

Project: BH0056 Prestwich Travel Hub
Title: Condition 44 – Roof lighting only original spill calculations
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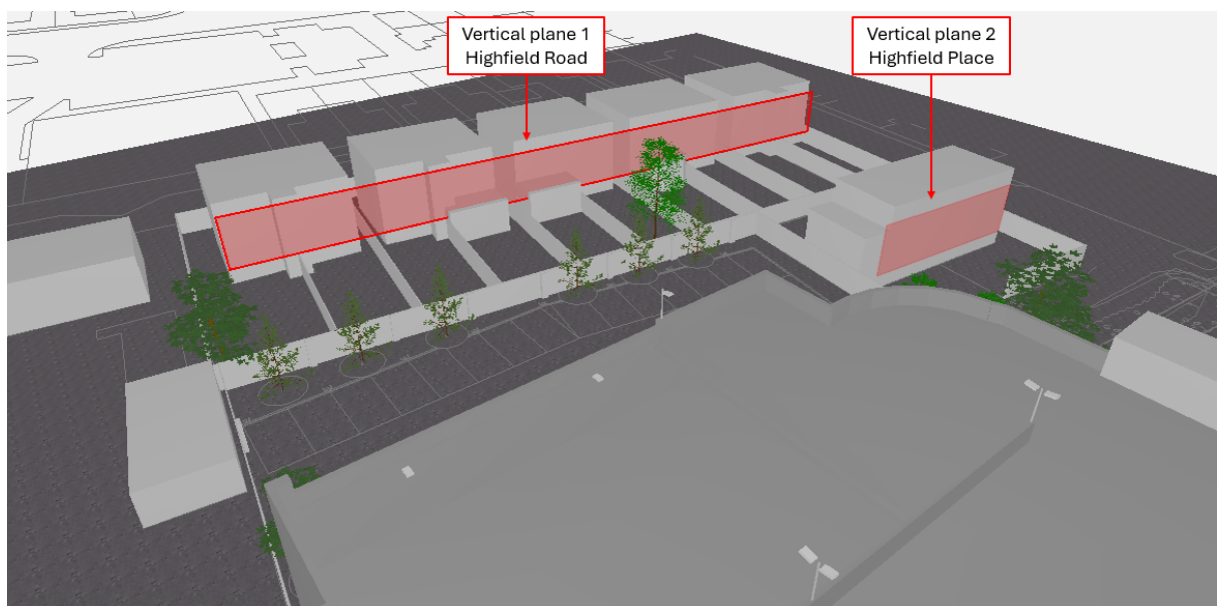
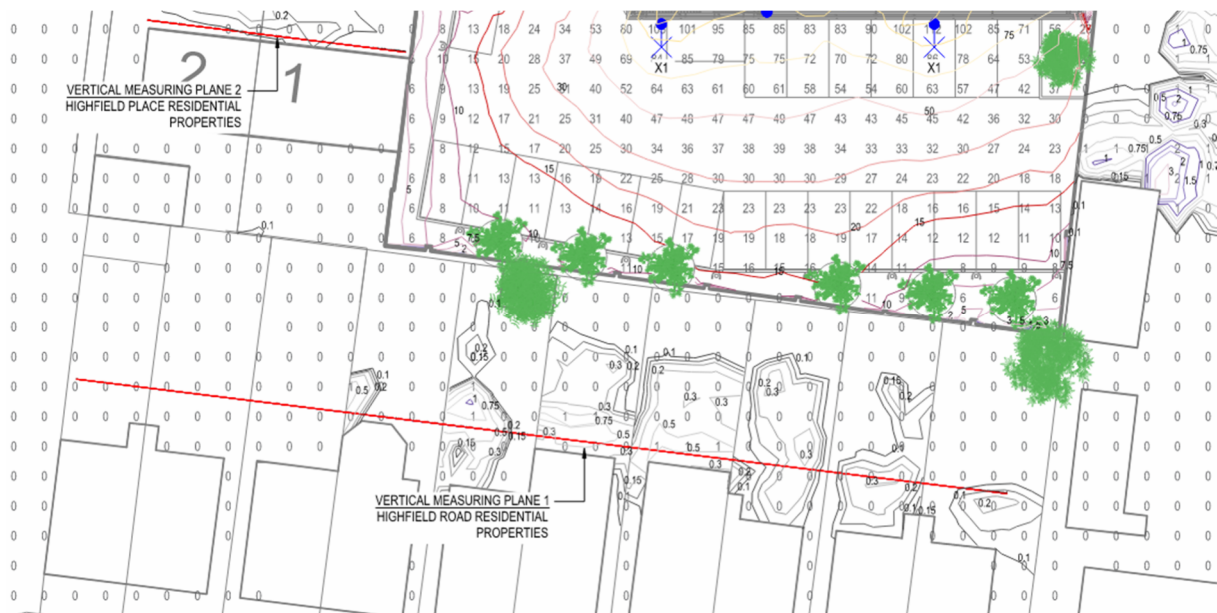
General Note:

This document is issued without prejudice or favour.

This document is issued to describe, in finer detail, the obtrusive lighting calculations undertaken by VBL / 24-7 Group in respect to planning condition 44 pertaining to the above mentioned development. This report describes the light spill of the roof top column heads only; all other external lighting is removed from the calculations.

Identification of vertical measuring planes:

Planning submission pack 15/04/26 drawing 17300-247-P1-00-D-E-960001, denoted the 2 No vertical planes below.



[m]	0.03	0.02	0.03	[2.88]	1.76	1.13	0.69	0.43	0.34	0.28	0.25	0.21	0.18	0.15	0.13
4.0	0.03	0.03	0.02	0.02	0.02	0.01	1.00	0.61	0.40	0.29	0.29	0.25	0.21	0.18	0.15
3.5	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.56	0.39	0.37	0.30	0.24	0.20	0.17
3.0	0.04	0.04	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.34	0.28	0.24	0.02
2.5	0.05	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.03	0.03
2.0	0.05	0.05	0.04	0.03	(0.00)	(0.00)	(0.00)	(0.00)	0.02	0.02	0.01	0.01	0.01	0.01	0.01
1.5	0.06	0.05	0.04	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	0.02	0.01	0.01	0.01	0.01	0.01
1.0	0.07	0.06	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	0.01	0.01	0.01	0.01
0.5	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	0.01
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)

Illuminance

Average illuminance $\bar{E}_m$ 0.11 lx

Minimum illuminance E_{min} 0.00 lx

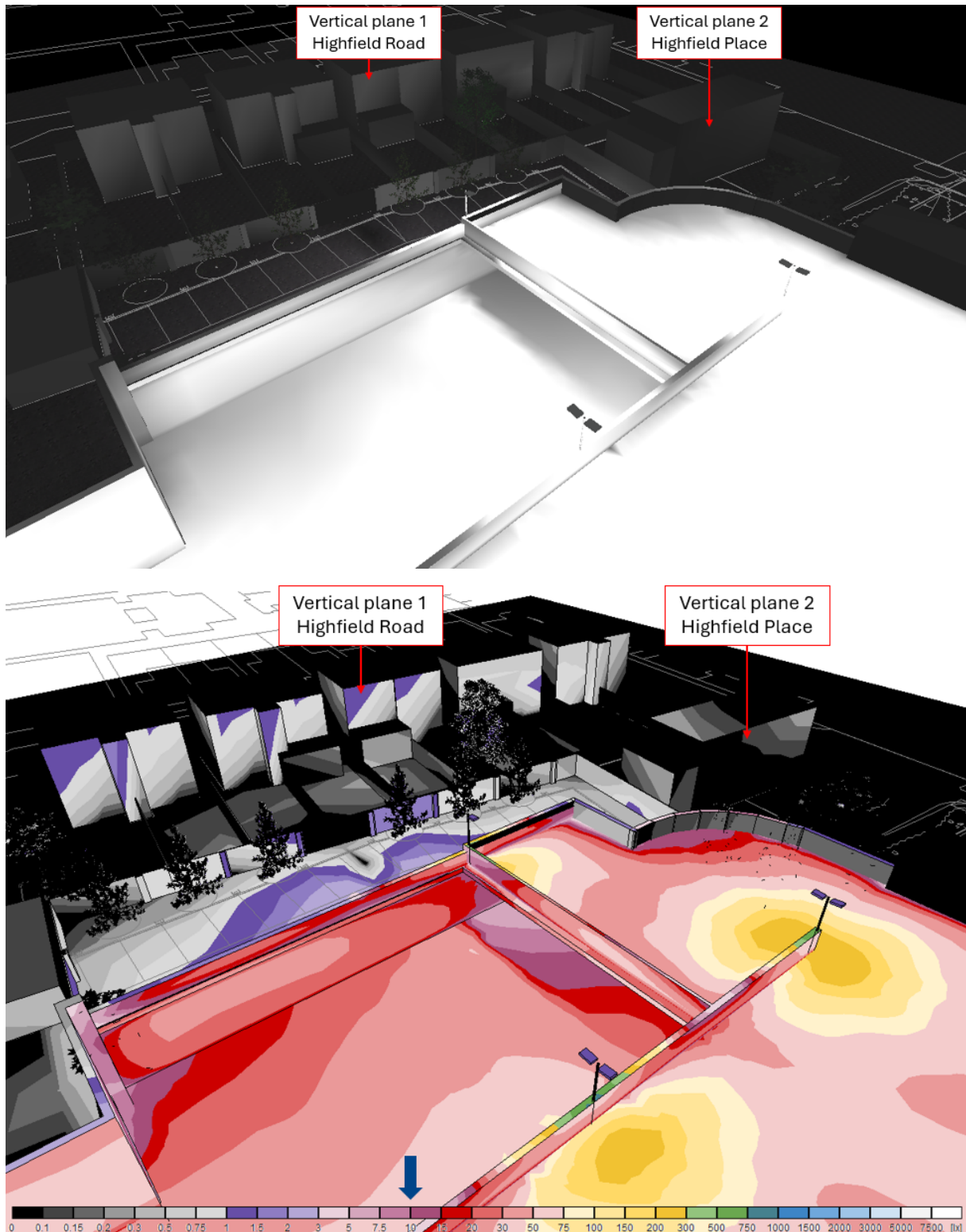
Maximum illuminance E_{max} 2.88 lx

Uniformity U_0 $E_{min}/\bar{E}_m$ 1:--- (---)

Diversity U_d E_{min}/E_{max} 1:--- (---)

With only the roof top columns operable in this calculation it can be seen that the obtrusive light spill is lessened on the properties along Highfield Place. The maximum lux point measured with all the external lighting illuminated was 3.73 lx measured where the maximum is now shown as 2.88 lx (approximately 3m from LH of plane and over 4m up from the bottom of the plane). The average obtrusive light spill across the Highfield Road properties is 0.11 lx.

Modelled results:



Please note – The Limitation of illumination on surrounding premises pre-curfew illuminance, as described ILP guidance note 01/21 is highlighted by the blue arrow (10 lx).