

Our ref: W40019/VAA

Gent Fairhead & Co Limited
c/o Court of Noke
Pembrige
Herefordshire
HR6 9HW

For the attention of Mr. Ralph Keeble

15 June 2017

Dear Sir

Rivenhall Airfield – IWMF Scoping Response - 58 m Stack Height Lighting

Pell Frischmann conducted the original external lighting impact assessment for the proposed Integrated Waste Management Facility at Rivenhall Airfield where both the local and wider environment was considered.

The assessment considered the type of light source, mounting heights and photometric control of the proposed lighting for external areas, buildings and service roads, frontage of the IWMF, CHP chimney and Woodhouse Farm.

It was demonstrated that through good design the impact of the external artificial lighting required for the IWMF would be minimised in line with the Institution of Lighting Engineers Guidance Notes for the Reduction of Obtrusive Light (now Institute of Lighting Professionals).

Mounting heights for lighting units were recommended to be no higher than 8m above finished ground level for both column and building mounted equipment, below and screened from the surrounding landscape.

The most sensitive/critical zones for minimising sky glow are between 90° and 100°, the proposed luminaires are of the full cut off variety ensuring zero light emittance above the horizontal (90°). The use of luminaires with a high level of control especially relating to upward light significantly reduces both the actual and perceived impact of light intrusion.

The proposed lighting is designed to be confined within the identified task areas and limited in operation to the agreed morning and night-time periods of darkness. The use of full cut off luminaires ensures no direct light emittance above the horizontal and from a mounting height of 8m subsequently no direct light should fall on the chimney stack either above or below the level of the surrounding landscape.

Offices at: London, Birmingham, Bishop's Stortford, Croydon, Exeter, Leeds, Luton, Manchester, Sunderland, Wakefield, India, Iraq, Manila, Qatar, Romania, UAE

Pell Frischmann is the trading name of Pell Frischmann Consulting Engineers Ltd and Pell Frischmann Consultants Ltd

Registered Office:
5 Manchester Square London W1U 3PD
Pell Frischmann Consulting Engineers Ltd
Registered in England No. 04403030
Pell Frischmann Consultants Ltd
Registered in England No. 1777946



Therefore, as the proposed lighting would not impact on the chimney in its original format it is confirmed that the same will apply to the proposed increase in height of the chimney stack. The reflective stack cladding starts at an elevation of 10m above surrounding ground level and will be approximately 17m above the canopy of the full cut off luminaries.

Notwithstanding the above, full details of the lighting for use during the operation of the IWMF indicating the location, height, design, sensors, times and luminance will be submitted to the Essex County Council in due course for approval against planning condition 44.

Yours sincerely/faithfully
On behalf of **Pell Frischmann**

G Lane
Senior Lighting Engineer

Enc.

cc.

Offices at: London, Birmingham, Bishop's Stortford, Croydon, Exeter, Leeds, Luton, Manchester, Sunderland, Wakefield, India, Iraq, Manila, Qatar, Romania, UAE

Pell Frischmann is the trading name of Pell Frischmann Consulting Engineers Ltd and Pell Frischmann Consultants Ltd

Registered Office:
5 Manchester Square London W1U 3PD
Pell Frischmann Consulting Engineers Ltd
Registered in England No. 04403030
Pell Frischmann Consultants Ltd
Registered in England No. 1777946

