As part of the ongoing public consultation of PA 0293/19 at the Ramla Bay Resort, in Marfa, Mellieha, we have reviewed the provided documents and would like to highlight the following points to be considered for drafting the EIA Terms of Reference.

General comments

- The proposed development is located adjacent to two marine protected areas. Direct impacts especially on the habitats and fauna need to be assessed in terms of these sites:
  - Special Area of Conservation (SAC) Zona fil-Bahar fil-Grigal ta' Malta (MT0000105)
  - Special Protected Area (SPA) Żona fil-Baħar madwar Għawdex (MT0000112)
- Given the close proximity to these sites, a separate Appropriate Assessment for phase two of the development further to the EIA is required providing in-depth mitigation measures for environmental impacts to the sites;
- According to the PDS, the footprint of the proposed development will increase from 6,398sqm to 6,584sqm. Furthermore, the built-up area will increase from 48,689sqm to 63,347sqm. Given that this is a significant increase in the development’s footprint, the development should be downscaled in order to minimise environmental impacts, including ground sealing and loss of biodiversity. Otherwise, the EIA needs to propose suitable mitigation measures to address the increase;
- A detailed woodland and tree survey needs to be undertaken so that the EIA takes potential damage and uprooting of trees into account;
- Table 3 indicates designated areas for car parking spaces whereas judging from the pictures provided, the current area used for car parking is located on Garrigue habitat. Environmental degradation of sensitive habitats due to the use of vehicles in the area needs to be addressed in the EIA;
- Air pollution during construction and operational phase of the proposed development needs to be addressed in the EIA. The PDS states that “any effect on air quality is expected to be minimal due to the area being open and exposed”. This justification is inadequate and appropriate measures need to be applied to mitigate for negative impacts on air quality;
- Given that negative environmental impacts on seabird colonies that are present in the area – especially in the above-mentioned marine protected areas - was not addressed in any environmental impact studies undertaken for this development so far, we see an urgent need to address particularly light pollution in the EIA and AA for phase 2 of the proposed development.

Light pollution and seabirds

The environmental impacts of light pollution are pervasive and far-reaching. Negative effects can range from various sub-lethal effects, such as changes in biochemistry or behaviour, to the direct cause of mortality – these effects are particularly strongly within the marine environment.
The Maltese Islands support globally significant populations of seabirds. Up to 10% of the global breeding population of Yelkouan shearwater *Puffinus yelkouan*, an IUCN red-listed species, return to the Maltese Islands each year. Scopoli’s shearwater *Calonectris diomedea* and European Storm-petrel *Hydrobates pelagicus* also breed in globally significant numbers.

**Breeding behaviour and site importance**

Shearwaters and Storm-petrels are long-lived seabirds that take up to five years to reach sexual maturity. Their breeding habitat is carefully selected according to various parameters, including darkness. They lay a single egg each year, a reflection of a large investment of resources. Incubation and chick rearing occurs over the course of several months and should the nest fail at any stage, they will not be able to lay a second egg as the cost to adult condition is too high. Due to their life-histories, any increase in the natural mortality rate of young birds and the degradation of breeding habitat can have serious consequences on their populations.

Their largest colony in the Maltese Islands is located within the protected area; Special Area of Conservation (SAC) and Special Protected Area (SPA) Ramla Tat-Torri / Rduum Tal-Madonna Area (MT000009).

This colony is located approximately 2.3km from the proposed development, well within the area of influence if light pollution is to be considered.

**Recommendations for PA 02943/19**

Seabirds must feature prominently in any EIA undertaken for this development given any light or noise disturbance will likely affect seabird colonies. Yelkouan shearwater arrive at their colonies at around mid-October, egg laying takes place in early February and the critical period of chicks fledging starts at mid-June finishing at around mid-July. Scopoli’s shearwater’s arrival at their colonies happens at the end of February, fledging of their chicks begins in mid-October for about one month. Especially during the fledging period of Shearwaters, light and noise pollution needs to be drastically avoided, meaning that from mid-June to mid-July as well as from mid-October to mid-November development works creating these impacts should not take place.

The proposed development is located close to the largest breeding colony of Yelkouan Shearwater in the Maltese Islands and so any obtrusive light, including skyglow, affecting Special Area of Conservation (SAC) and Special Protected Area (SPA) Ramla Tat-Torri / Rduum Tal-Madonna Area (MT000009) is unacceptable.

Furthermore, the site has also been identified as a major stranding hotspot for fledging seabirds and must therefore be considered a priority area for mitigating light pollution.

**Outdoor lighting scheme**

BirdLife Malta propose that all/any outdoor lighting to be installed is kept to the absolute minimum level that still provides the minimum level of illuminance required for safe-use of the area. The following guidance documents describe European and International standards / best-practice on outdoor lighting.

This particularly pertinent to luminaires installed with direct line of sight to the sea. Vanity lighting or decorative lighting should be kept to an absolute minimum.

All outdoor luminaires must meet these specifications:

- Full cut-off ULOR 0%
- Downward facing (any angle of uptilt is unacceptable)
- CCT <3000K OR Spectral G-index >2.0 (minimize blue wavelengths in emitted spectra)
- Dimmable
- Run according to a lighting schedule.

Every effort must be made to restrict light to the bounds of the site. Any light spill onto protected areas is unacceptable.

Balcony lighting should be controlled by hotel guests and not left switched-on for extended periods of night. Documentation on why it is important to limit light pollution should be provided to guests.

The critical fledging times of year; June-July (Yelkouan shearwater) and October – November (Scopoli’s shearwater) demand extra consideration to use of outdoor lighting. During these periods all outdoor lighting should be dimmed as far as possible of switched-off entirely.

**Conclusion**

- The EIA needs to include a lighting scheme, including the above-mentioned mitigation measures
- Noise and light pollution needs to be avoided especially during periods of the year sensitive to breeding and fledging periods of seabirds
- Air quality assessment needs to be included in the EIA