

3D PROPERTY–TYPES OF RIGHTS

Tan Liat Choon

Department of Survey and Mapping Malaysia

Email: tanliatchoon@gmail.com

Abstract

The use of 3D property rights has become a common feature internationally and has existed for many years. The aim of this paper is to illustrate the way 3D situations are currently registered and recognised in the Malaysian Cadastral Registration. One situation in Penang and five in Kuala Lumpur were selected to illustrate representative situations in this paper. The purpose of the illustration is to investigate if the current cadastral laws and regulations under the National Land Code 1965 (Act 56), the Strata Title Act 1985 (Act 318) and the Building and Common Property (Maintenance and Management) Act 2007 (Act 663) are adequate, or if improvements are needed. All these models have been selected because of their simplicity, and also because they are representative of several types of problems associated with 3D properties. This study encompasses three property types, namely dimensions on-surface, above surface and below surface constructions (buildings, sky bridges, basement parking, utility transmission lines), and transportation networks.

Keywords: *Rights¹, 3D property², on surface³, above-surface⁴, below-surface⁵*

1 INTRODUCTION

To present an overview of how 3D situations are presently registered in the Malaysian Cadastral Registration, six structural properties are selected as representative examples.

2 DIMENSIONS ON-SURFACE, ABOVE SURFACE AND BELOW SURFACE

Buildings may be constructed to serve different owners who may have different functions in mind for the properties. Meanwhile, infrastructure objects such as transmission lines and transportation networks are entities that are necessary for the transportation of electricity, vehicle and people. Infrastructure objects frequently cross parcel boundaries. From a cadastral point of view, it is important to register the property rights of these buildings and infrastructure objects, not only to know who the owner is but also to indicate who is responsible for the properties and objects in case of accidents and damage (Stoter, 2004).

2.1 Situation 1: Prangin Mall and Kompleks Tun Abdul Razak in Penang

Figure 1 shows a good example of a 3D situation (dimension above, on and below surface) where there are buildings, sky bridges above and basement parking below the public road at Prangin Mall and Kompleks Tun Abdul Razak (KOMTAR). Prangin Mall is a popular shopping complex located right in the centre of Georgetown, Penang. Opened for business in 2001, it is attached to KOMTAR and Pacific-KOMTAR via the sky bridges from level two and three, which is above the public roads, *Lebuh Teik Soon* and *Jalan Ria*. The mall comprises six levels including a basement floor, two levels of basement parking and a further three levels of parking at the upper floors.



(a)



(b)



(c)



(d)



(e)



(f)

Figure 1: Buildings, sky bridges above and basement parking below public road

KOMTAR is Penang's tallest building, located in the heart of Georgetown. The 65-storey tower is a 232 metres twelve-sided geometric block atop a four storey podium. It is a multipurpose complex consisting of offices and retail commercial spaces, transportation hubs, recreation facilities and administrative offices for the Penang state government. It also serves as a symbol of order and stability for the town and the province. Figure 2 shows the location map of the buildings in KOMTAR.



Figure 2: Location map of KOMTAR

On the Cadastral Map in Figure 3, we can outline the part of the building above ground surface (red line) and basement parking below surface level (blue line), which is located between Lot 398 and Lot 399 below the public road, *Lebuh Lintang*. The arrows indicate the view position of the photos taken in Figures 1 (b), (c) and (d). Prangin Mall is the owner of the building. It has the recognised common rights of the whole building and can subdivide the building into individual parcels. Meanwhile, the Penang Municipal Council, the local authority holds recognised rights of ownership on the public road, *Lebuh Lintang*. Here, Prangin Mall possesses unrecognised rights of ownership on the building and basement parking above and below public road.

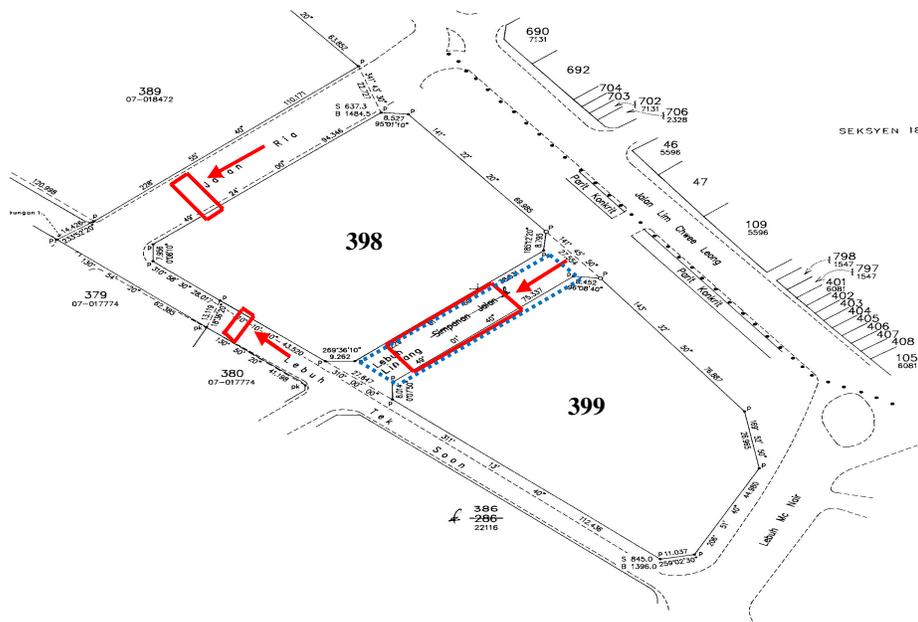


Figure 3: Cadastral Map showing location of the buildings, sky bridges and the basement parking of Prangin Mall

KOMTAR (Lot 400) is attached to Prangin Mall (Lot 398) and Pacific KOMTAR (Lot 389) via the sky bridges and building respectively from level two and three, which is above the public road that is *Lebuh Teik Soon*. On the Cadastral Map (Figure 4), we can see the buildings and sky bridges above surface level, located between Lot 400 and Lot 389 as well as Lot 400 and Lot 398 respectively, which is above the public road (*Lebuh Teik Soon*). The arrows indicate the view position of the camera in Figures 1 (e) and (f). Here again, the individual parcel owner has the recognised common rights of the individual parcel in the building, whereas the Penang Municipal Council, the local authority is supposed to hold the recognised rights of ownership on the public road that is *Lebuh Teik Soon*. However, the public road that is part of *Jalan Ria* and *Lebuh Teik Soon* was surrendered to the management corporation of KOMTAR in order to subdivide the building. The 3D model for Prangin Mall and KOMTAR, which is shown in Figure 5, gives a clearer picture of the location of buildings, sky bridges above and basement parking below the surface of public road respectively.

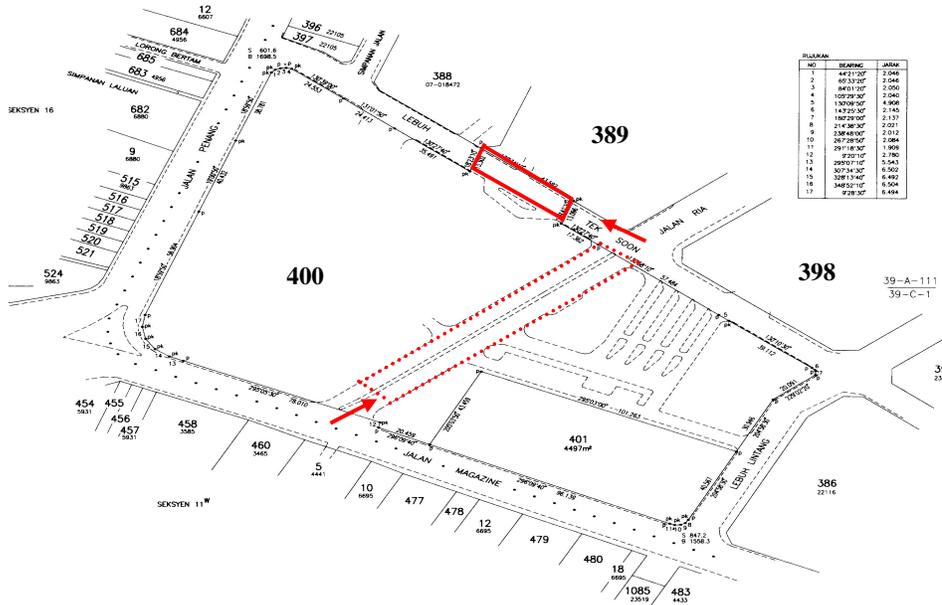


Figure 4: Cadastral Map showing the location of the buildings and sky bridges

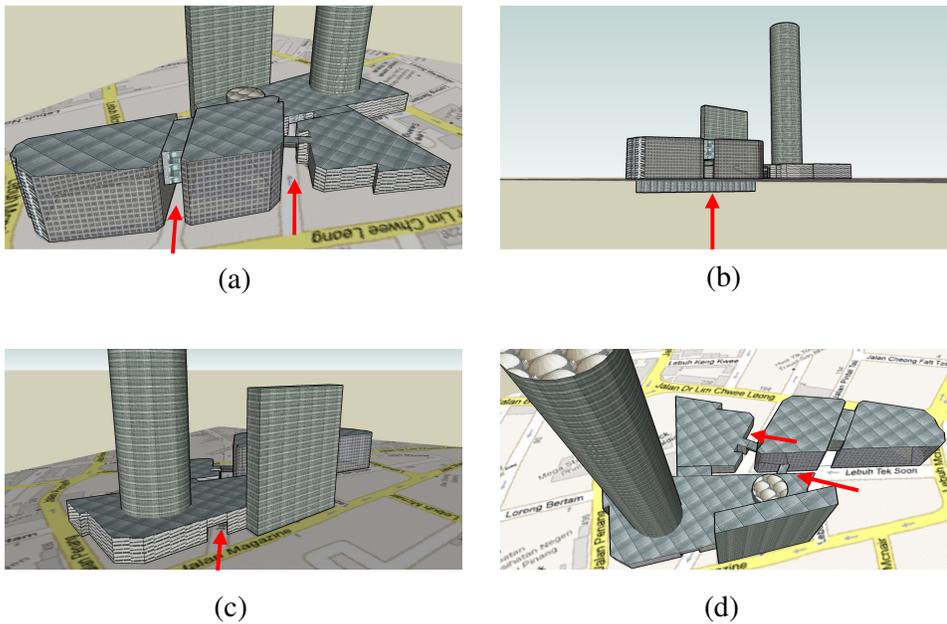


Figure 5: 3D model showing buildings, sky bridges and basement parking at Prangin Mall and KOMTAR

2.2 Situation 2: Kuala Lumpur Sentral in Kuala Lumpur

Kuala Lumpur Sentral is a multilevel public transport interchange. It is an exclusive urban centre built around Malaysia's largest transit hub, corporate office towers and business suites, five star international hotels, luxury condominiums and a shopping mall offering global connectivity, excellent investment opportunities, business convenience and an international

lifestyle. Its infrastructure supports six rail networks which consist of the KLIA Express Rail Link, KLIA Transit, RAPID KL (PUTRA LRT), KTM Komuter, KTM Intercity and KL Monorail Services. Kuala Lumpur Sentral is spread over 72 acres of land bordered by *Jalan Travers*, *Jalan Damansara* and *Jalan Tun Sambanthan*, situated in the southwest of Kuala Lumpur City and just 1.5 kilometres from the central business district. Figure 6 and Figure 7 show the overview picture and location map of Kuala Lumpur Sentral phase development respectively.

The use of common rights and management rights will be discussed in other case studies. Here, we take a closer look at the public rights and private rights. Public rights are rights that entitle its holder to build and have building or construction on surface, above surface and below the surface of different ownership. In the case of Kuala Lumpur Sentral, the holder of the recognised public rights is entitled to build and own the station on top of the railway platforms. On the other hand, others own the railway tracks and public roads in unrecognised private rights while the shops and retail stores, located on the first and second floors, hold recognised common rights, erected on Lot 75, which is on top of the basement parking, and railway platforms located on its top floor. The Cadastral Map (standard sheet) shows that the railway track (shown in red shading) is on top of the private parcels and public roads which are erected on Lot 73, Lot 74, Lot 75, Lot 77 and Lot 78 respectively. While the question of who owns the space above the railway station might seem irrelevant at the time of writing, it is possible that the problem of ownership might arise later. Nevertheless, if a developer wishes to build a business centre on top of the railway platform in the future, the ownership of the space above the railway platform will become another issue again. Figure 8 shows the Cadastral Map (standard sheet) of the rail track situation. The arrows indicate the position of the pictures taken in Figures 6 (c) and (d).

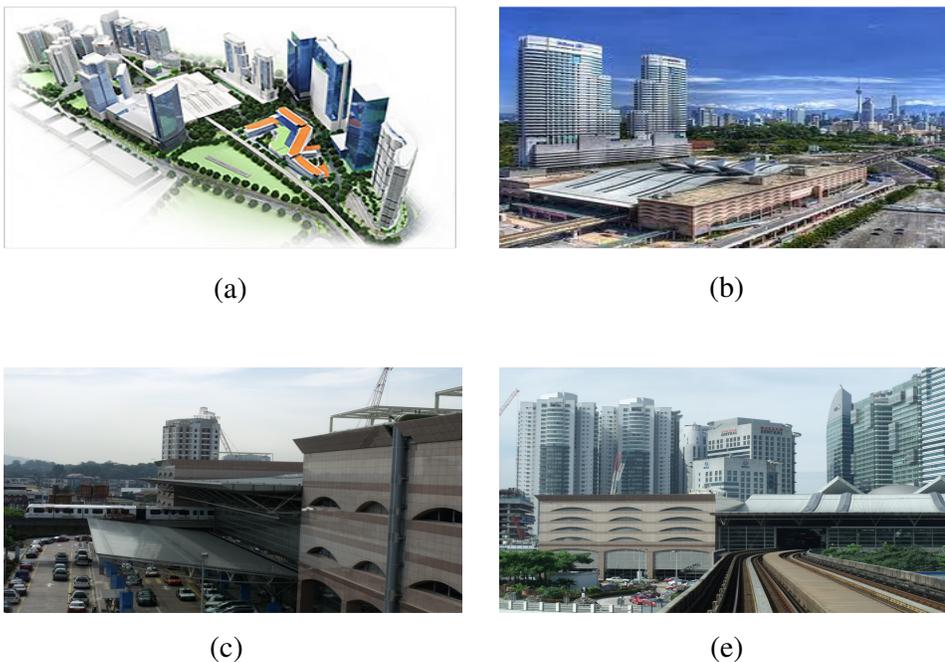


Figure 6: Overview pictures of Kuala Lumpur Sentral phase development

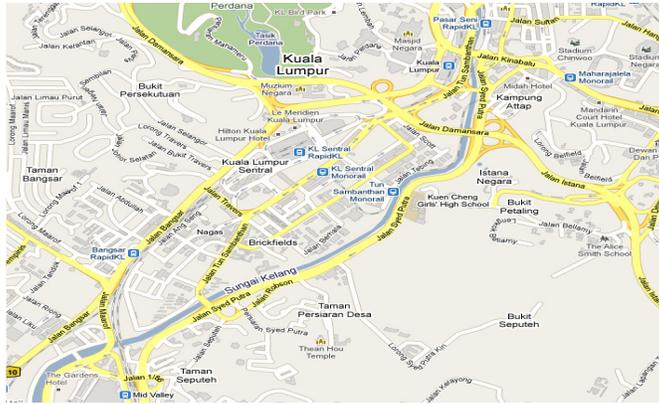


Figure 7: Location map of Kuala Lumpur Sentral phase development

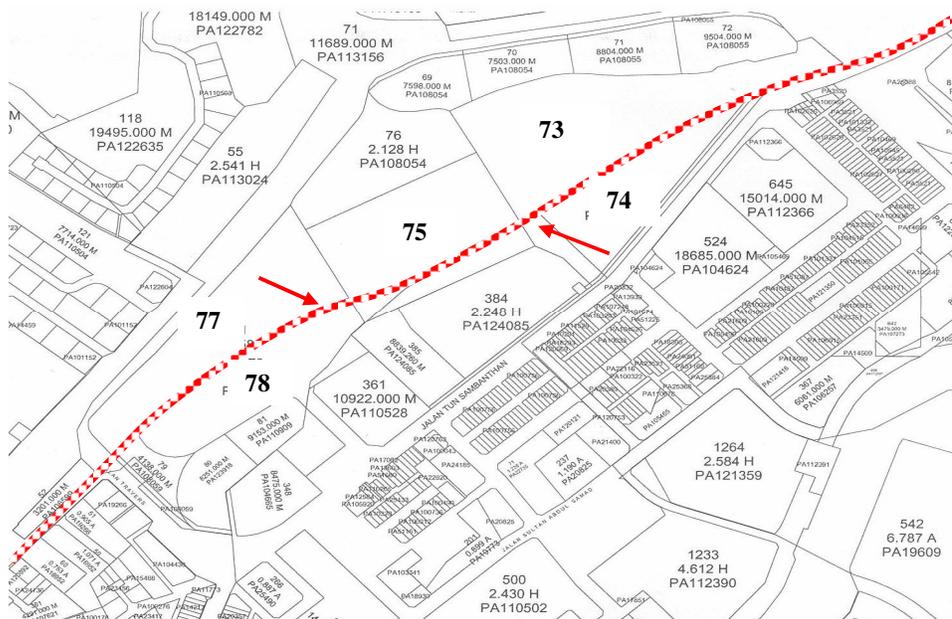


Figure 8: Cadastral Map showing location of the railway track

2.3 Situation 3: Underground Complex in Kuala Lumpur

The *Dataran Merdeka* (Merdeka Square) is located in a field fronting the Royal Selangor Club that was extensively used for cricket, hockey, tennis and rugby matches until the mid-nineties when the whole area was rebuilt to accommodate a complex that included an underground parking lot, shopping area, restaurants. Beneath the square are combinations of food stalls, leisure and an entertainment complex called Plaza Putra which contains a theatre, food court, restaurants and souvenir shops and car parks. Figure 9 and Figure 10 show the overview picture and location map of Plaza Putra respectively whereas the dash line indicates the underground Plaza Putra.



(a)

(b)

Figure 9: Overview picture of Plaza Putra complex

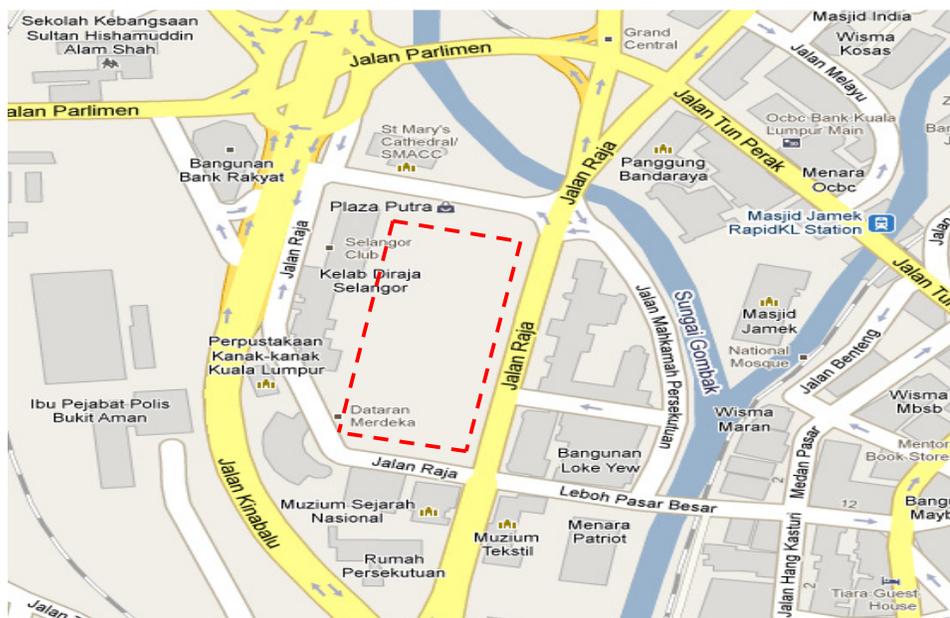


Figure 10: Location map of the Plaza Putra complex

The Cadastral Map (standard sheet) on Figure 11 shows the Royal Selangor Club on Lot 70, and the field fronting it that was originally the cricket green and rugby field on Lot 71, now with Plaza Putra located below it. The arrow indicates the entrance to Plaza Putra of the picture taken in Figure 9 while the dash line indicates the position of the underground Plaza Putra. In 1987, the field was reclaimed by Kuala Lumpur City Hall, which holds recognised private rights of the field, and developed the underground shopping mall and car park, which is owned by many individual proprietors with unrecognised public rights. The National Land Code 1965 (Act 56), Section 92C and Section 92D allow underground land under State land to be alienated. Also the National Land Code (Underground Land) (Minimum Depth) Regulations 2006 have specified the minimum depth of underground land to be alienated. The whole Plaza Putra is closed for reconstruction at the time of writing, with the underground land subdivision still pending.