"point" of relief. Selected streets and open spaces could be aligned with the "points" to create "lines" of relief so that pedestrian has a choice to move around the city following the network of "lines". An urban area so designed will have the needed environmental diversity important for urban thermal variations and options (Steemers & Steane, 2004).

> **Example 4:** In suburban areas with a low FAR of 3, An area average ground coverage of 50%, and an area average greenery of 30% or more, the area would be classified as UCPZ 2. The area would have low/moderate thermal load and good dynamic potential. It would induce neutral or slightly negative heat related stress in the summer months.

3.5.7 Considering Building Volume Density [BVD], Ground Coverage, Greenery and Proximity of Openness

There is no single solution to all urban climatic issues. Many other considerations and constraints have to be balanced before coming to a planning decision. Based on the UC-ReMap, appropriate planning parameters such as BVD, Ground Coverage, Greenery and Proximity to Openness could be "targeted" to achieve a good balance. It is important to plan so that one stays within the threshold, which are explained above, of the respective UC-Map categories. For instance, if there is a need for higher building volumes/floor area ratio (FAR), then it is useful to offset it with further greenery and/or lower ground coverage.

BVD, Ground Coverage, Greenery and Proximity to Openness are "first order" considerations in urban climatology. On top of that, the use of cool building materials, water retentive ground surface covering and water bodies, as well as reducing anthropogenic heat due to buildings and traffic can also help. Further and separate studies of these "second order" benefits may be beneficial to complement the urban climatic understanding.

3.6 BEYOND THE FOUR DESIGNATED AREAS (FOCUSED AREAS)

Apart from the 4 designated areas identified, the Hong Kong UC-ReMap also highlights other 'focused areas' that require care and attention. Although not as concentrated as the four designated areas in terms of UCPZ 5 areas, they are still high in thermal load and poor in dynamic potential with "clustering of UCPZ class 4 and 5 areas" (Figure I-127):

Hong Kong Island	**Wan Chai / North Point / Quarry Bay and Shau Kei Wan areas**
Kowloon	**Tsim Sha Tsui / Yau Ma Tei / Mong Kok / Sham Shui Po / Cheung Sha Wan/ Lai Chi Kok areas**

Hung Hom and To Kwa Wan / San Po Kong areas

NT **Tuen Mun / Yuen Long areas**

Mitigation strategies as explained in 3.5.1 to 3.5.7 above are applicable to these focused areas.

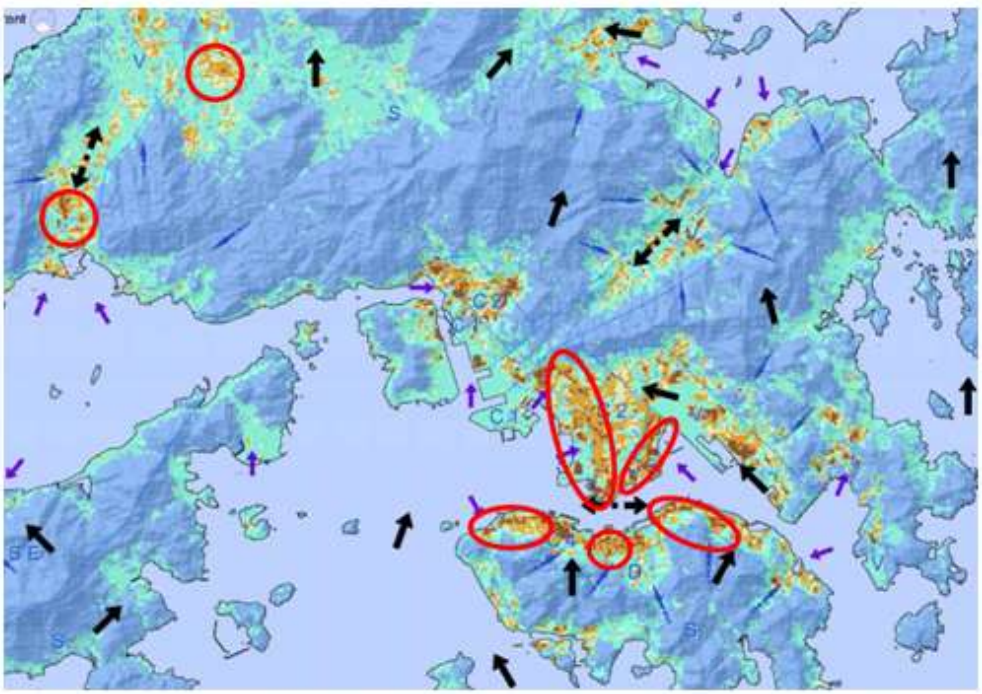

Figure I-127 Focused areas needing care and attention based on the HK UC-ReMap

3.7 LIMITATIONS AND CARE IN READING, INTERPRETING AND USING THE UC-REMAP

The UC-ReMap should be interpreted and applied appropriately and urban climatologist's assistance may be needed. For example, bearing in mind that the analysis was conducted on a 100m x 100m raster basis to gain an area-wide understanding of the urban climatic characteristics, it is inappropriate to scrutinise the map pixel by pixel, or to read into the fine boundaries of the pixels. Rather, the pattern, clustering and extent of the pixels (UCPZ) within the UC-ReMap will provide a better overview of the general urban climatic characteristics of an area.

For example, the extensive array of UCPZ 4 and 5 pixels in Mong Kok, Cheung Sha Wan and Sham Shiu Po inland area means that as a whole, mitigation actions are desirable and recommended in accordance with the planning recommendations of the UC-ReMap. Further detailed studies are needed.