



SDNP DARK NIGHT SKY LIGHTING ASSESMENT

128 MOGGS MEAD, PETERSFIELD

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Introduction

In 2016, the South Downs National Park (SDNP) became an International Dark Sky Reserve, bringing with it new planning policies to protect the dark skies above the park.

Our design for above address for a single storey rear extension to provide additional living space for the occupants. The proposed structure will introduce 3 glazed roof lights and a set of (reused) glazed bi-folds with 2 fixed glazing panels. Below will detail the mitigations / consideration that will be utilised for this design to reduce / minimise the impact on the dark night sky zone.

Dark Night Skies

The use of artificial light has increased so significantly over recent decades that our view of the universe has been severely impaired. Light pollution not only prevents us from seeing the marvel of the night sky, but also has considerable adverse effects on the natural environment, harming wildlife and damaging human health, not to mention the enormous amount of energy consumed and the detrimental effect this has on climate change.

Here in the UK, the South Downs National Park (SDNP) became an 'International Dark Sky Reserve' in May 2016, the 2nd in the UK after the Exmoor National Park. The South Downs National Park Authority has since used its role as a planning authority to protect the dark skies above the park, integrating policies into the Local Plan, for designers and users alike to adhere to. As light pollution is caused by the use of any artificial light at night, new developments within the SDNP now have to take on board the preservation of dark skies, avoiding or, at the very least, mitigating the adverse impact of artificial light appropriate to the location of the development within the SDNP.

In light of the Dark Night Skies policies, any amount of larger glazing is now considered as follows:

"... the spill of lights from large open glass windows and sky lights often present a greater source of light pollution than externally mounted lights. Consequently, it is important to control the lighting coming from these types of developments. The design of buildings should reduce the impact of light spill from internal lighting or suitable mitigation measures should be put in place."

(SDNPA Local Plan: 5.64 – South Downs Lightscape Management Policy) Together with upgraded existing external low lumen LED lighting and internal dimmable LED light sources, surpassing current energy efficiency standards, the SDNP Planning Authority we hope will support our design with the preservation of the Dark Night Skies.

Mitigations and Considerations

As part of the design the occupant will be replacing internal standard bulb lighting with Dimmable LED downlighting, with the added benefit of the directional lighting which will reduce the overspill out of the glazed roof lights. Any free standing lighting will be below 500 Lumen.

The glazed roof lights will have fitted Blinds which will predominantly be closed at night again reducing the dark night impact. The existing Bi-folds which are being reused in the proposed new extension have internal blinds fitted which again are predominantly closed at night which will minimise the lighting impact.

All external lighting will be on PIR sensors / timers will only be on when required. The lighting that will be considered and utilised in the garden are will be low lumen (below 500 Lumens) or if the and security lighting is used it will have directional shielding to aim at the ground.

As this extension would be considered small in the scale of light pollution the occupants have taken a view on the dark night sky policy and will keep this in mind with any design decisions.

Conclusion

This Report concludes that the proposed plans and the area of glazing is not excessive and with the mitigations / considerations the light pollution from the proposed extension will be minimal and will comply with requirement set out in the SD2 of the South downs local Plan.

Author

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Signed: 

Date: 10/02/2024

Occupant

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Signed: 

Date: 10/02/2024