

Project name

Hong Kong Science Park

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Pak Shek Kok, New Territories, Hong Kong

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Hong Kong Science Park Technology zone

by Angela Tam

The comment has been repeated too often, that Hong Kong is behind in the hi-tech race and that something like the Hong Kong Science Park (HKSP) would be unable to compete against regional counterparts in countries like Singapore and Malaysia because of that. Although it is a valid criticism, it does not take into account the fact that being a late starter means Hong Kong is able to learn from the successes and failures of others and therefore has the opportunity to get it right the first time.

It means, for example, those involved in the project have the time to study in great detail the factors that contribute to a successful model like Silicon Valley in the US; factors that take into account a way of life rather than merely a working environment. Do you know, for instance, that more ideas are generated in the staircases and corridors of Silicon Valley than the cubicles where the “geeks” work?

Such factors are carefully considered in the design of the Science Park, Phase 1a of which opened in June 2002.





Planned as a sprawling research and development campus that would attract hi-tech firms to set up base, Hong Kong Science Park occupies a 22 ha site at Pak Shek Kok, next to Tolo Harbour and opposite the hill where the Chinese University stands. The aim for synergy is clear, with the proximity to the tertiary institution designed to encourage research and development (R&D) exchange between academia and commercial business. The project is being developed in three phases. Phase 1 will occupy 8 ha of the site and provide 120,000 sq m of GFA.

The masterplan developed by Simon Kwan & Associates (SKA) divides the site into three areas designated as campus, core and corporate zones. "Campus" buildings are designed for medium-sized companies requiring up to 5,000 sq m of space each while corporate buildings are targeted at big tenants that will occupy entire buildings. All essential facilities from restaurants to exhibition hall and serviced apartments are provided in the core buildings.





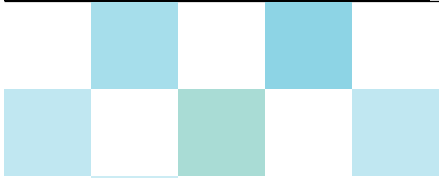


In Phase 1a, the three zones are made up of ten buildings: two campus buildings, one core building and four corporate buildings designed by the Architectural Services Department (ArchSD) and two core buildings and the car park building designed by SKA. The first phase of the development covers 23,230 sq m of GFA.

Two campus buildings and the car park building, named Icon Tower, are arranged along the southwest end of the site, next to Tolo Highway, to serve as a barrier to traffic noise as well as to present the park's hi-tech image to the passing public. Building services are also pushed towards the portion of the buildings facing the highway, in effect doubling as a noise insulation layer.

While some medium-sized tenants may have their own conference rooms, they are also expected to hire the facilities available in the core buildings. Tenants of the corporate buildings, on the other hand, are expected to have the whole gamut of facilities within their own buildings. Targeted at big companies, the





corporate buildings will also have their own semi-basement car parks, making each building relatively independent, although they too will have access to the core buildings.

The core buildings are where all essential facilities for the park will be located, including restaurants, shops, exhibition halls and other support facilities. A footbridge provides a direct link from the car park to the two core buildings that are connected together by an atrium. With weather protection afforded by a skylight six storeys above, a tree-lined and sun-lit internal street on the ground floor will provide informal interactive space as well as access to a wide range of amenities. These will include a food court, restaurants and meeting rooms as well as a fitness centre and 19 serviced apartments ranging from studio to two-bedroom apartments,





all fitted to four-star standard, to accommodate visiting executives and researchers who may or may not bring their families. In future the internal street will link the buildings to Phases 2 and 3 of the development.

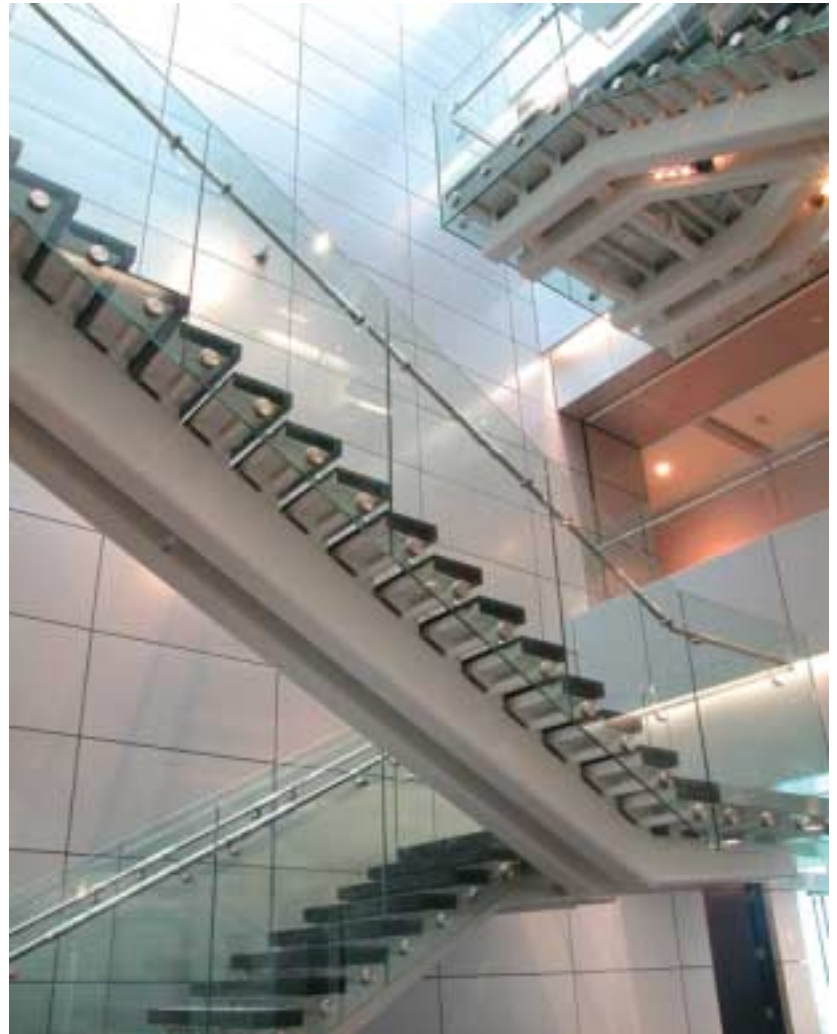
HKSP will be the first project in Hong Kong to be partially powered by solar energy. Photovoltaic panels have been fitted to the facade of Icon Tower and the louvres on Building 2, one of the core buildings. According to ArchSD, the knowledge gained from the installation of photovoltaic panels in Phase 1a will be applied and refined in later phases, to optimise the amount of solar energy utilised.

There are other green features. The curved roof panels, for example, have two layers designed to stop heat from entering the buildings. Building 2 also features a double skin facade. The triple glaze has an 800 mm space between the panes, to shunt heat upwards for dissipation. Cooling towers are designed to run in a closed re-circulation system and an underground waste disposal system will collect recyclable materials and rubbish separately. Building services equipment will switch on and off automatically as occupants enter and leave their offices. Recycled pavers are used to pave the roads.

What distinguishes all the buildings from the typical Hong Kong office building is the generous allocation of space for circulation or simply hanging out. It is a use of space that is anathema







to any Hong Kong developer's concept of profitability, but built in at HKSP because research reveals its importance to creativity and business. Apparently at Silicon Valley, researchers discovered that more ideas were generated and hands shaken on business deals on staircases and landings than the actual office.

At HKSP, therefore, stairways and corridors are unusually wide. Landscaped, naturally lit atriums as well as quiet corners and balconies invite passers-by to stop and refresh their minds. The corporate buildings, for example, feature balconies in a variety of shapes providing space for informal conferences. The landscaped atriums are naturally lit skylights as well as clerestories located under metal roof forms, to maximise the amount of daylight entering the buildings at various times of the day.

The buildings are clad in aluminium and glass for a modern, hi-tech look. Ranging from six to eight storeys in height, they were designed to step down towards the waterfront in line with the topography of the site. They were also carefully spaced out to ensure all of them enjoy view corridors.





The park will be served by two loop roads running to the north and south of the core buildings respectively. With the car park located in the north, the northern loop road is expected to be the more heavily used of the two. The quieter southern road will be paved to create a more relaxing atmosphere. According to the architect, tenants will be encouraged to park their cars upon entry and use more environmentally friendly means of transport. Icon Tower is deliberately placed close to the entrance roundabout, so that motorists can park their cars or bicycles and get around on foot. The waterfront promenade will feature a cycle path connecting the park with Shatin and Tai Po. Covered walkways and internal routes in landscaped surroundings ensure that all walking will be pleasant and refreshing. For longer distances, the park will be served by electric shuttle buses. 