

	Scene/ Time		English Script	Chinese Script
1. Background & Introduction 背景與介紹				
			<p>The establishment of Hong Kong Children's Hospital is aimed to enhance the quality of tertiary clinical paediatrics services in Hong Kong by concentration of leading medical professionals and paediatrics patients with serious and life-threatening illness. Advanced medical training and research activities will also be accommodated to strengthen the development of clinical researches and innovation for paediatrics healthcare services. Upon commissioning, Hong Kong Children's Hospital will adopt a hub and spoke model to serve as a tertiary referral center for complex cases.</p>	<p>香港特別行政區政府設立香港兒童醫院，目的是集合頂尖的兒科醫學專業人員，提高香港兒科的臨床服務質素、治療病危和重症兒童、開展先進的醫學培訓和研究工作、加強兒科醫療衛生服務創新和臨床研究。</p> <p>香港兒童醫院啟用後，會採用中心輻射模式作為複雜病例的第三級轉診中心。</p>

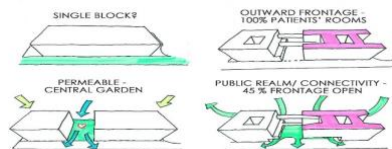
			<p>Following the <u>Legislative Council</u> funding approval in the first half of 2013, the construction works was started in August 2013. After handover of the completed buildings to Hospital Authority in early 2018, Hong Kong Children's Hospital has commenced its service in fourth Quarter of 2018 by phases.</p>	<p>工程撥款在 2013 年上半年獲立法會批出，工程隨即於 2013 年 8 月動工。</p> <p>香港兒童醫院落成後，順利地在 2018 年初移交醫院管理局，並在 2018 年第四季開始分階段投入服務。</p>
2.Design Outline 設計大綱				

			<p>The design brief of Hong Kong Children's Hospital requires accommodation for in-patient and day-patient services with 468 beds, a clinical trial centre, an oncology centre, an integrated rehabilitation centre, operating theatres, specialist out-patient clinic, ambulatory care centre, radiological diagnostic facilities, clinical laboratories and other ancillary supporting facilities. To promote continued advancement and clinical excellence, a comprehensive research and training centre are also integrated into the facility. The total net operational floor area of Hong Kong Children's Hospital is about 46,000 meters squared.</p>	<p>香港兒童醫院的淨作業面積總共約為 46000 平方米。</p> <p>在建造計劃中，除了為日間醫療服務及住院服務提供 468 張病床外，還設有臨床試驗中心、腫瘤中心、綜合康復中心、手術室、專科門診、門診護理中心、放射診斷設施、臨床實驗室及其他附屬配套設施。</p> <p>為了更進一步提供卓越的臨床表現，醫院也配備了一個綜合性的研究和培訓中心。</p>
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The prime design objective of the Hong Kong Children's Hospital is to create a non-institutional, home-like, child-friendly, comfortable and cosy environment that is conducive to patient recovery, support the best clinical practice under a patient-centred approach, facilitates multi-disciplinary and cross-specialty collaboration, and allows efficient and flexible use of facilities and resources with appropriate sharing.

香港兒童醫院的主要設計目標是創造一個適合兒童、非機構式、以人為本和類似家居一般的舒適環境。

在有利病人康復的情況下，開展最佳的臨床實踐，促進多學科和跨專業的合作，有效而且靈活地使用設施和資源，進行適當的資源共享。



In the early stage of the project, Architectural Services Department succeeded in obtaining client's agreement to split the single block into a twin-tower configuration with a central landscape garden in the middle. With podium free design principle, the hospital campus would be more permeable to well-integrate with the urban fabric and provide a better environment at street level. By opening up the ground floor of the hospital buildings with extensive glass walls, a good physical and visual connection is created between the hospital street of Hong Kong Children's Hospital and the adjacent public roads and waterfront promenade.

在項目開展初期，香港建築署成功獲得用家部門的同意，將醫院分割成兩座大樓，中間留有中央景觀花園。遵循無裙樓的設計原則，醫院的整體結構更具滲透性，能更好地融入城市的規劃中，使接連的街道有更好的環境。

香港兒童醫院的低層和地下大堂設有大量玻璃幕牆，增加醫院低層的通透度。醫院街與鄰近的公共道路和海濱長廊之間建立了友善的通道和良好的視覺連繫。

			<p>Hong Kong Children's Hospital comprises of two building towers of 11 storeys high with a basement and link-bridges at secondth Floor, thrid Floor and ninth Floor. An intervening space of about 50 meters wide in the form of rehabilitation garden at ground level is inserted in-between the two towers to improve the air ventilation and permeability of the development. A single-storey basement is provided to accommodate the Supporting Services as well as carparking spaces for about 130 private cars and loading, unloading bays for goods vehicles.The total construction floor area is about 168,000 meters squared.</p>	<p>香港兒童醫院由兩座樓高 11 層的大樓組成，總建築面積約 16.8 萬平方米，在 2 樓、3 樓和 9 樓設有行人天橋連接。</p> <p>在兩座大樓之間有 1 個約 50 米寬的復康花園，改善空氣流通和通透性。</p> <p>此外，大樓設有地庫，提供約 130 個私家車位和配套設施，也提供了上落貨區。</p>
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			<p>The main entrance portal at the drop off area opened up to a large lawn area which offers direct view to the promenade and harbour, while creating a pleasant sense of arrival. Continuous and direct pedestrian covered walkway is provided to link up the the main entrances of the two tower as well as the central rehabilitation garden. Colorful architectural features in the form of trees, sky with clouds and birds at the main entrance lobbies greet all users once they arrived. Natural lighting and selection of warm coloured materials created a calm and comfortable environment.</p>	<p>主要的地面上落客區，接連復康花園的大草坪，可以觀賞海濱長廊和海港，營造宜人的環境。</p> <p>連續而直接的有蓋行人通道能通往中央復康花園和兩座大樓的主大堂。</p> <p>主入口大堂設有色彩繽紛的模擬樹木，藍天白雲，雀鳥等裝飾和動物圖案迎接每一位來賓。通過自然採光及選用暖色物料，營造寧靜舒適的環境。</p>
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			<p>For In-patient Wards, the patient care services by the medical staffs are greatly enhanced by clustering of bedrooms around a central nurse station with good sight lines and generous spaces for different functions.</p> <p>Satellite workstations for nurses are carefully placed adjacent to the patient bedrooms to enhance workflow and operational efficiency. External harbour views and daylight are maximized by careful room orientation and use of half-glazed walls at internal corridors. To alleviate the drawback of a large floor plate, internal courtyards with glass walls are introduced at central location to maximize penetration into the internal areas.</p>	<p>在住院病房佈局方面，病房分佈在護士站周圍，確保醫護人員有寬敞的工作空間和良好的視野，大大加強及提升病人護理的服務質素。</p> <p>護士站設置在病房附近，提升工作流程和營運效率。規劃完善的房間佈局加上內部走廊的半玻璃幕牆設計，使內部有良好的採光，也令用家可以欣賞海港景觀。為了減低大地板的限制，內部庭院的中心位置採用玻璃幕牆，增加內部區域採光。每組病房內均設有遊戲室，與暖色系的室內裝飾互相配</p>
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			Playrooms are provided inside each ward with nice decoration and good exterior views to cater	合，滿足了長期住院患者及家屬在病房外的社交需求。
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			<p>The interior design emphasizes on a “home-like” atmosphere which alleviate the traditional distressing perception of hospitals. Natural colour backdrop with colourful way-finding features and cheerful graphics are used throughout the interior spaces to create a stress-free and unthreatening environment for treatment, rehabilitation and recovery. The design of the waiting areas in the Specialist Out-patient Clinic moves away from the traditional hospital atmosphere where interesting pockets of waiting spaces are integrated with the play areas to create a cozy environment. These spaces act as family spaces and area of exploration for the children. The scenic views of the waterfront together with the</p>	<p>兒童醫院的室內設計追求家一般的感覺，而不是傳統醫院般的壓迫感。醫院內有大自然的色彩背景、豐富多彩的路標和活躍的圖案，為治療、複診和康復者創造了一個輕鬆的環境。專科門診候診室的設計突破了傳統醫院給予人的刻板印象，把有趣的候診區與遊樂區融為一體，營造了一個舒適的環境。為孩子們提供探索的區域，也為家庭創造了共處的空間。海濱景色和遊戲元素可以分散兒童的注意力，緩解他們在治療過程面對的心理壓力。</p>
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			number of play elements will distract the children from their worries.	
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			<p>The concept “A Habitat for Life” is applied in the Hong Kong Children’s Hospital, where each patient floor is featured with a different habitat and animal graphics to provide a friendly and inspirational environment as well as creating story telling opportunities that may help to communicate with younger patients through the stimulation of senses. Eight animal characters were carefully selected in consultation with the users to form a “family” to enliven the clinical areas of the hospital. These characters, graphically depicted in their natural habitats, act as friendly hosts and helpful guides to inform, distract and accompany young patients while relieving their stressful feeling. They also provide excellent communication</p>	<p>香港兒童醫院運用了「動物棲息地」這個概念，在每個樓層加入不同的棲息地的動物圖案，提供一個令人愉快的環境。讓成人可以透過講故事與小患者交流，並為他們帶來感觀刺激。相關部門選出八個動物角色組成了一個「家庭」，使醫院的臨床工作活躍起來。以圖畫方式描繪了這些動物在自然棲息地中友善和樂於助人的形象，使動物們彷彿在醫院裡陪伴著年輕患者，並緩解他們的壓力。</p>
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			opportunities between caring staffs and patients, much like a storybook.	
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5. External Design 外部設計

Through careful articulation of façade elements, Hong Kong Children's Hospital portrays a child-friendly and non-threatening image and that will be experienced by children and visitors when they arrive the Hospital. A coherent and sensible architectural composition is achieved by interplay of curtain walls and aluminium claddings. A vibrant and dynamic façade composed of coloured patterned vertical glass fins and a touch of coloured claddings will enlighten the atmosphere.

香港兒童醫院精心設計的外牆，創造了一個深受兒童喜愛的形象，為兒童和訪客帶來親切的感覺。另外，幕牆玻璃和鋁層互相配搭，形成了連貫的建築圖案。帶有彩色花紋的垂直玻璃翼和帶有色彩的鋁板組成了一個充滿動感和活力的氛圍。

			<p>Nature has a profound healing effect which aids to relief stresses, evocates empathy and balance emotion. The central rehabilitation garden provides a breathing space for enjoyment and rejuvenation with large lawn areas and surrounded with carefully selected plants. The garden is divided into different zones for various activities to take place. There are pocket spaces for gathering and family sharing; children play area with unique play sets; healing garden space and a greenhouse for rehabilitation and horticultural activities; an amphitheatre for events and performance.</p>	<p>大自然的環境有治療作用，可以緩解人的壓力，平衡情緒。中央復康花園有一個大面積的草坪，周圍有很多植物，創造了一個讓人快樂並恢復活力的空間。花園被劃分成不同的區域，人們可以進行各樣的活動。有供家庭聚會的空間；有特色的兒童遊戲區；用作復康和園藝活動的溫室；舉行各類表演活動的半圓形劇場。</p>
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			<p>The theme of animal characters is also extended to the non-conventional design of the central garden and children playground in-between the twin towers. Play equipment specialist was engaged at the very beginning of the design to provide innovation ideas and technical advices on the physical set up and safety aspects of the playground and play elements. Allied health professionals were also consulted on the design of green house and the rehabilitation garden. The end product is very appealing and successful.</p>	<p>動物角色的主題也被應用在兩座大樓之間的中央花園和兒童遊樂場的設計上。在設計初期，我們聘請了設備專家，為遊樂場內設施的設置和使用安全提供專業意見。也就溫室和復康花園的設計諮詢了專職醫療人員。結合多方意見後，建成的花園非常有趣。</p>
6. Sustainability 可持續建築設計				

			<p>Hong Kong Children's Hospital is a sustainable and environmentally friendly hospital that aims at better treatment outcomes by providing a healing environment, and it has succeeded in being the first public hospital to attain the Platinum Rating in Provisional Assessment under the BEAM Plus New Building version 1.2 of Hong Kong Green Building Council Limited.</p> <p>.</p>	<p>香港兒童醫院是一個同時具有環境保育性及可持續性的醫院，為病人提供一個更好的復康環境從而提升治療效果。在香港綠色建築委員會有限公司的綠色建築認證(第 1.2 版)臨時評估下，香港兒童醫院順利成為全港首間獲得白金評級的公立醫院。</p>
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			<p>Over 40% of site coverage of greenery is provided in forms of landscaped gardens, green roof and vertical green walls.</p> <p>Hong Kong Children's Hospital is the first hospital building in Hong Kong pioneering the use of District Cooling System for central air-conditioning with automatic demand control of chilled water circulating system and carbon dioxides sensors. Renewable energy installations such as solar hot water system and photovoltaic panels are installed at rooftop to reduce the carbon footprint of the hospital. Low energy artificial lighting system, water efficient sanitary fittings and rainwater recycling system are installed to reduce electricity and water consumptions. Charging</p>	<p>景觀花園、綠色屋頂和垂直綠色牆壁為醫院帶來超過 4 成的綠化覆蓋率。</p> <p>香港兒童醫院是全港首幢採用中央空調分區供冷系統的醫院大樓，同時設有自動水量控制系統及二氧化碳感應裝置。為減低醫院的碳排放，屋頂安裝了太陽能熱水系統和光伏板等可再生能源裝置。此外，醫院安裝了低耗能的人工照明系統、節水潔具和雨水回收系統，減少水電消耗。停車場亦設有供電動車輛使用的充電設施。</p>
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			facilities are also provided in the carpark for use by electric vehicles. .	
7. Innovation 創新				
8. Construction 建築期				

			<p>One of the major challenges of the project is the construction for the 15 meters deep basement with complex ground conditions and various site constraints. In order to expedite the construction progress, the Excavation and Lateral Support design has been carefully considered with enhance buildability, structural efficiency and construction safety. Enormous temporary steel working platforms are designed to support the construction vehicles and plants for the excavation works, which involved a total volume of soil excavation of 245,000 meters cubed with the peak daily production rate of 3,150 meters cubed . A barging point was specially set up near an adjacent seawall so that transportation of excavated soil by sea was made</p>	<p>工程中其中一個挑戰，是要在複雜的地底環境及各種工地限制下建造 15 米深的地庫。為了加快施工進度，工程團隊考慮到挖掘及側向支撐安裝工程設計的建造可行性、結構施工效率及施工安全性，設計了龐大的臨時鋼製工作平台去支撐建築車輛和工具以進行挖掘施工。涉及開挖泥土總量為 24.5 萬立方米，每日最高生產率為 3,150 米。在鄰近的海堤設置躉船停泊處，實現通過海上交通運輸挖掘泥土。這不僅加快了挖掘施工，還減輕了對道路網絡負載和對沿途環境造成的滋擾。</p>
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			<p>possible. This not only allowed the excavation to proceed promptly but also reduce the burden on the road network and the environmental nuisance along the land transportation route.</p>	
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			<p>To expedite the completion of the Reinforced Concrete structure with large floor plate, detailed planning of the concreting cycle and the logistic arrangement was carefully studied and reviewed. The whole floor plate was divided into 14 separate zones. With the support of 7 numbers of tower cranes operating simultaneously at strategic locations of the site, it was aimed to achieve a 10-day concreting cycle for each zone. The installation of the unitized curtain wall system was also synchronized with the construction of the superstructure so that first fix of the building services installations could be commenced at lower zone in parallel with the Reinforced Concrete construction of the upper zone.</p>	<p>為了對加快大樓層板鋼筋混凝土結構的工程進度，工程團隊對澆築周期和物流的安排作出詳細的計畫及審核。整層樓板被劃分為 14 個不同區域。工地主要位置可以同時使用 7 部天枰，達到每個區域 10 日澆築周期的目標。安裝組合式幕牆系統工序與上蓋結構工序同時進行，以至於大樓下層的屋宇裝備裝置的首固工程可以與大樓上層的混凝土結構工程同時進行。</p>
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			<p>The 63 meters long-spanned elevated warren truss link bridge at ninth floor presents another challenge to the contractor. With careful planning and risk management, the pre-fabricated steel segments of the linkbridges were erected and assembled on site with the use of modular steel propping system and heavy-duty mobile cranes.</p>	<p>另一個承建商面對的挑戰，是興建位於 9 樓的 63 米長高空桁架橋。在承建商仔細地規劃並進行風險管理下，工地運用組合式鋼製承托支架和重型吊機去安裝桁架橋的預製鋼組件。</p>
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9. Conclusion 結束語

Under the concerted efforts and collaboration of Hospital Authority, Food and Health Bureau, Architectural Services Department the contractor, and other stakeholders, the construction was substantially completed in fourth Quarter of 2017. Hong Kong Children's Hospital has celebrated its official opening in middle of 2019 where over 300 guests from different sectors witnessed the important milestone in public paediatric services in Hong Kong.

Hong Kong Children's Hospital integrated design features, coupled with a philosophy that puts patients' well-being at the heart of the project, will be key to its success and provides positive

香港兒童醫院是香港公共兒科服務重要的里程碑。在醫院管理局、食物及衛生局、香港建築署、承建商及其他持份者的共同合作下，本項目於 2017 年第四季度完工，並在 2018 年第一季度入伙，於 2018 年第三季度啟用。醫院於 2019 年年中正式開幕，約有 300 多名來自不同行業的來賓一同來見證這個時刻。

香港兒童醫院的綜合設計特色及以病人健康為本的理念，不但是其成功的關鍵，還將造福香港社會。以病人為本的設計

			<p>impacts to the Hong Kong communities. The patient-centred design approach has ensured that the patient's experience and the needs of paediatric patients and their families were championed in the design.</p> <p>In her address, the Secretary for Food and Health Professor Sophia CHAN complimented Hong Kong Children's Hospital user-oriented features which set the standard for future new hospitals and redevelopment project.</p>	<p>方針使兒科患者及家屬的需求得到照顧。</p> <p>食物及衛生局局長陳肇始教授在致辭時讚揚香港兒童醫院以人為本的精神，更表示它是未來新建的醫院和重建項目的目標和方向。</p>
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