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CIRCULAR TO PROFESSIONAL INSTITUTES

Dear Sirs

REVISED PLAN SUBMISSION REQUIREMENTS FOR DEVELOPMENTS WITH MECHANISED CAR PARKING SYSTEMS

Who should know

Building owners, developers, architects and engineers

Effective Date

With immediate effect

Background

1. There has been a growing trend to provide mechanised parking systems in new developments. However, a significant number of the mechanised parking systems submitted for approval do not satisfy the prevailing car park standards, in particular the minimum dimensions of mechanised parking spaces.
2. We have observed that architects and developers only consult the Land Transport Authority (LTA) on their proposed mechanised parking system when the design and development of the project is at a very advanced stage. Consequently, the development proposals have to be re-worked and amended substantially to comply with the Parking Places (Provision of Parking Places and Spaces) Rules.

New Plan Submission Requirements

Pre-Submission Consultation with LTA

3. Henceforth, QPs and developers are required to submit their mechanised car parking system proposals to LTA for a pre-submission consultation before a development application is submitted to the Urban

Redevelopment Authority (URA) for planning permission. This will allow architects, engineers and developers to incorporate the necessary requirements into the design of the development upfront to minimise abortive work and major revisions to development proposals later.

4. [Appendix A](#) lists the guidelines for the design of a proper mechanised car parking system, including LTA's requirements. As there is a variety of mechanised car parking systems in the market, it is possible that some of these systems do not fully comply with LTA's guidelines. For such cases, the systems will be evaluated based on its own merits during the pre-submission consultation with LTA.

Plan Submission of Development Application to URA

5. Following the pre-submission consultation with LTA, applicants may proceed with the submission of the Development Applications to URA if the proposals meet the requirements of the Parking Places (Provision of Parking Places and Spaces) Rules as well as the guidelines for mechanised parking. However, this does not constitute a clearance for parking matters as it is still subject to formal clearance at the detailed submission stage. Development Applications that include mechanised car parking system must be submitted to URA with LTA's in-principle clearance letter, or they will be returned.
6. The detailed design and layout of the building with the proposed mechanised parking system is subject to evaluation by URA at the point of submission of the Development Application, and must comply with all prevailing Development Control guidelines. As with all other Development Applications, the proposal will also be subject to all necessary clearances from the technical agencies after Provisional Permission has been obtained, including the formal clearance from LTA.
7. We would appreciate it if you could convey the contents of this circular to all members of your respective organisations. If you have any queries, feel free to contact the following.
 - a. LTA - Mr Mohamed Saddiq Md Nor at Tel: 6332 8236
 - b. BCA - Mr Tan Cheong Ee at Tel: 6325 8638
 - c. URA - Ms Joanne Tay at Tel: 6329 3308

Yours faithfully

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URBAN REDEVELOPMENT AUTHORITY

Appendix A

	Guidelines for Mechanised Car Parking Systems	Agency
Location of mechanised parking system	<p>In general, mechanised parking systems should be located away from the required building setback / physical buffer and planting strip / green buffer of a development. They should also generally be kept to within the first storey height of a development and are to be walled up and screened off with lush heavy planting. The first storey of buildings is typically limited to a height of 5.0m. This will help to minimise extensive high blank walls needed to screen mechanised parking systems and potential noise concerns to the surrounding neighbours.</p> <p>Mechanised parking systems that depart from the above conditions (eg. exceeds 5.0m in height of the first storey) will be considered on a case-by-case basis, depending on the design merits of the proposal as well as the site context.</p>	URA
Headroom	All systems shall comply with LTA's minimum headroom clearance of 2.2m, and is the clear height from the surface of the parking stall to the underside of any projections or fittings from the ceiling or subsequent parking stalls.	LTA
Stall Width	<p>The minimum stall width of a mechanised parking system shall be 2.4m wide. Where there are obstructions on the sides, the minimum stall width shall be 2.7m if obstructed on one side and 3.0m if obstructed on both sides.</p> <p>The minimum width of car lifts shall be 2.6m wide.</p>	LTA
Stall Length	<p>The minimum stall length of a mechanised parking system shall be 5.4m long.</p> <p>The minimum length of car lifts shall be 6.2m long.</p>	LTA
Holding bays and queuing spaces	<p>Mechanised parking systems are predominantly self-operated. Therefore, holding bays must be provided within the development to allow vehicles to be held while motorists operate the car lift or stack. A queuing space in terms of number of car lengths equivalent to 5% of the total parking spaces to be provided within the development, must also be provided within the site boundary, and shall not be along roads, including local access roads.</p> <p>For service roads only, LTA will evaluate on a case-by-case basis depending on the site location and the efficiency of the mehanised parking. Where allowed along service roads, the queuing spaces shall be limited to the extent of the frontage of the property's boundary. Please refer to the LTA Handbook on Vehicle Parking Provision in Development Proposals for more details.</p>	LTA

Safety from falling	<p>As a mechanised parking system consists of moveable parts, the requirements for safety from falling under the Building Control Regulations will be applicable for the following situations:</p> <ol style="list-style-type: none"> 1. If the vehicle is parked on a platform where a difference in level of 1.0m or more exists; and 2. If a person is required to access the platform to pick up the vehicle. 	BCA
Car lifts which convey driver/passengers	<p>Where the car lift is intended to convey vehicles together with car driver and/or passengers during operation, it must be designed to comply with SS 550 : 2009 – Code of Practice for Installation, Operation and Maintenance of Electric Passenger and Good Lifts, as required under the Building Control Regulations. Such car lifts must be regularly maintained to ensure the safe operation of the lift as specified under the Building Maintenance and Strata Management (Lift and Building Maintenance) Regulations.</p>	BCA
Provision of accessible parking lots	<p>Accessible parking lots must be provided in developments where mechanised car parking systems are proposed. It shall comply in accordance with the requirements stipulated in the Code on Accessibility in the Built Environment. Where the accessible parking lots cannot be provided in the mechanised car parking systems, surface car parking lots shall be provided in lieu.</p>	BCA