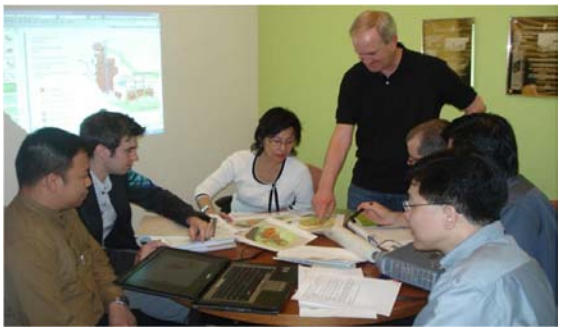
The aim of the Precinct Master Plan (PMP) 1 is to develop a blue print for future development of SoM, FoD and FoS with NUH at the masterplan level to realise the formation of an Academic Medical Centre (AMC) that synergises Clinics, Translational Research, Teaching and Multi-disciplinary Basic Sciences in the hope of creating an environment where new knowledge is founded, new treatment is provided and new expert-scientists are trained.

The scope of work for PMP 1 includes space programming, traffic assessment and improvement, environmental sustainability design, guiding principles, urban design guidelines and visions that will chart the developments in NUH, SoM, FoD and FoS in the next 15 years and beyond.



CPG Architects and Zimmer Gunsul Frasca Architects LLP were appointed to develop this Master Plan Report through a number of interrelated activities. These included site visits, data analysis and interviews with key leadership representatives of NUHS and NUS. During the months of May through August of 2009 the team studied the existing conditions of the hospital through a series of facilities tours. Applying CPG's extensive experience in hospital planning in Singapore and the rest of Asia and ZGF's international hospital experience the team made a series of judgments regarding the physical condition of the buildings and their appropriateness for the current usage. During this time the, team also analyzed the NUHS and NUS site and studied ways to improve campus circulation and identified a number of potential building sites.

NUHS/ NUS Campus Master Planning

Start 24 Apr – 15 May week 1, 2, & 3	Data Collect 18 May – 29 May week 4 & 5	Data Collect I Jun – 12 Jun week 6 & 7	Schematics 15 Jun – 26 Jun week 8 & 9	Draft A&B 29 Jun – 10 Jul week 10 & 11	Brief B&C 13 Jul – 24 Jul week 12 & 13
• Introductions, ascertain roles & responsibilities • Review project approach • Determine FOD building direction • Establish groupings and contacts • Introduce work flow and processes • Micro scheduling • Feedback and vision gathering [Faculty & EG] • Confirming agenda and meeting users • Data collection and review of information [Faculty & EG] • Define scope of work & confirm data [EG presentation]	• Benchmark & Tours • Deciding on guiding principles • Data and feedback collection [Facilities Groups] • Testing options [Option Diagrams] • Identifying limitations and challenges • Schematic sketch •Site analysis • Preparation of DPC [Draft MP Description]	• Zone A & B preliminary projection • Identifying regularization / decanting sequencing • Quantifying spaces • Determine infrastructure strategies • Define hospital & campus components •Site assessment report • Prepare education & healthcare draft report	• Space programming refinement (A & B) • Master plan design development • NUHS feedback collection • Refine campus relationships •Liaise with LTA & other agencies (MPC) •Prepare preliminary infrastructure plan A & B •Review planning facilities report with users •Assess phasing options • Zone A & B master plan and design draft update	• Zone B & C master plan and design draft update • Establish Zone A & B financing strategies with cost consultants • Infrastructure B&C design • Landscape A & B strategies • Environmental sustainability strategies A & B •Final facilities report •ZONE A & B DRAFT REPORT **DUE JULY 7th**	• Transport network design • Landscape B & C strategies • Cost review with quantity surveyors A & B •Programming Zone B & C final report submission

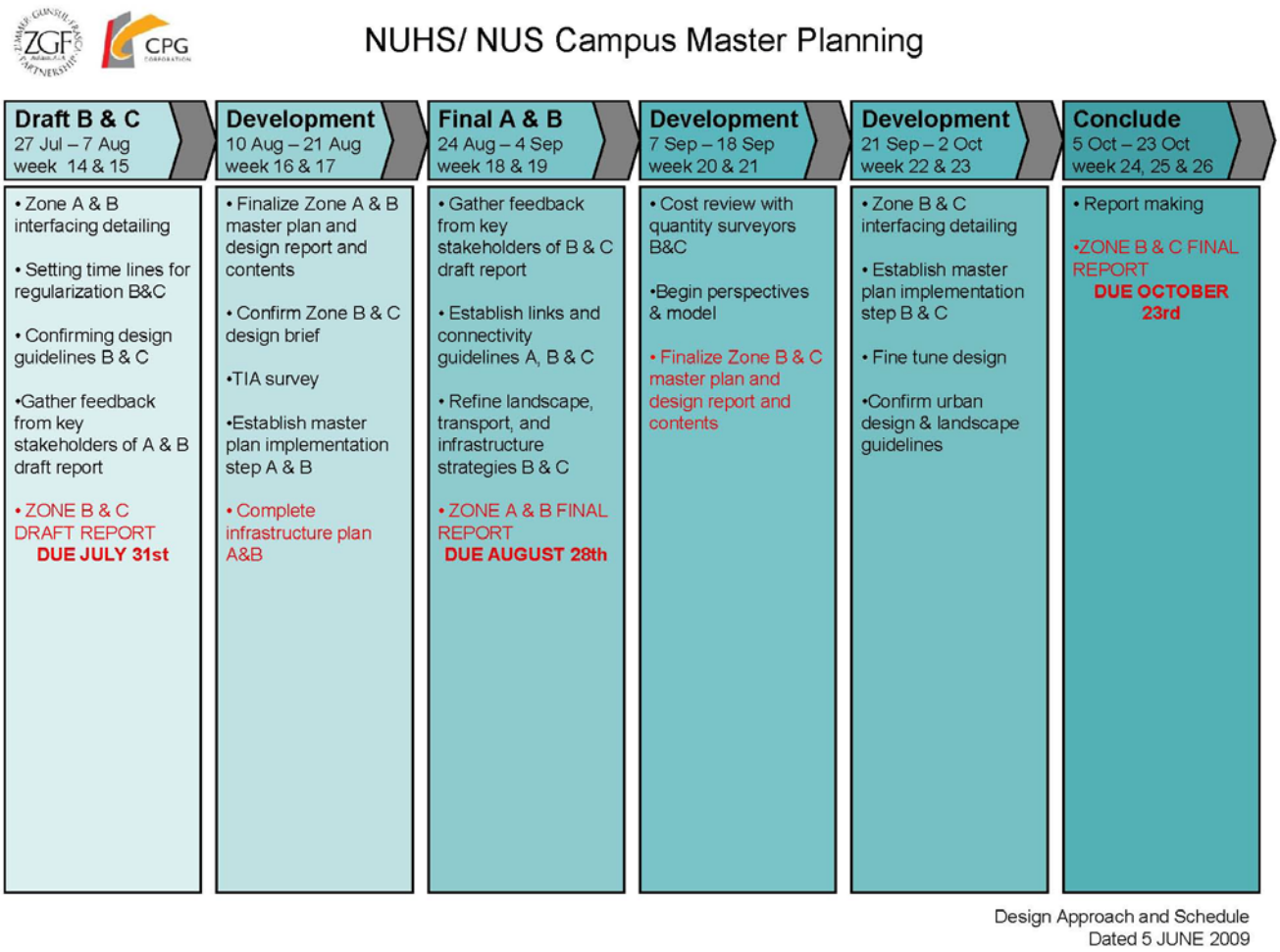
Design Approach and Schedule
Dated 5 JUNE 2009

A number of interviews were done with key executives from NUHS and NUS, including the CE(NUHS), CEO NUH and the President (NUS). The purpose of these meetings was to identify the key goals for the future of the campus as well as to get some sense of the qualities of the hospital and the campus that should be maintained.

This Master Plan report aims to summarise the Guiding Principles, propose the required initial build-up based on projected needs and present the final Nested Campus Option with Phase 1 resolved to building massing stage. It also provides a glimpse into the immediate benefits once Phase 1 is implemented by 2015 in terms of new benchmarked and safe facilities, new amenities that promote interaction and collaboration, and the creation of memorable collegiate spaces.

The report further elaborates on possible future phases after 2015, provides plot specific guidelines to ensure future buildings can be developed in viable parcels, and also provides guidelines to create Centralised M&E plant systems, service road network and pedestrian/bicycle connectivity. GreenMark District Sustainability Guidelines and Landscape Guidelines are included to ensure that every aspect of campus development is guided towards the final Mission and Vision.

Three options of SoM-FoS-FoD masterplan were developed, proposed and discussed with Senior Management during Executive Group (EG) meetings. Based on the preferred Nested Option, phasing plans were developed for the master plan, illustrating the development of the different blocks including decanting and demolition where required. Details also included vehicular and pedestrian circulation, landscaping, Mechanical and Electrical services, academic green for interaction and study spaces. Due to the unique site constraints, users' immediate space needs and the availability of funding balanced with the need for maximum benefits/impact, the master plan gave much attention to the first phase of FoS and SoM.



Design Approach and Schedule
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In Phase 1 of PMP implementation, a new wet science building and MD1 will be developed. The master planning team identified a potential site for the new wet science building. This site allows the new building to be linked to the proposed MD1 and MD6 buildings. The physical & programmatic adjacency of these clusters of new buildings i.e. wet science, MD1 & MD6 buildings and eventually connecting to NUH, is in line with the Academic Medical Centre (AMC) vision for the precinct.

An academic green will also be developed in Phase1. The academic green would include a new FoS canteen, lecture hall, car parking, M&E utility plant, covered linkways and other student activity nodes to improve the heart of FoS. A feasibility study is on-going to surface any possible challenges not yet identified so as to ensure Phase 1 of PMP can be implemented smoothly.