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THE VERTICAL LAND USE ZONING FOR UNDERGROUND SPACE DEVELOPMENT IN MALAYSIA

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Abstract

There is a demand for the development of underground space beneath alienated land by a third party other than the surface landowner. Arguments frequently arise because the surface landowner asserts that his rights extend to ownership extension, while the other party wishes to develop the underground space without interfering with the rights of others. Due to Malaysia's absent of land use zoning for underground space, the rights to develop underground space are ambiguous. Using a qualitative approach, this study will examine the role of land use zoning in assisting the development of underground spaces. Thematic analyses revealed three interconnected elements: underground land use zoning, standardisation of land category depths, and a buffer zone for surface and underground space ownership. Additionally, a comparative study was conducted between Malaysia, Hong Kong, China, Japan, and Finland in order to determine the optimal strategy for zoning underground space land uses. At the conclusion of this paper, vertical land use zoning was also proposed.

Keyword: underground space, vertical planning, underground land use zoning, comparative study, qualitative study

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