

An aerial photograph of the Woodlands Health Campus. The image shows a large, winding lake surrounded by dense green forest. A road with a parking lot and a few cars is visible in the lower center. In the background, a city skyline is visible under a clear blue sky.

Woodlands Health Campus

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Confidential

Health Campus in the North of Singapore



The plot of land which will be used to build the new Woodlands General Hospital, pictured on 15 February, 2014.

Tuesday, Feb 18, 2014
The New Paper

SINGAPORE - An integrated 1,800-bed healthcare complex will open in Woodlands in phases from 2022.

Confidential

Urban Master Plan



- Housing**
- Close to 30,000 new residential dwellings by 2018, adding a total population of 135,000
 - More units for multi-generational living



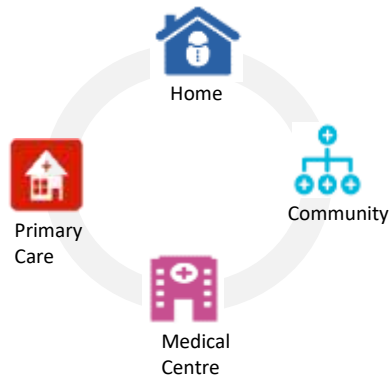
- Industrial/ Commercial**
- New retail and mixed use cluster at Woodlands Regional Central
 - Industrial developments along Gambas Avenue and North Coast Wafer Park



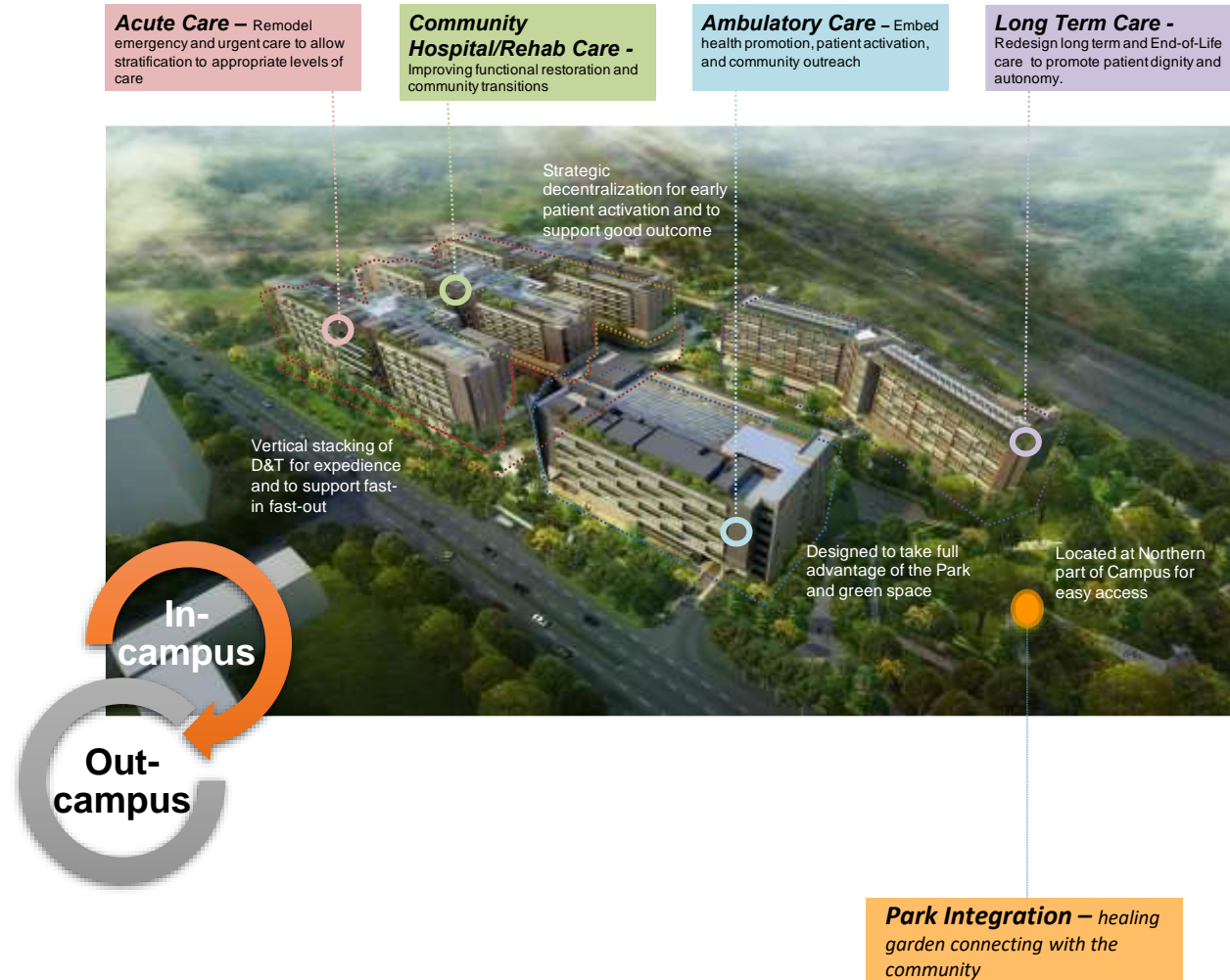
- Improved connectivity**
- New Thomson-East Coast Line and North-South Expressway
 - 3 MRT stations in Woodlands by 2019

Campus Master Plan – “One-ness”

- Integrate *In-Campus* and *Out-Campus* Care
- *Integrated Campus* to enable care delivery across care continuum
- *Campus as part of the community* to inspire positive and healthy lifestyle
- *Campus as a community asset* and take advantage of the Park and park connector



Focusing on enhancing existing resources in the community and building a *network of care*



Campus Design Principles

Person-Centred Medical Planning

Healing Environment

Engaging Community

Activating and Health Promoting

Efficiency and Productivity

Future Proofing

Sustainability



An aerial photograph of a lush, green landscape. A winding river flows through the center, surrounded by dense forest. In the foreground, a large, grassy hill rises, with a few small buildings visible on its slope. The overall scene is serene and natural.

Person-centred Masterplan

The Nature of Healing

Communal Effect

Person-Centred Masterplan

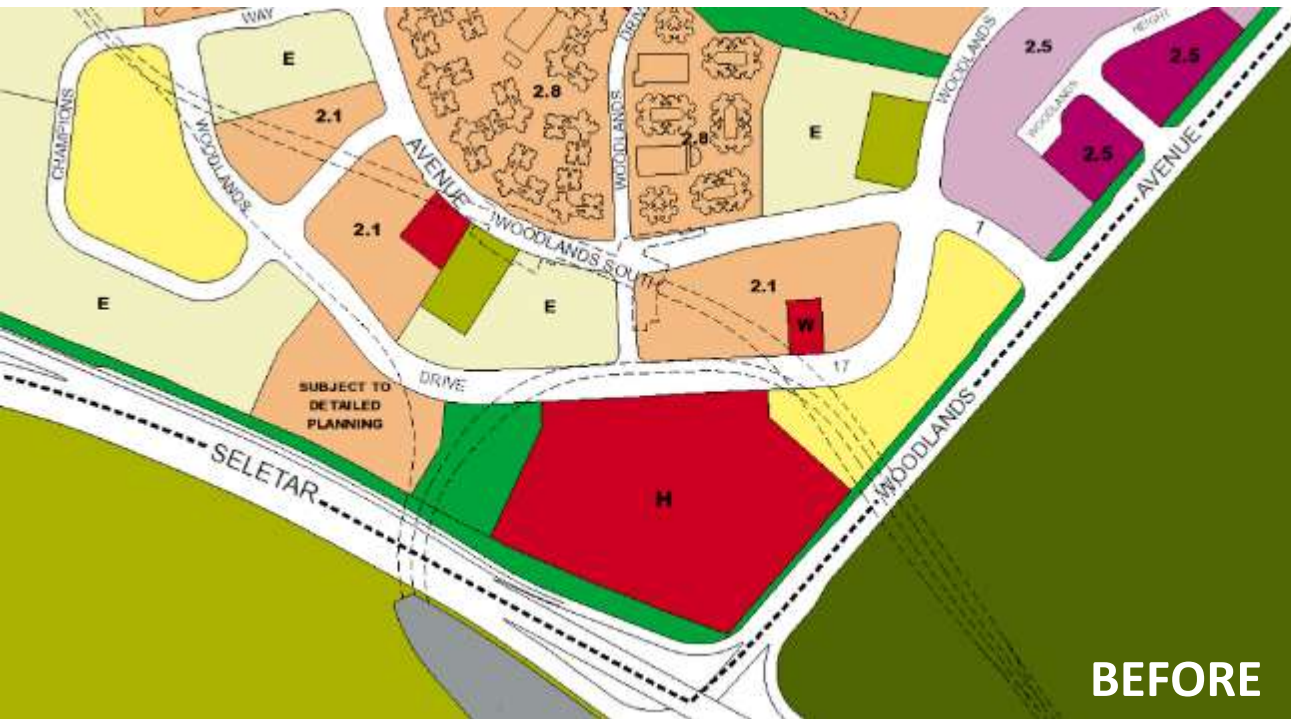
Woodlands Regional Centre

Mandai

Central Water Catchment



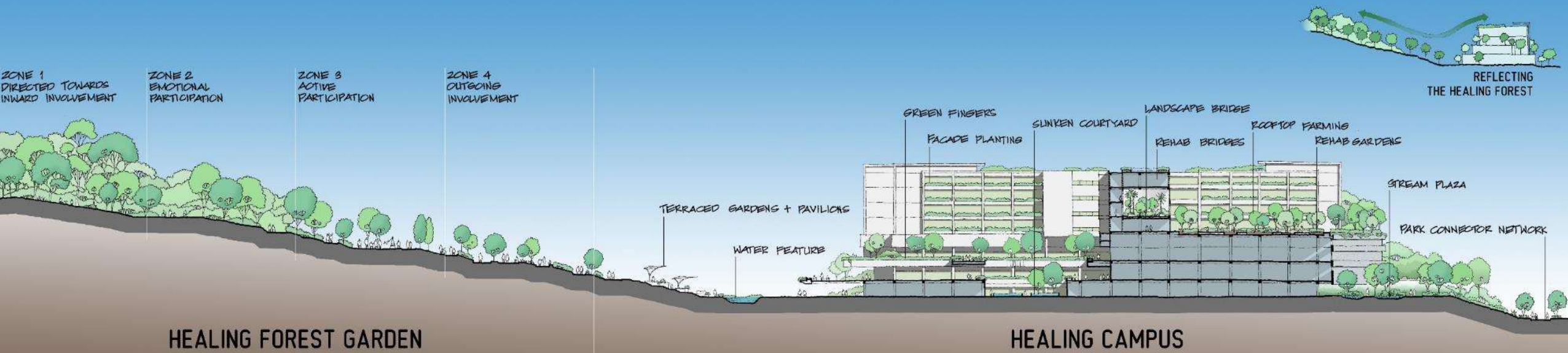
Park Integration



- Reconfiguration of site boundaries for symbiotic benefits for both development
- Sharing of infrastructural provisions
- Encourages usage of park connector network
- Car-free ground floor for active mobility
- A 'larger park' for all – everyone wins!

Person-Centred Masterplan

- Nature for both public and patients
- *Topography* creates different zones
- Continuity of landscape across both sites –
“Micro-scale Urban Green”



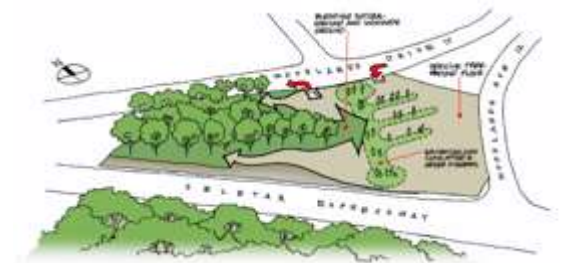
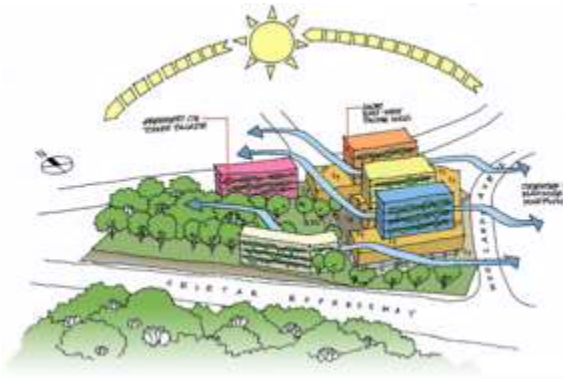
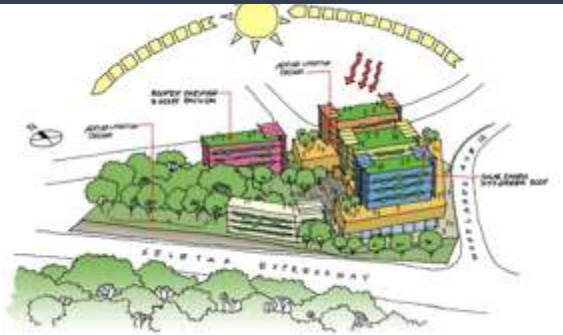
Rainforest Inspired Campus

EMERGENT

CANOPY

UNDERSTORY

FOREST FLOOR

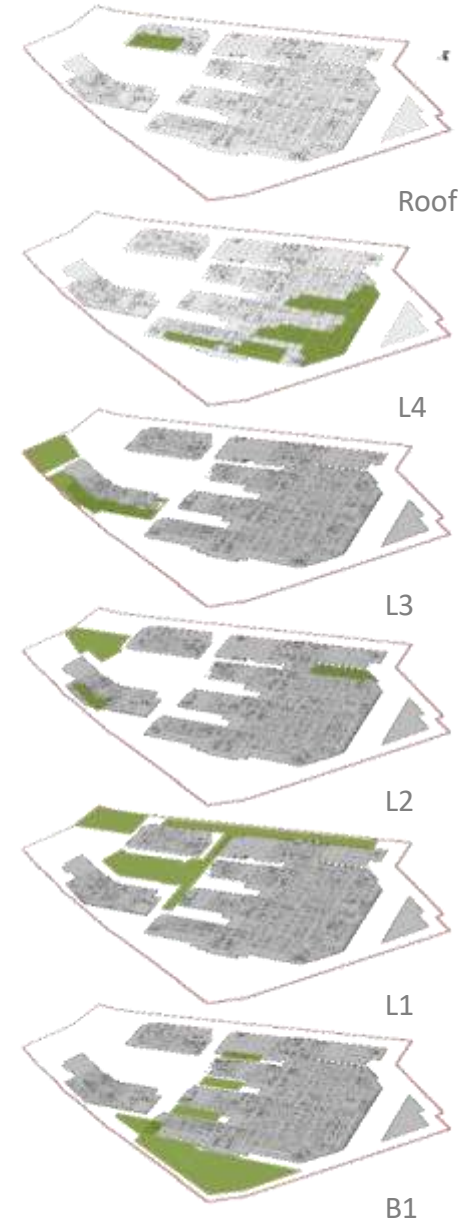


- Rooftop **urban farming and gardens**
- Healing landscapes

- **Most ventilated and day-lit layer**
- Quiet and secured ward towers
- Inter-connected by link bridges

- Accessible yet protected middle layer
- Podium for diagnostic and interventional floors
- Green fingers offer **daylight and ventilation**

- Creating a **park-like ground plane**
- Conducive for pedestrians of all profiles
- Extensive cycling tracks and parking
- **Fenceless, seamless, car-less**





HEALING FOREST GARDEN
Landscape reduces urban heat island effect



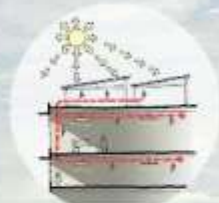
ACTIVE LIVING STAIRS
Naturally ventilated and daylight stairs with views to park encourages use of stairs



ROOFTOP FARMING
Reduces heat gain from sun



TILTED WINDOWS
Designed to reduce direct heat gain



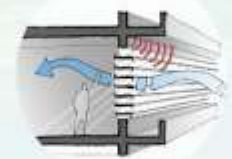
PHOTOVOLTAIC CELLS
Harvests solar energy



NORTH-SOUTH ORIENTATION
Minimises exposure to direct sunlight



MONSOON CANOPY
Allows natural ventilation during heavy downpour
Cuts down noise



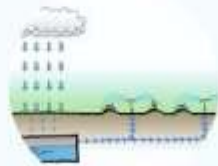
SENSOR OPERATED WINDOWS



RAIN GARDEN



OUTPATIENT REHAB BY THE PARK



RAINWATER COLLECTION FOR IRRIGATION



SMART SENSOR-OPERATED FANS



BICYCLE PARK
Conveniently located to promote cycling



SYPHONIC GROUND DISCHARGE
Reduces deep concrete drains



SUN PIPES IN BASEMENT
Harvests natural daylight for underground spaces



EDIBLE GARDEN
"Farm-to-table" concept

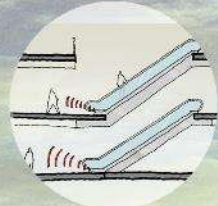


FOOD WASTE RECYCLING
Converts food waste to water

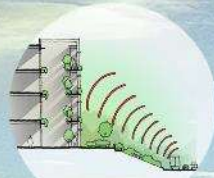




SENSOR OPERATED LIGHTS



MOTION SENSOR ESCALATORS



GREEN ACOUSTIC WALL

Reduces noise substantially from SLE
Softens facade with greenery



DISPLACEMENT COOLING

Efficient cooling of the rooms



STREAM PLAZA

Collection of rainwater



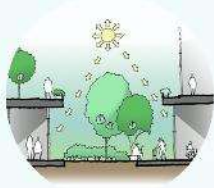
RAIN SENSORS

Reduces the need for irrigation



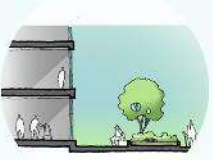
SUNKEN GARDEN

Brings greenery and daylight to Senior Care Centre

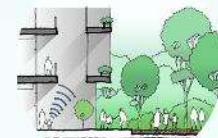


DEMENTIA GARDEN

Secured dementia garden for nursing home residents



INTER-GENERATIONAL GARDEN



GABION RETAINING WALL

Made from underground rocks harvested from site



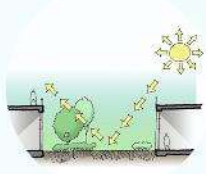
PARK CONNECTOR NETWORK

Encourages cycling and jogging by connecting campus to park connector at various points



HEALING FOREST GARDEN

Reduces heat reflected into wards' corridors



An aerial architectural rendering of a modern university campus. The central focus is a large, multi-story building complex with a prominent green roof and extensive glass facades. The building is surrounded by lush greenery, including trees and landscaped courtyards. In the background, several other buildings are visible, some with green roofs. The entire campus is set within a larger urban or suburban context, with roads and parking areas visible. The lighting is bright, suggesting a sunny day.

THANK YOU