

# THE CHINESE UNIVERSITY OF HONG KONG PRELIMINARY MASTER PLANNING PROPOSAL FOR 2021 – SUMMARY

3-9-2007

## 1.0 Objectives

- accommodate population of 30,000 by Year 2021,
- facilitate pedestrian movement through the large and hilly campus, (2 km long and over 130m in height difference between low and high points),
- Enhance sustainable campus through energy preservation, active landscaping and preservation of existing natural vegetation,
- enhance public usage of the University's grounds and facilities.

## 2.0 Planning Strategies and Innovations

### a) Pedestrianization – Covered Mechanized Pedestrian Social Spine

- To achieve the major goal of optimizing pedestrian circulation between different levels of the campus, a clear and efficient, covered "Mechanized Pedestrian Path/Social Spine" consisting of escalators, stairs, and gathering places is proposed. This facility will become the primary mode of pedestrian movement from the train station to the Central Campus and from there to other areas of the University. Social gathering spaces are distributed along the spine at entrances to buildings.

### b) Cleaner Environment and Greater Sustainability – Green Campus

- With the introduction of the 'Mechanized Spine', the pedestrian / bus-users ratio will change from the existing 40/60 to 80/20. Thus the use of buses and other vehicles will be drastically reduced and with it the emission of foul gases and noise, the use of fossil fuel and cost of maintenance and operation, hence producing a cleaner, quieter, environment and greater sustainability.

### c) Centralization of Major Academic and Amenity Facilities

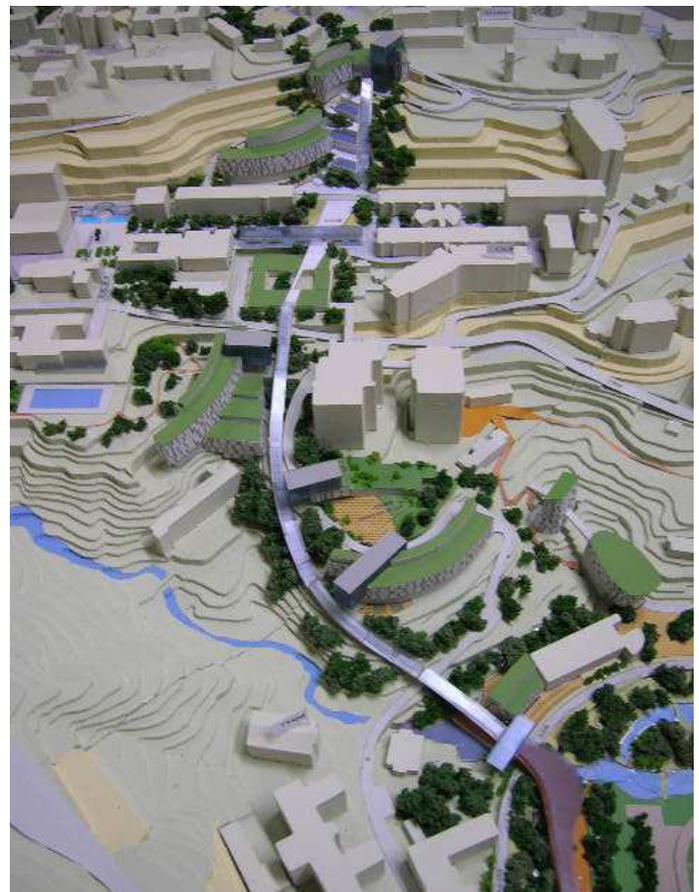
- To fully capitalize on the covered and mechanized Social Spine, new academic buildings are concentrated along its length, to provide better access, sharing of facilities and academic interaction.
- Situated on the Social Spine, mid-way between the lower and central campus areas, a series of "amenity terraces" is proposed, consisting of a canteen with its roof as a garden at the base of the existing Engineering Building, and its upper and lower floors opening onto cascading terraces descending to the existing lawn. This provides a landscaped open area in a mid-campus location, offering a valuable social node and 'breathing space' among the surrounding buildings and dense vegetation.

### d) Heritage

- all existing buildings on Central Mall & other buildings unique to the heritage of CUHK are preserved,
- where existing older buildings are inadequate for current functions, they will be refurbished and up-graded to meet the latest and future needs, wherever necessary.

### e) Community Use

- A plaza on both sides of Station Road outside the train station provides a space for gathering and orientation, and direct access to the elevated 'Spine'.
- Retaining the existing Lingnan Sports Ground, a landmark is created just beyond the plazas, in the form of a 'Great Space' delineated by an elevated section of the new Social Spine on its western edge. With amenity facilities located under the 'Spine' and nearby buildings, and Wei Yuan Lake as its central focus, this 'Great Space' is designed to enhance community life and to strengthen the identity of the University at its main entrance. This 'Great Space' can also accommodate the University's main open-air functions.
- On the east side of the 'Great Space', a 'Grand Walkway' with escalators and stairs, weaves through the new Integrated Teaching Buildings to provide a second major pedestrian linkage between the Great Space and the University Sports Centre and other upper districts of the campus. Social gathering spaces are also distributed along the Grand Walkway.
- A new Library complex is located adjacent to the train station at the southern end of the Social Spine, so as to facilitate its use by both the on-campus and off-campus communities.
- East of University Station, a new University Hall and Cultural Complex is proposed to replace the existing Shaw Hall at the Central Mall, with a large auditorium to serve university functions and open to the public for music and drama performances, open lectures, public addresses etc. Exhibition spaces are also proposed for public viewing of exhibitions of historical, scientific and artistic interests, including local history, environmental issues, astronomy, geology, visual arts, painting, sculpture, graphics, calligraphy, etc. Programmes related to a holistic education for the public at-large can be accommodated in this complex, and will contribute enormous benefits to the community. The Music Department is also proposed to be accommodated, with all necessary teaching, practicing and rehearsing facilities audio and visual studios, etc. Food and beverage facilities are also proposed to support the above facilities.
- Large pedestrian plazas at the Library and the University Hall, are open to the public for leisure sitting, gathering and social activities. Thus the tie between the University and the Community is further strengthened.



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## f) New Train Station

- An additional train station is proposed near “ Area 39”. This will be of great benefit to the accessibility of the Northern Campus, and especially to the users of the laboratory complex and the post-graduate hostels in Area 39.
- This direct linkage from the city to the northern end of the mechanized pedestrian walkway system will also greatly enhance the desirability of future redevelopment along the northern section of the walkway system.
- A pedestrian link through the train station to the Science Park will also provide a short and convenient connection between the scientific institutions on both sides of Tolo Highway.

## 3.0 Other Design Features

### a) Central Mall & Upper Campus

- The Social Spine reaches the Central Mall via an elevated footbridge over University Avenue, connecting onto the existing green roof of the Lady Shaw Building, where pedestrians may proceed to all the areas of the Central Mall.
- Across the Central Mall, a large, academic building is proposed on the site of the existing Shaw Hall to provide a significant injection of academic space in the existing central academic hub. On the western end of the Central Mall, a new academic building replaces 2 existing older and smaller buildings “Fung King Hey Building” & “Leung Kau Kui Building” to further increase academic space at the Mall.
- To facilitate pedestrian movement between United and New Asia Colleges and the Central Mall, the mechanized Social Spine continues to the junction of United Road and New Asia Circle, terminating at a new iconic academic tower at the top of the campus which, together with the existing water towers on either side, create a memorable skyline for the University.

### b) Main Vehicular Entrance

- A new cascading water feature greets visitors to the University at the main vehicular entry on Tai Po Road.
- The existing administration building is expanded with a new wing with parking located underground, enabling covered access to the existing building, and alleviating surface traffic at the existing uncovered drop-off area.

### c) Student Residences and Staff Accommodations

- 5 blocks of new undergraduate hostels are located along Campus Circuit West and Residence Road between United College and Shaw College.
- 2 new staff residential blocks are located on Campus Circuit North, just east of the group of existing staff residences on the northern portion of the existing campus.

### d) Area 39

- 6 blocks of new post-graduate residences are located in Area 39, orientated to preserve sightlines and breeze-ways from the hinterland towards Tolo Harbour.
- Centralized General Laboratories and Research and Development Laboratories are located at the northern-most portion of Area 39, and are designed as signature structures to mark the limits of the University to the north.
- A covered pedestrian path connects the development in Area 39 with United College. The steeper sections of the pedestrian path are provided with escalators to facilitate scaling the level differences, whilst travelators are provided on the relatively level sections to shorten travel time.

## 4.0 Landscaping Design Principles

- protect and preserve native fauna and flora,
- implement planting strategies with emphasis on indigenous species.

## 5.0 Building Design Principles

- select sites with minimum geotechnical impact,
- preserve sightlines from existing buildings and vantage points,
- limit building height and bulk to conform with surroundings and human scale,
- minimize ground space to maximize cost-effectiveness, preservation of existing vegetation, and space for future development,
- orientate buildings and components to harness natural resources, and minimize energy consumption,
- incorporate energy-effective technologies for greater sustainability.

## 6.0 Flexible Phasing

- allow for changes in phasing programme to meet changing needs in the forecoming years.

