited to daylight hours, with the majority of events finishing before 9pm. Any instances where the operation of the building extends beyond this time will be limited throughout the course of the year and short term in nature. The extent of any light spill from the East Stand Extension is also likely to be less than currently experienced from the 24-hr operational use of the South Stand and should therefore be considered acceptable. A detailed quantitative light pollution assessment has therefore not been deemed necessary in this instance.

Yours sincerely,



Matt Harris
Associate Partner
For and on behalf of Point 2 Surveyors

