



Season
14
第十四季

「兒童之家·同行創路」
Carving Paths Together
for Small Group Homes

重塑未來兒童之家的設計
Reimagining Small Group Homes for the Future

行動項目報告
Action Project Report

主辦機構 ORGANISER



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1 前言

Foreword

在社會福利署的定義下，「兒童住宿照顧服務」是為21歲以下，因種種因素（例如家庭、行為或情緒問題），而暫時未能得到適當照顧的兒童及青少年，提供住宿照顧¹。這一詞中出現了三個概念重點，讓項目團隊在研究過程中，更清晰目標方向，訂立第十四季「兒童之家·同行創路」的首個行動項目：「重塑未來兒童之家的設計」。

1. **「兒童」**：兒童之家的對象是4-18歲，團隊重視不同兒童及青少年在各個階段的成長需要，及當中8至9位舍員彼此同住的社交相處和個人空間。
2. **「住宿」**：團隊明白不少兒童住宿服務機構在進行環境改善工程（Environment Improvement Project (EIP) 之時，曾嘗試多種新式設計，並參考創傷知情概念設計提供理想的住宿環境予舍舍成員。賽馬會社會創新設計院（Jockey Club Design Institute for Social Innovation (J.C.DISI)）的行動項目貫徹以人為本的設計精神，希望住宿不僅是一個暫時安頓的位置；而是在各種設計細節和考慮中，促進舍員的身心健康和情緒表達，滿足個人及社交的需要，同時支援前線員工的運作，盡量減低他們的工作壓力。
3. **「照顧服務」**：同樣，兒童之家的年齡層廣泛，導致不同舍員的照顧需要大相逕庭，但照顧服務不只於單向的支援，更需要尊重兒童及青少年的聲音及參與權，在設計過程中團隊期望以遊戲活動和實習計劃促進前線職員、舍員和建築師的雙向溝通，以及將其想法和意見化為設計考慮，是參與式設計項目的重心。

According to the definition provided by the Social Welfare Department (SWD), “Residential Child Care Services” (RCCS) are provided for children and young persons under the age of 21 who cannot be adequately cared for by their families because of various reasons such as behavioural, emotional or relationship problems, or family crises arising from illness, death and desertion¹. This definition encompasses three key concepts that have directed the Project Team in our research process, ultimately leading to the launch of the first action project for the Season 14 “Carving Paths Together for Small Group Homes”: “Reimagining Small Group Homes for the Future”.

1. **“Child”**: The target users of the Small Group Homes (SGHs) age from 4 to 18 years old. The Project Team recognises the diverse developmental needs along different stages of growth and the importance of social interaction and personal space among the 8 to 9 residents living together.
2. **“Residential Care”**: The team acknowledges that a number of residential care operators have attempted innovative designs and incorporated trauma-informed care design concepts into their Environment Improvement Projects (EIPs) to provide an ideal living environment for SGH residents. The Jockey Club Design Institute for Social Innovation (J.C.DISI) approaches this action project with a human touch design concept, aiming for the accommodation to be more than just a temporary shelter. We also considered how to support staff operation and reduce their burnout. Through careful consideration of design details, the Project Team aims to instill physical and mental well-being of SGH residents, cater to their emotional expressions, and fulfill their individual and social needs.
3. **“Care Services”**: Similarly, due to the wide age range of the SGH residents, the caring needs vary significantly. Caring services are merely one-way support; they require respecting the voices and participation rights of Children and Youths (C&Y). During the design process, the team intends to facilitate two-way communication among frontline staff, SGHs residents, and architects through activities such as games and job shadowing programme. This participatory design project focuses on incorporating stakeholders’ ideas and opinions into the design considerations.

兒童之家的環境性質一般為保密，以保障舍員的私隱。因此，尋覓真實環境作設計研究的過程並不容易，行動項目能夠獲得一間兒童之家營運機構的信任並提供真實的單位環境，作個案研究的基礎屋址，並且能於同行路上與不同兒童之家的舍員、家舍家長及社工，進行用家參與的討論活動，J.C.DISI對此深表感激。

J.C.DISI的空間項目團隊亦作出首次嘗試，誠意招募了兩位曾經參與上述活動的舍員以實習身份加入項目計劃，幫助我們進一步完善概念設計。兩位同學是來自不同機構家舍的中學生，在短短兩個月的實習時間內，J.C.DISI全體同事及其機構社工深刻地目睹她們的自信改變，以及為家舍未來翻新項目的積極付出。

同時，我衷心感謝C-LAB建築設計團隊成為「重塑未來兒童之家的設計」的行動項目夥伴，除了協助重新審視環境改善工程的可能性，同時為整體兒童住宿服務提出設計考慮。

過程中，團隊亦了解到樓宇老化、設施明細表的限制及現時體制的人數分配對環境改善工程造成不少影響，降低兒童友善設計的可塑性。J.C.DISI 期望未來有更多跨界別及跨部門的合作能進一步梳理公共房屋的核心樓宇問題，提升整體住戶的生活素質和幸福感。

香港理工大學

賽馬會社會創新設計院總監

實務教授 (規劃)

凌嘉勤 銀紫荊勳賢

2024年3月

¹兒童住宿照顧服務的定義

https://www.swd.gov.hk/tc/index/site_pubsvc/page_family/sub_listofserv/id_residchildcare/

The spatial environment of the SGHs is generally confidential to safeguard the privacy of the residents. Therefore, it was not easy to secure actual SGH units to conduct design research. The Project Team was honoured to gain the support from an SGH operator to provide us an operating SGH flat as the basis for case studies. Moreover, J.C.DISI also appreciated the participants of our user engagement events – SGH residents, house parents, and social workers.

The spatial team of J.C.DISI also made a pioneering attempt by recruiting two SGHs residents who previously participated in the user engagement activities as job shadowers to help us further refine the conceptual design. These two secondary school students, from different SGHs, underwent a transformative journey during their two-month job shadowing, witnessed by all J.C.DISI colleagues and their corresponding social workers. They demonstrated increased self-confidence and made positive contributions to future renovation projects in the homes.

At the same time, I would like to express my sincere gratitude to the C-lab architectural design team for being our action project partner in “Reimagining Small Group Homes for the Future”. They not only assisted in re-evaluating the possibilities of spatial improvement projects, but also contributed to the overall design considerations for RCCS.

Throughout the journey with us, the team also recognised the impact of building ageing, limitations of the Schedule of Accommodation, and current human resources arrangements on EIPs, which reduced the flexibility for child-friendly design. J.C.DISI hopes for more cross-disciplinary collaborations in the future to address the core building issues in public rental housing, thus enhancing the quality of life and well-being of residents as a whole.

Ling Kar-kan, SBS

Director

Jockey Club Design Institute for Social Innovation (J.C.DISI)

The Hong Kong Polytechnic University (PolyU)

March 2024

¹The definition of Residential Child Care Services (RCCS)

https://www.swd.gov.hk/en/pubsvc/family/cat_childcareservice/residchildcare/

項目團隊

Project Team

賽馬會社會創新設計院

Jockey Club Design Institute for Social Innovation (J.C.DISI)

凌嘉勤, 銀紫荊勳賢	總監	Ling Kar-kan, SBS	Director
李雅筠	空間項目經理 I	Karen Lee	Project Manager I (Spatial)
劉妙君	項目協理	Micki Lau	Project Associate
簡思諾	項目協理	Sharon Kan	Project Associate
劉卓怡	項目助理	Cherry Lau	Project Assistant

行動項目夥伴 Action Project Partner:

C-lab Limited

潘緻美	董事	Anika Poon	Director
余志恒	建築師	Derek Yu	Architect
羅兆珊	建築師助理	Susan Law	Architectural Assistant
孫詩媛	建築師助理	Cara Sun	Architectural Assistant
李俊軒	建築師助理	Justin Li	Architectural Assistant
牛安萍	建築師助理	Diva Ngau	Architectural Assistant
康欣懿	建築師助理	Peony Hong	Architectural Assistant

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Jockey Club Design Institute for Social Innovation, 2024. “Reimagining Small Group Homes for the Future - Action Project Report”, Hong Kong: Jockey Club Design Institute for Social Innovation, The Hong Kong Polytechnic University.

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3 項目目標

Project Objectives

行動項目的目標是為了：

1. 了解前線員工和住戶的需要、對兒童之家居住環境的關注和期望，並探索不同方式去建立一個現代化的用家為本環境，以配合他們的生活作息；
2. 通過用家參與活動提出概括的空間設計原則，以改善兒童之家的運作，以應用於其他兒童住宿服務的環境；
3. 就社會福利署提供的設施明細表和最低翻新工程設計要求提出意見，以改善孩子和家舍家長的生活條件和配合營運需要；
4. 提供孩子為本的概念設計方案，給予非政府組織作參考或應用於未來翻新工程，以考慮孩子需要、生活日程及創傷知情設計概念。

是次行動項目不止於制定設計考慮及空間設計概念的計劃，更希望從用家角度重新反思環境改善工程的可塑性，讓社工更能理解明白如何摒除技術性障礙，在有限的資源及環境條件下，實現持分者對家舍的期望。行動項目亦將以非院舍設計感營造兒童及青少年友善環境，並提供傢俬的選擇參考。同時，團隊也嘗試探討打破現有人數分配及探索跨樓層使用空間的可行性和成效。

團隊雖以其中一間真實兒童之家屋址為藍本，過程亦將整體兒童住宿服務的需要考慮在內，希望研究內容能廣泛涵蓋不同機構的實際需要。

The objectives of the action project are as follows:

1. Engage frontline SGHs colleagues and residents to understand their needs, concerns and aspirations for the SGHs environment, and explore ways to modernise and create a user-centric environment to meet their routine;
2. Suggest general spatial design principles through user engagement exercise(s) for improving the operation of SGHs, which could also be applied to other Residential Childcare Services (RCCS) settings;
3. With a view to improving the living conditions of the children and the house parents to suit modern living, suggest ways to update the Schedule of Accommodation (SoA) and Minimum Design Requirements for the Renovation Works provided by the SWD to make SGHs more child-centric and to suit operation needs;
4. Provide child-centric conceptual design scheme for SGH operators to make reference to and/or adopt for future renovation works, with consideration of children's needs, SGH routines and "Trauma-informed Care" design concepts.

This action project goes beyond devising design considerations and spatial design concepts. It also aims to foster a rethinking of the possibilities of EIPs from a user's perspective, enabling social workers to better understand how to overcome technical barriers and meet stakeholders' expectations within limited resources and environmental constraints. The project also seeks to create child and youth-friendly environments that defy institutional settings and provide furniture selection references. Additionally, the team explores the feasibility and effectiveness of reallocating personnel and space configuration across different floors of SGH units.

While the project is based on a specific SGH location, the process considers the broader needs of RCCS, with the intention of encompassing the practical needs of different institutions.

4 前期共創參與工作

Early Co-creation and Engagement

香港賽馬會慈善信託基金的團隊自2021年邀請J.C.DISI探究這議題，尋求以參與式設計及創新方法改善兒童之家的環境。

繼2022年4月，J.C.DISI舉行了「十萬分之一」第十四季「兒童之家·同行創路」社創研討會，期望加強學術界和兒童住宿照顧服務機構間的知識傳播，藉著嘉賓的討論交流，讓相關持份者在挑戰當中探索可行的創新方案，並召集同行者支援兒童及青少年的需要。接著於同年6月舉行的網上共創工作坊，開展了項目計劃的前期階段，逐漸建立和鞏固社會創新過程中的持份者連繫。

有關詳細內容及資料，請參閱第十四季：「兒童之家·同行創路」總結報告。

不少來自理大學術部門、慈善機構、企業、及社會服務機構於兩場活動後均對兒童之家議題表達關注，希望尋求適當切入點，以支援兒童住宿照顧服務中每個階段的需要。

Since 2021, the team from The Hong Kong Jockey Club Charities Trust (The Trust) has been collaborating with J.C.DISI to explore and improve the environment of SGHs through participatory co-design and devising innovative solutions.

Following the “One from Hundred Thousand” Season 14 “Carving Paths Together for Small Group Homes” Social Innovation Symposium held in April 2022, efforts were made to enhance knowledge transfer between academia and RCCS operators. Through discussions and exchanges among guest speakers, stakeholders were encouraged to explore feasible innovative solutions amidst the challenges and gather support from peers to meet the needs of Children and Youths (C&Y). Subsequently, an online co-creation workshop was conducted in June 2022 to initiate the preliminary phase of the action project planning, gradually establishing and strengthening stakeholder connections during the social innovation process.

For detailed information, please refer to the Season 14 “Carving Paths Together for Small Group Homes” Summary Report.

A number of participants from academic departments, charitable organisations, businesses, and social service operators expressed their concerns regarding SGHs after the two events. They seek appropriate entry points to support the needs of C&Y when they are being cared for under the RCCS.

5 從兒童及青少年聲音和用家參與活動中思考設計

Designing with Consideration for Children and Youths' Voices and User Engagement Activities

自2022年6月起，J.C.DISI舉辦或協辦了一系列的用家參與活動。是次行動項目的用家參與活動有別於一次性的持分者了解諮詢，而是基於自願及平等參與，不同年齡的舍員、家舍家長和社工的意見都獲得重視及聆聽。參與是建基於成人與兒童及青少年彼此的尊重，以及各人對家舍環境的關心。

活動事前，參加者被告知活動的意義除了為各人的家舍未來翻新作長遠考慮，亦希望通過舍員的自身體驗讓研究團隊得知整體兒童住宿服務的空間環境的限制和痛點，從而思考如何改善未來的服務支援。

J.C.DISI亦到另一間兒童之家進行家訪，除了為未能親身到香港理工大學的家舍兒童舉辦活動外，同時了解兒童之家的舍員如何運用空間及其生活習慣。

讓家舍舍員、職員和設計師進行用家參與和共同設計，是一個充權措施，以增強他們對家舍的歸屬感和自主權，並協助他們日後適應裝修後的家舍新環境。有別傳統的意見收集方式（例如向家舍舍員提供材料選項），J.C.DISI的用家參與方式強調孩子的主動性和參與性，亦注重將舍員和職員的情感與空間需求結合。透過讓所有舍員（包括有特殊教育需要的舍員）參與設計過程，他們可以更透徹地了解自己的需求，從而提出更加貼近實際需要的設計方案，也可讓設計師按個別舍員作出個性化調整，提高住戶的舒適度和生活質量。

Since June 2022, J.C.DISI has organised or co-organised a series of user engagement activities. The user engagement activities in this initiative differ from one-off stakeholder consultations as they are based on voluntary and equal participation, with the opinions of residents of different ages, house parents, and social workers being equally valued and listened to. Participation is grounded in mutual respect between adults and C&Y, as well as individuals' concerns for the spatial environment of the homes.

Prior to the activities, participants were informed that apart from considering long-term renovations for their respective residences, the purpose of the activities was also to enable the Project Team to understand the limitations and pain points of the overall RCCS environment through the personal experiences of the residents. This understanding would then inform and direct future service improvement and system change.

In addition to organising activities for residents who were unable to visit PolyU, J.C.DISI also conducted home visits to the SGHs, aiming to gain insights into how the residents of that home utilise their space and their living habits.

Engaging residents, staff and design team in user engagement and co-design process is an empowerment measure to enhance C&Y and the staff sense of belonging and ownership within the homes and to assist them in adapting to the newly renovated flat in the future. Different from traditional methods of opinion collection (such as providing material options to residents), J.C.DISI's user engagement approach emphasises the active participation of C&Y, while also considering the emotional and spatial needs of the residents and staff. By involving all residents, including those with special educational needs (SEN), in the design process, they can gain a deeper understanding of their own requirements and propose design solutions that are more closely aligned with their actual or unmet needs. This approach also allows designers to make personalised adjustments for individual residents, thereby improving their comfort level and quality of life.



**家舍成員用家參與活動
SGH Residents Engagement**

2022年6月到12月

與兒童之家的舍員、社工、家長和建築設計團隊分別於理大和家舍內進行了4場互動用家參與環節

June to Dec 2022

Conducted 4 rounds of user engagement sessions in PolyU and SGHs households with resident, workers and the architectural design team



**家舍空間再設計
Redesign of SGH Interior**

2022年10月到2023年10月

從實地考察、用家參與及研究、和與兒童之家的員工持續交流所得，製作新的兒童之家室內空間設計

Oct 2022 to Oct 2023

Produced schematic design with input from user engagement activities, R&D and continuous refinement with SGH operators



**舍員實習生參與家舍模型製作
Jobshadowing and Model Making**

2022年12月到2023年1月

邀請即將離開兒童之家的舍員參與實習，並賦權他們收取其他舍員的意見，製作一個理想的兒童之家室內設計模型

Dec 2022 to Jan 2023

Invited to-be graduates of SGH to jobshadow at J.C.DISI and empower them to gather input from their peers to produce an ideal physical model of SGH interior



**家舍家長焦點小組
Focus Group with House Parents**

2023年2月

與香港賽馬會慈善信託基金和理大應用社會科學系的團隊，一同與兒童之家營運者、家長和替假家長進行了不同層次的討論，以了解他們對服務和孩子們的需求和期望，從而協助服務轉型

Feb 2023

Together with the Trust and the Department of Applied Social Science of PolyU, the project team engaged in different levels of discussions with NGO operators, house parents and relief house parents to understand their needs and aspirations for the service and for the C&Y to support service transformation

圖一：J.C.DISI 自2022年起有關兒童之家的的研究和用家參與工作
Figure 1: J.C.DISI's Research and User Engagement Work on Children's Homes since 2022

不同用家的意見整合 Integrating the Feedback from Different Users

在不同形式的用家參與活動中，我們收集了來自兒童之家舍員、營運機構/社工和家舍家長的各種意見。這些回應將進一步指導設計考量和優化服務供應。

An array of responses are collected from SGH residents, NGO operators/ social workers and house parents during the diverse engagement events, which are imperative to direct design considerations and optimising the service delivery.

平衡家舍中的可見性和舍員的個人私隱 Balancing visibility and privacy for SGH residents



支持健康發展和成長

Support healthy development and growth

兒童之家的設計考量 Design considerations for SGH

- 可調節和靈活的家具
Adjustable and flexible furniture
- 使用不同材料增強舍員的多感官體驗
Deploy a variety of materials to enhance the multi-sensory experience of SGH children

滿足不同年齡階段
舍員的不同需求
Cater for the different needs of
children from different age cohorts

避免尖角傢俬
以確保安全
Avoid furniture with sharp
edges to ensure safety

允許舍員靈活使用空間
並展現他們的創造力
Allow children to unleash
their creativity in the use of space

為不同年齡階段的舍員安排家具
Easier-to-arrange furniture for
children of different age



舍員的意見
Feedback from SGH residents



營運機構/社工/家舍家長的意見
Feedback from NGO operators/ social workers/ house parents

提供不同程度的社交和寧靜空間 Provide different magnitudes of social and quiet spaces within the household

兒童之家的設計考量 Design considerations for SGH

- 分開動態和靜態活動，減少衝突
Space out active and passive activities thus support conflict management
- 使用一致色調，配合使用特色牆壁
Consistent colour tone with feature walls
- 使用油漆而非牆紙，避免剝落
The use of paint instead of wall paper to avoid peel-offs

為舍員提供自由互動的機會
Provide opportunity for
children to freely interact with
each other when they desire

允許舍員自由使用空間，
加強他們的自主權
Allow children to freely use
the space to strengthen children's
sense of control and ownership

避免年幼的舍員在其他孩子做作業/
需要專注的時候分散他人注意力
Avoid younger kids distracting others
while the latter are doing homework/
requiring space for concentration

整體設計中保持一致，
避免負面感官刺激
“Clean” and consistency in
overall design to avoid triggers



舍員的意見
Feedback from SGH residents



營運機構/社工/家舍家長的意見
Feedback from NGO operators/ social workers/ house parents

用家參與的洞見和後續發展

有些參與者可能會因為注意力短暫而難以理解和參與遊戲，特別是年幼的孩童和有特殊教育需要的家舍成員。此外，我們需要為每個家舍單位定制平面圖，這也讓遊戲難以普及使用。因此，我們從參與者的情感需求出發，來確定空間需求，並協助參與者更容易理解和參與遊戲。另外，由於在遊戲過程中會涉獵家舍狀況的討論，我們亦需要避免觸發家舍成員過去的負面情感。根據此用家參與的經驗，我們展望下一屆段的行動項目能協助孩子們有效表達自己。

J.C.DISI 與 Press Start Studios 和本地繪本作家貓珊共同開發一套桌上遊戲，作為深入了解家舍孩子的思想、情感、空間和個人發展需求的溝通工具；同時將家舍孩子於遊戲期間所表達的空間意見和願望向設計師反映，確保未來的家舍環境改善工程設計揉合孩子聲音。該桌上遊戲亦具個人成長的指導性，協助青少年探索自身發展的方向。有關遊戲化溝通工具的構想和促進者手冊的內容將會在行動項目報告中詳細說明。

Insights from User Engagement and Subsequent Developments

Some participants, particularly young children and those with SEN, may have difficulty understanding and engaging in the games due to short attention spans. Additionally, the customisation of floor plans for each residential unit makes it challenging to implement the engagement games on a wider scale. Therefore, we first started by identifying the emotional needs of the users to determine individuals' spatial requirements and facilitate their understanding and engagement in the games. Moreover, since the engagement processes touch upon the conditions of the SGHs unit, we need to avoid triggering participants' negative emotions. Based on the user engagement experience, we envision it to be better assist children to effectively express themselves in the next phase of the project.

J.C.DISI, in collaboration with Press Start Studios and local children's picture book author Maoshan Connie, has developed a board game as a communication tool to gain deeper insights into the thoughts, emotions, space, and personal development needs of C&Y from SGHs. This game serves as a platform for them to express their opinions and desires regarding the living space, which will be conveyed to the architects and designers to ensure that future improvements in the residential environment incorporate the children's voices. The board game also guides personal growth, assisting youths in exploring their developmental paths. The concept of the gamified communication tool and the content of the facilitator's guide will be elaborated in detail in the subsequent action project report.



6 兒童住宿照顧服務的空間限制和設計可能

Spatial Limitations and Design Possibilities for Residential Child Care Services

J.C.DISI就行動項目的用家參與過程及創傷知情研究探索了兒童住宿照顧服務的室內空間設計可能性，包括整體結構和住屋環境方面，還有空間設計與兒童及青少年成長需要的關係，歸納出以下的設計考慮：

重塑空間和設計布局 提供以兒童和青少年為本的服務

1 提供私人空間及社交互動空間

了解家舍家長為舍員制定的日程，對於探索如何劃分和優化空間使用，以支持舍員的團體活動、學習、進食和睡眠模式，並維持共同生活、個人空間和私隱的平衡非常重要。全面的用家參與過程將確保設計方案不是強加於舍員的方案。用家參與還可教育舍員、家舍家長和職員如何充分利用環境升級後的設施，並增強舍員對家的歸屬感和依附感。

兒童及青少年需要有私人空間，可以在其中放鬆和休息，同時也需要有機會與人交流互動，發展社交能力，與同伴一起成長。因此，設計團隊考慮了提供私人空間和社交空間的平衡，於走廊創建一些半開放式的座位，供數人共聚或一人享用，希望舍員的活動空間不只有房間和大廳，能按自己的心情喜好選擇適當的空間作個人或群體模式的活動。

J.C.DISI has explored the possibilities of interior space design for RCCS through user engagement in the action project and trauma-informed care research. This includes considerations for overall structural integrity and spatial environment, as well as the relationship between spatial design and the developmental needs of C&Y. The following design considerations have been derived:

Spatial reconfigurations and design to boost use of space and provide a more C&Y-centric service

1 Providing Private Spaces and Social Interaction Spaces

Understanding the house parents' routine set for C&Y living in that particular SGHs is fundamental to examining and exploring how the space should be zoned and optimised to support the children's group activities, studying, eating and sleeping patterns to achieve good balance of communal living, personal space and privacy in this shared household. A holistic user engagement exercise will help elevate the design scheme to ensure that the scheme is not a scheme imposed on C&Y. It also has a dual function of educating residents, parents and staff on how to maximise the use of the upgraded facilities and empowering C&Y to build their sense of ownership and attachment to the home.

C&Y need personal spaces where they can relax and rest, as well as opportunities for social interaction to develop social skills and grow together with peers. Therefore, the design team balanced the provision of private and social spaces by creating semi-open seating areas along the corridors. These areas can accommodate several individuals or be enjoyed by a single person, allowing residents to choose suitable spaces for individual or group activities based on their preferences and moods.

2 一房多用/ 一物多用/ 一層多用

在空間設計中，考慮使用單一房間滿足多種需求，例如同一房間可以用作靜態娛樂、多感官治療、休息和疫情期間的隔離房等。多用途室中使用的床鋪，可以設計成沙發床，以增加空間的利用率，用作普通座位，同時可轉換成隔離病房的休息空間。

同時，為了增加空間的舒適度，應避免擺放過多雜物和添置過多儲物櫃於多用途室。一些簡單科技配置，如可調教的燈光、小型投影機和抽拉式螢幕可滿足現代青少年的影視娛樂需求；也可成為互動多感官治療室的基礎設備。

此外，設計團隊亦建議於家舍單位內區分可供舍員進行跨樓層活動的空間，提供共享設施或非臨床治療活動，例如音樂治療、寵物治療、遊戲治療等，促進不同年齡層的舍員發展社交能力，以優化空間使用率之餘，以可保障個人休息空間不被干擾。

2 One Room/ Item/ Floor, Multiple Uses

As a rule of thumb, the overall spatial design must maximise the use of space and be flexible to cater to multiple needs and functions. For example, the same room can be used for quiet activities, entertainment, multi-sensory therapy, rest, and sick bay during a disease outbreak. The bed in a multi-purpose room can be designed as a sofa bed to increase space utilisation. It can serve as regular seating and be transformed into a resting space for isolation purposes if needed.

To enhance the comfort of the space, it is advised to avoid clutter and excessive storage cabinets in the multi-purpose room. Simple technological features such as adjustable lighting, small projectors, and retractable screens can fulfil modern teenagers' entertainment needs and serve as basic equipment for interactive multi-sensory therapy rooms.

Furthermore, the design team suggests creating spaces within residential units that allow residents to engage in cross-floor activities. These spaces can provide shared facilities or non-clinical therapeutic activities like music therapy, pet therapy, and game therapy. This promotes the development of social skills among residents of different age groups while optimising space utilisation and ensuring individual rest spaces are not disturbed.

3 檢視結構牆以外的間隔改動

改動單位的結構牆存在技術困難，其可行性相當低。不過，設計團隊發現有些現存的間隔牆建造時比標準厚度更闊，有空間再調整牆身的厚度，甚至轉為半透明材質，增加整體住屋的開放性及可透視性。有助家舍家長及職員持開放態度照顧舍員的同時，亦尊重兒童及青少年的個人空間和有助改善室內通風。

4 打造以強項為本 符合現代生活條件的環境設計

大部分兒童之家建於三十多年前，部分設施較陳舊和設備款式過時。隨時間過去，市面的電器產品日趨進步，使投資智慧家居變得更經濟實惠，於兒童之家配備現代化的設備亦更為合理。例如智能電熱及消毒晾衣架、智慧照明系統和洗碗機（用於提高效率以及舍員和員工的健康和安全）。在設施明細表中給予兒童之家營運機構更多靈活性，讓他們可以選擇符合兒童和青少年基本需求並解決各個單位空間限制的家具和設備，將更有效地提升兒童之家的營運效率，提高舍員的生活品質。

提升兒童之家單位的配置，以應對未來技術發展至關重要，例如可促進小組遙距學習、遙距醫療諮詢和輔導服務，以及通過物聯網設備監測舍員的健康和福祉等。這能增強兒童之家的未來準備能力，支持兒童及青少年的學習和發展，並減輕兒童之家員工的照顧壓力。J.C.DISI和理大電子計算學系正在探索在兒童住宿

3 Review Modifications Beyond Structural Walls

Modifying the structural walls of units presents significant challenges and has low technical feasibility. However, the design team has discovered that some existing partition walls are constructed wider than the standard thickness, allowing for adjustments in wall thickness and even the use of semi-transparent materials. This increases the overall openness and transparency of the household, fostering an environment where house parents and staff can provide optimised care while respecting the personal space of C&Y. This treatment can also contribute to improved indoor ventilation.

4 Environmental Design to Create a Strength-based Environment and Support Modern Living

Most of the SGHs were set up over thirty years ago, and some facilities and equipment are outdated or have become obsolete. As time passed by, advancements in electrical appliances make smart home investments more affordable to justify modernising SGHs living, such as clothes drying rack with heater and sanitisation function, smart lighting and dishwasher (for operation efficiency and health and safety of C&Y and staff). Giving operators more flexibility in the Schedule of Accommodation (SOA) to choose furniture and equipment that suit the C&Y's basic needs and combat spatial constraints of each individual units will help to boost the operation efficiency of SGH and increase the quality of living of the residents.

Making the units ready for future technological advancements, such as group e-learning, remote medical consultation and counseling services, and monitoring residents' health and well-being through Internet of Things (IoT) devices, is critical to increase the future-readiness of homes to support the learning and development of children and help alleviate the caregiving pressure on SGH staffs. In reference to a pilot project J.C.DISI and the Department of Computing are developing to enable remote expressive arts therapy in RCCS, NGO operators should make provisions for a 2m x 2m room with 5G network, a fast computer and wall-padding to reduce accidental injury and for soundproofing.

照顧服務提供遙距表達藝術治療的先導項目。如家舍設計提供最少兩米乘兩米的空間，配備5G網絡，快速電腦和牆墊減輕碰撞帶來的傷害和作隔音之用等配置，將有助服務發展。由於裝修後加建非常昂貴，有時甚至不可行，因此清楚地瞭解所需的最低空間要求和設施升級將有助於設計師和承建商進行環境設計和成本估算。

5 提供年齡相稱的設計

兒童住宿照顧服務的室內空間設計需要考慮到不同年齡階段的兒童及青少年的需求。對於幼童，需要提供安全和易於清潔的地面、圓角傢俬、適合他們高度的桌椅、洗手盤等。這些設計細節不但能保障兒童成長的安全，更希望讓兒童從小培養良好坐姿。而對於青少年，傢俬的大小同樣值得關注，桌椅高度和床的尺寸都會影響他們的學習和休息狀態。

青少年更需要有個性化的空間，滿足自主心態，可考慮以一些可拼式桌子替代傳統大廳的飯桌，並於房間提供獨立書桌，與平時娛樂位置分隔，方便他們於固定位置專心學習。讀書與娛樂空間分明有助提升學習專注力，也有助他們享受放鬆的空間。

As post-fit out additions are extremely expensive and at times not feasible, a clear understanding of the minimum spatial requirements and utility upgrades is essential for designers and contractors in environmental design and cost estimation.

5 Providing Age-Appropriate Design

The interior design for RCCS should consider the needs of C&Y at different stages of development. For young children, it is important to provide a safe and easy-to-clean floor, furniture with rounded edges, and tables, chairs and sinks suited to their height. These design details not only ensure the safety of children but also aim to cultivate good sitting posture from an early age. For youths, the size of furniture becomes equally important, as the height of desks, chairs, and bed dimensions can impact their learning and resting.

Youths require personalised spaces that give them a sense of autonomy. Consideration could be given to replacing traditional dining tables with modular tables and providing separate study desks in their rooms, distinct from recreational areas. This allows them to concentrate on their studies in a designated space. Clearly delineated study and leisure areas help improve focus while also provide a space for relaxation.

通過設計消除負面感官刺激 以支持兒童和青少年情緒管理和建立韌性

6 改善室內通風環境

提升熱舒適度將有助減少觸發較敏感舍員的感官刺激，幫助舍員管理情緒。不少舍員反映空內空間狹窄及焗促影響他們的整體舒適感和在家舍內的活動及休息區選擇。因此，增強整體室內空氣流通至關重要，而增設通風口、風扇吊燈，以及於十字走廊加裝抽氣扇有助改善空氣對流，均對提高居住舒適度有幫助，從而促使他們更願意於家舍每個角落休息和學習。雖然這些改動和加建工程 (A & A) 可能會增加環境改善工程的複雜性，然而對於提高家居的整體舒適性、減少以使用冷氣改善熱舒適度和控制濕度則至關重要。改善空氣流通也能提高家舍整體的能源效益。

7 提供柔和及可調節的燈光照明

一個適合兒童和青少年居住的整體照明環境應盡可能提供充足的自然光，以提高學習專注力，並藉晝夜節律確保作息定時和睡眠質素，室內照明可考慮選擇柔和而溫暖的燈光色調，避免使用強光燈管以減少眩光和刺激對他們視力的負擔和對情緒管理的影響。

而市面上亦有提供一些書枱燈是可調教色調及提供不同程度的亮度，以供使用者自由按活動情況選擇適合的燈光照明和氛圍。此外，燈光應該均勻地分布在室內，以避免刺眼的明亮區域和黑暗的角落，對年少幼童和特殊教育需要者造成視覺刺激，產生恐懼感。

Removing Sensory Triggers by Design to Support Emotion Management and Build Resilience

6 Enhance Indoor Ventilation

Boosting thermal comfort will greatly help to reduce sensory triggers for more sensitive C&Y and support their emotion management. Many residents have expressed concerns about the lack of space and poor ventilation in the unit, which affects their overall comfort and choices of activities and rest areas within the residence. Therefore, enhancing overall indoor air circulation is crucial. The addition of ventilation openings, ceiling fans, and installation of exhaust fans in cross corridors will contribute to improved airflow, thereby encouraging residents to utilise and relax in every corner of the residence. While these additions and alterations (A & A) may increase the complexity of the EIP, this is crucial to improving the overall comfort level of the home and reducing reliance on air conditioning to enhance thermal comfort and for better humidity control. Improving air circulation will also increase overall energy efficiency of the unit.

7 Provide Soft and Adjustable Lighting

An environment suitable for C&Y should prioritise providing abundant natural light to enhance C&Y's concentration and ensure adherence to diurnal rhythms for regular schedules and quality sleep. Soft, warm lighting is recommended for indoor lighting. Avoid the use of bright light tubes to reduce glare, visual strain, and negative impacts on emotional management. Additionally, there are desk lamps that offer adjustable colour tones and different levels of brightness, allowing users to select the level of luminance and ambience based on their activities. Furthermore, lighting should be evenly distributed to avoid areas of excessive brightness and dark corners that may create visual stimulation and induce fear in young children and individuals with SEN.

8 注重多感官環境設計的平衡及佈局

多感官環境對兒童及青少年的健康和成長十分重要，意即在環境中提供視覺、聽覺、嗅覺與觸覺等感官的刺激。

在設計兒童住宿照顧服務的室內空間時，多感官設計需要得到平衡。例如避免使用太雜亂眼花的圖案牆紙，避免視覺混亂；除了窗外的自然環境風聲外，應盡量減少街上噪音。同時，可於房間提供適當的隔音措施以保障舍員與社工傾談的私隱，例如於牆身鋪設吸音材料和安置隔音效果較好的門，如用酒店規格的房門。

於家舍種植小型盆栽和親自然的設計亦有助提升視覺和嗅覺的正面感官刺激；而於專屬幼童的樓層則可以考慮使用軟墊、質感牆及磁性貼，增添觸覺體驗和玩味性及童趣。揉合多感官環境可以製造和諧感和，並透過空間配合兒童及青少年感官發展，亦有助培養他們表達情緒的能力。同時可考慮引入以強項為本的活動和治療，以助減輕焦慮，培養人際交往和溝通技巧，並增強舍員的抗逆力，例如藝術治療、音樂治療、園藝治療等。

天花板燈、房間飾面和窗框等建築及傢俬選擇是創造一個理想空間的關鍵。設計團隊希望通過適當的物料選材，根據飾面、模組化和舍員的適應性來選擇家具，以創造靈活的空間使用佈局，從而有助營造舒適感、信任和居家氛圍。

8 Balancing and Layout of a Multi-Sensory Environment Design

A multi-sensory environment is vital for the healthy growth and development of C&Y, esp providing suitable sensory stimulation through visual, auditory, olfactory, and tactile experiences within the environment. When designing the interior spaces for RCCS, a balanced multi-sensory design is necessary. For example, it is important to avoid using overly cluttered and visually overwhelming wallpaper patterns to prevent confusion. While sounds of nature are welcome, efforts should be made to minimise street noise. Adequate soundproofing should be introduced in appropriate rooms, to ensure privacy during discussions between residents and social workers. Incorporating sound-absorbing materials on walls and installing doors with better sound insulation, similar to those used in hotel rooms, can be considered.

Including small potted plants and nature-inspired design elements within the residence also helps enhance positive visual and olfactory sensory stimulation. For areas dedicated to younger children, the use of soft cushions, textured walls, and magnetic surfaces can provide engaging tactile experiences. This will introduce a sense of playfulness in the unit. Blending a multi-sensory environment with learning can create a harmonious environment and support the sensory development of C&Y, fostering their ability to express emotions. Consideration could also be given to incorporating strength-based activities and therapies to help reduce anxiety, develop interpersonal and communication skills, and enhance resilience among residents, such as art therapy, music therapy, and horticultural therapy.

Key architectural and furniture choices, such as ceiling lights, room finishes, and window frames, play a crucial role in creating an ideal space. Selecting appropriate materials for finishes, modularity, and adaptability of furniture will help create a more flexible layout and promote comfort, trust, and a homely atmosphere.

揉合創傷知情的設計考量 增加兒童和青少年的依附感

9 促進安全感和幫助情緒釋放

在兒童住宿照顧服務中，兒童及青少年可能會因家庭問題或其他壓力因素而面臨情緒上的困擾，加上有特殊教育需要的舍員比例日益增多，故安全又能釋放情緒的空間對他們而言十分重要。

環境顏色選配可採用較柔和的冷色調，如藍色、綠色和紫色等，設置室內植物和選用親自然環境的軟材質都可以提供一個放鬆和舒緩的環境。這些創傷知情的設計考慮可以很容易地融入環境中，幫助兒童及青少年釋放情緒，紓緩壓力並提高他們的情緒穩定性，同時減輕家舍職員照顧不同情緒需要的舍員的壓力。

10 提供多層次及可分類的收納空間

不論大型物件以至微細物件均需有一個妥善的收納空間，以滿足不同舍員的儲物需要。這對於長期居住家舍和較年長、擁有大量個人物品和書籍的舍員尤其重要。地台式設計可為不常用的大型物品提供收藏空間，雙層並可移動的設計可提供開放式的座位，促進互動的社交生活。在房間中，設計團隊建議增加衣物和課本的收納空間，透過分類的收納方式，可以使環境更加整潔和有條理，同時也能讓舍員更加容易找到他們需要的東西。設計團隊亦建議為每個舍員提供可上鎖的個人收納空間以保存個人貴重物品以提升安全感和控制感；而社工亦需要更多可上鎖的儲物空間收放各舍員的個人物品。

Incorporate trauma-informed care design considerations to boost C&Y's sense of attachment

9 Promoting Sense of Security and Emotional Release

C&Y in residential care services may experience emotional distress due to family issues or other stressors. Considering the increasing number of residents with SEN, it is crucial to provide spaces that offer both a sense of security and safety and support their emotional release.

Cool, soft tones such as blue, green, and purple is recommended for the décor to help create a sense of calmness and tranquillity in the unit. Incorporating indoor plants and using soft materials inspired by natural environments create a relaxing and soothing atmosphere, helping C&Y release emotions, alleviate stress, and improve emotional stability. These trauma-informed care design considerations can be easily incorporated in the environment to alleviate stress and reduce the pressure on staff members caring for residents with diverse emotional needs.

10 Providing Multi-level and Categorized Storage Space

Proper storage space is necessary for accommodating belongings, from large items to small objects, to meet the storage needs of different residents. This is especially important for longer term residents and older residents who have a lot of personal items and books. Platform-style designs can offer storage space for infrequently used large items in the open areas, and double-up as seating to promote interactions. Within the rooms, the design team recommends incorporating storage space for clothing and textbooks. Implementing a classification system for storage can create a tidy and organised environment, making it easier for residents to find what they need. It is also suggested to provide lockable storage spaces for each resident to secure personal valuables, enhancing their sense of security and sense of control. Additionally, social workers may require more lockable storage space to store residents' personal belongings.

11 培養個人自主和歸屬感

兒童及青少年有自己的習慣和個性，家舍中可提供更多擺放個人喜好的裝飾位置，如掛畫牆、水松板、洞洞板和磁貼牆等，可讓他們自主地建立個人化空間、和鼓勵他們表達自己、和幫助他們保持對周圍環境以及生活的控制感。

而採用整套的上床下桌組合，上層屬睡眠位置，並於下層作個人學習及儲物空間，可讓他們享有物主身分，並提高對家舍空間環境的歸屬感，同時促進青少年為未來的獨立生活做好準備，亦能讓舍員感受到被尊重和重視。

11 Cultivating Individual Autonomy and Sense of Belonging

C&Y have their own habits and personalities. Providing more spaces for personal decorations, such as hanging walls, corkboards, pegboards, and magnetic walls, allows them to actively establish personalised spaces, express themselves, and maintain a sense of control over their surroundings and lives.

Using loft bed combos, where the upper level serves as a sleeping area and the lower level functions as a personal study and storage space, can provide a sense of ownership to residents and enhance their sense of belonging to the residential environment. This setup also helps prepare youths for independent living in the future. It contributes to residents feeling respected and valued, facilitating the adaptation of newcomers to the SGHs.

籌劃環境改善工程

12 採用自然和耐用安全的裝修材質

兒童住宿照顧服務的室內環境是多人共享空間，而當中的傢俬設備需要承傳使用，故材質的選擇對整體環境改善工程影響深遠。自然材質如實木、地磚，不含甲醛的油漆及親自然的環境設計均有助提升耐用性，且能保障安全及健康，增加舒適感。

13 及早處理單位的現存結構性問題可向相關單位求助

這包括設計團隊應該審視現有單位於低層建築的結構，例如漏水、天花板或牆壁石屎剝落、老化的喉管、破損的地板或天花板。處理這部分的金錢和時間成本佔比大，當中需要與業主和物業管理單位協調及溝通。在環境改善工程開始前，設計團隊應與社會福利署和作為物業管理機構的房屋委員會或房屋署進行深入協商，以縮短遷置的時間並避免工程延誤，同時減輕舍員和家舍職員長時間居住在陌生地方所帶來的精神和經濟壓力。有了安全的結構環境，可為健康室內設計和創傷知情概念提供穩固基礎，並且延長住宿環境在翻新工程後的可續性。

EIP planning

12 Using Natural, Durable and Safe Materials for Renovation

RCCS is designed as a shared space with furniture and equipment expected to serve multiple generation of residents and over an extended period of time, hence the selection of materials plays a significant role in the overall EIP. Natural materials such as solid wood, floor tiles, formaldehyde-free paint, and nature-inspired design elements contribute to durability of furniture and equipment. This will also ascertain the health and safety of the residents and enhance their sense of comfort.

13 Address Existing Structural Issues in Units and Seek Assistance from Relevant Parties at an Early Stage

The design team should examine the structural integrity of existing units in the bottom level floors of the building, such as water leakage, spalling from ceilings or walls, deteriorating pipes, and damaged floors or ceilings. Dealing with these issues incurs significant financial and time costs, requiring coordination and communication with the landlord and property management. Advanced discussion with SWD and the Housing Authority or Housing Department as the property manager for rectification before the EIP works is crucial to shortening the decanting period and avoid timetable slips. This will also help reduce the stress of C&Y and staff living in an unfamiliar place for extended periods during the renovation process.

14 資源配套和支援

在進行環境改善工程期間，兒童之家營運機構往往需要承擔額外的 workload，例如有效管理調遷至不同場所的舍員，以及管理翻新工程的進度。然而，他們並沒有得到額外的支援來處理這些工作。此外，負責環境改善工程的政府人員會定期更替，導致批准翻新細節的標準有異，亦影響翻新工程的進度。因此，兒童之家營運者需留意審批標準的不同，以確保翻新工程符合最新的要求。

14 Resource and Assistance

During the EIP, RCCS operators often face additional workload, such as managing the decanting of residents to different locations and overseeing the progress of the renovation works. However, they may not receive additional support to handle these tasks. Additionally, government personnel responsible for the renovation projects may transfer out, leading to variations in the approval standards and affecting the progress of the works. Therefore, RCCS operators need to be aware of the differing approval standards to ensure that the renovation projects meet the latest requirements.

我們採取了一系列的設計以考量重塑兒童之家的室內空間，旨在不僅提升居住環境的美感，還致力提高整體生活和工作環境的質量。

The subsequent reimagined design for Small Group Homes households have implemented a series of considerations aiming not just to enhance the aesthetics of interior design, but also an endeavor to enhance the overall environment quality for living and working.



7 設計背景及挑戰

Design Background and Challenges

透過深入的用家參與活動，項目團隊透徹了解兒童之家在室內環境、支援舍員身心和個人發展上的限制。此行動項目不僅是一個兒童之家的室內裝潢工程，而是由環境改善工程的設計開始，開啟一個契機讓相關持分者重新想像和全面檢視兒童住宿照顧服務的供應及不同的創新可能。

Through extensive user engagement activities, the Project Team gained a thorough understanding of the constraints faced by the SGHs in terms of the interior environment and support for the physical and personal development of the residents. This action project is not merely an interior design project for the SGHs, but rather a starting point for a comprehensive reimagining and evaluation of the provision of RCCS, which begins with a new interior design to explore other innovative possibilities.

環境改善工程背景

環境改善工程項目由社會福利署開展，獲獎券基金撥款進行兒童住宿照顧服務環境改善工程，有關開支必須用於提供社會福利的非政府機構所使用的樓宇的小型裝修或翻新工程，或供這些機構購置家具及設備。

Background of the Environmental Improvement Project

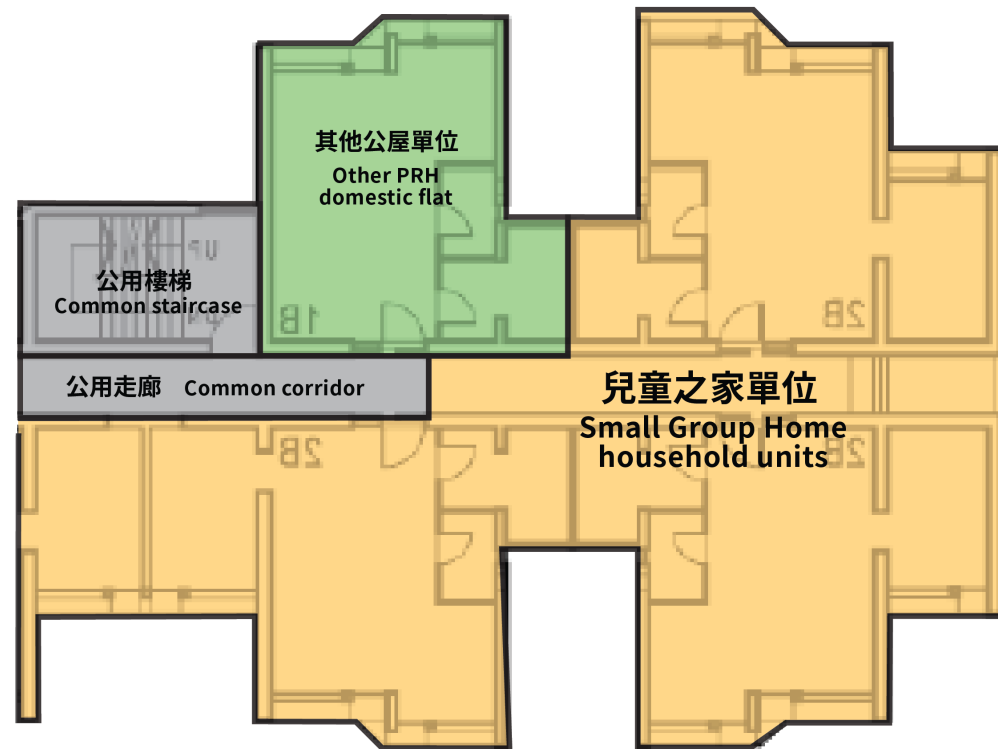
The Environmental Improvement Project (EIP) is funded by the Lottery Fund and managed by SWD. The allocated funds are intended for small-scale renovations or refurbishments of buildings used by non-governmental organisations (NGOs) to provide social welfare services, as well as for the purchase of furniture and equipment for these organisations.

環境概述

一般而言，兒童之家位於公共房屋的一樓至三樓，由當中三個單位打通，形成「L型」的居所(參圖二)，可容納至少10人居住，包括家舍家長(正家長及替假家長)和舍員，其他非恆常居住者亦包括家舍社工、家務及煮飯助理等。兒童之家分佈於本港不同的地區，當中以東區、天水圍區和黃大仙區的數目最多，確切地點為保密資料，以保障住戶的私隱。

Overview of the Environment

Generally, the SGHs are located on the first to third floors of public rental housing buildings, with three units connected to form an “L-shaped” residence (see Figure 2). It can accommodate at least 10 individuals, including house parents (main and relief) and residents. Other non-permanent residents include social workers, housework assistants, and cooking assistants. The SGHs are distributed across different areas in Hong Kong, with the highest number located in the Eastern District, Tuen Mun, and Wong Tai Sin Districts. The specific locations are treated as confidential information to protect the privacy of the residents.



圖二：兒童之家單位於典型和諧型公屋的布局

Figure 2: Layout of SGH Units in Typical Harmony Standard Block of Public Rental Housing Building

環境條件、設計及營運限制

1 公屋單位設施老化影響身心健康

不少位於公屋低層單位的兒童之家面對大廈老化問題，加上由三個公屋單位組合而成的家舍的間隔用途與三樓以上的單位不同，上層的洗手間設施老化導致下層同一位置的公共空間出現天花板漏水、牆身滲水等惡劣情況。更嚴重的是，低層單位受到室內污水渠頻頻淤塞影響，以致污水倒流入屋，影響居住環境和家舍運作，甚至出現漏電危機，嚴重影響兒童和家舍家長的身心健康。

此外，低層單位亦不時面對通風問題及採光不足，影響住戶作息生活，戶外蚊蟲和害蟲入屋導致的家居衛生問題也進一步加重了家舍職員的工作負擔。一旦遇上颱風暴雨惡劣天氣，單位的窗框防漏維修和加固同樣值得關注，以保障整體住戶安全。

據某些家舍營運機構反映，家舍單位新裝修不久已經存在滲漏問題，反映這些問題在裝修過程中未被徹底解決。因此，家舍營運機構及其承建商，應儘早釐清結構問題和關鍵的結構升級工作，確保可為舍員、家舍家長和家舍職員提供安全舒適的環境，以提升他們的健康和幸福感。早期關注家舍的結構問題並與業主進行早期諮詢可避免工程延誤。

Environmental Conditions, Design, and Operational Limitations

1 Ageing Public Housing Stock Affects Physical and Mental Health of Residents

Many SGHs situated on the lower floors of public housing experience issues that are typical of aged buildings. Furthermore, the functional aspects of a unit formed by merging three flats differ from those of a typical unit located on the third floor or higher. When the bathroom facilities in an upper unit deteriorate, it often results in issues such as water leakage in the ceiling or walls of the corresponding area in the lower unit.

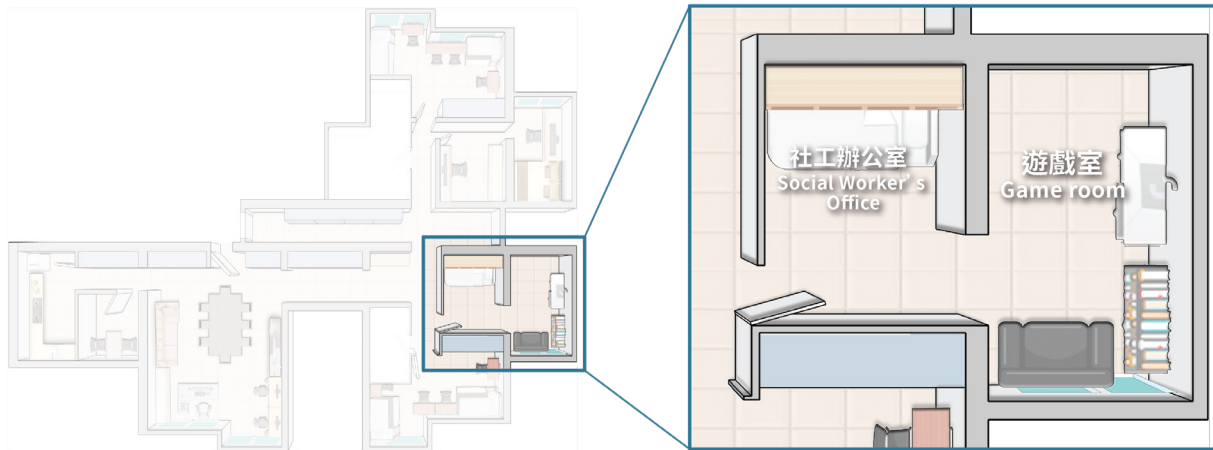
Moreover, the lower units frequently experience problems caused by frequent blockages in the sewage pipes and subsequent indoor sewage overflow. In more severe cases, electric shocks may occur, posing significant risks to the living environment, service operations, and the physical and mental well-being of residents. Additionally, the lower units also face ventilation issues and inadequate natural lighting, affecting the daily routines of the residents. The presence of pests and the resulting hygiene concerns further add to the workload for SGH staff. It is also crucial to address window repairs during typhoon or storm seasons to ensure the safety and well-being of all residents.

According to the feedback from some SGH operators, some newly renovated units are already encountering leakage issues which have not fully been resolved during the renovation process. Therefore, it is crucial for NGO operators and their contractors to identify building defects and carry out necessary structural upgrades to improve the units and provide a safe and comfortable environment for the C&Y, house parents, and staff, thus enhancing their health and well-being. Early attention to structural issues and early consultations with property owners should be pursued to avoid delays.

2 「房中房」不設閉門妨礙私隱

大部分兒童之家由三個公屋單位打通，當中的主力牆不能被清拆，而且兒童之家的設計需要符合社會福利署就設施明細表及其他指定要求，間隔上未盡人性化。其中一個最明顯的例子是單位出現「房中房」的情形，如圖三中顯示，住戶進入房間盡頭需要通過兩個入口，而且中間的入口不能裝上有鎖的門，因走廊還要兼作逃生通道。這種設計降低了家舍共用空間的實用性，缺乏靈活性來滿足多位住戶。

這個情況的空間使用變得矛盾，假如兩個相連的空間分別用作家舍家長和工作空間，職員的進出會為彼此帶來不便；若用作舍員的玩樂空間和社工房，又會降低舍員使用玩樂空間的意欲。因此，在隔音、保障私穩和房間用途上，設計需要有巧妙的處理。



圖三：家舍中「房中房」的布局

Figure 3: Layout of “Room within a Room” in the Residence

2 Lack of Privacy due to “Room within a Room” Design

The majority of SGHs are formed from 3 public rental housing units, which consist of load-bearing walls that cannot be demolished. Moreover, the spatial setup of SGHs has to comply with the Schedule of Accommodation (SOA) and other requirements drawn by SWD, Resulting in a non-user centric spatial design. As indicated in figure 3, the “room within a room” usually has no closable doors, and the corridors have to double as fire escape corridors. Such design reduces the usability of shared spaces in SGH and lacks flexibility in accommodating multiple residents’ needs.

This arrangement creates conflicting use of space. If the two connected spaces are designated for house parents and workspaces, it causes inconvenience for staff members when entering and exiting. On the other hand, if the spaces are intended for children’s play areas and the social worker’s office, it may reduce the children’s intention to play in the area. A clever design may also help address the constraints and improve sound insulation, safeguard, privacy, and room functionality.

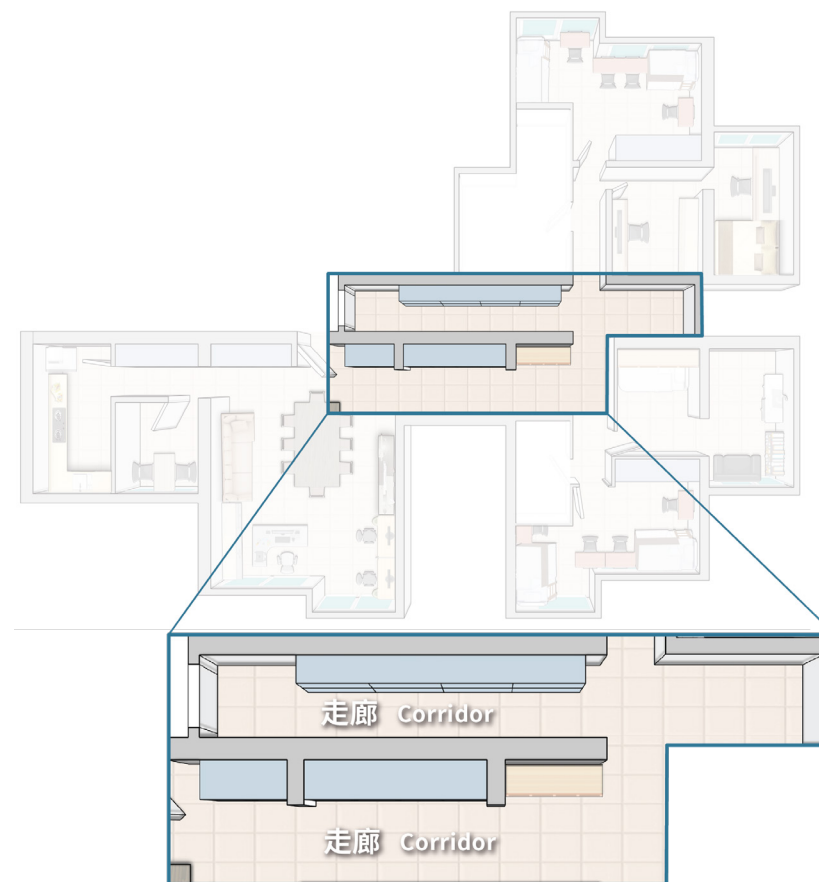
3 雙重走廊降低空間使用率

如圖四所指，打通三個單位令原來連接四個公共屋邨單位的公共走廊和住所中的走廊成為「雙重走火通道」。由於兒童之家是公共屋邨的租戶，不可於單位內進行重大結構改造。這類間隔不便設計容納多位住戶的公共空間，減少住戶交流互動的機會。一般而言，近大廳的走廊照常用作行走通道，另外一條偏窄的走廊則用作晾衣和儲物。作為行走通道的走廊亦有一些突出的結構牆，令整體走廊空間收窄，而偏窄的走廊通風較差，則會影響房間的對流。

3 Reduced Space Efficiency due to Dual Corridors

As indicated in Figure 4, the combination of three units results in the public corridors previously connecting four public housing units to become “dual corridors” within the residence. Since the SGHs operate as tenant of the public housing estate, significant structural modifications is normally not allowed. This design constraint limits the ability to accommodate multiple residents in the public space and reduces opportunities for interaction and communication.

Typically, the corridor closer to the main entrance continues to serve as a thoroughfare for access, while the rear corridor is designated for clothes hang-drying and storage purposes. The corridor used for access also contains protruding structural walls, which narrows the overall corridor space. Additionally, the rear corridor has poor ventilation, which hampers air circulation within the unit.



圖四：家舍中雙走廊的布局
Figure 4: Layout of Dual Corridors in the Residence

4 傢俬的成本規限不利於彈性選擇

進行環境改善工程的過程中，選購傢俬的過程需根據社會福利署所建議的成本範圍。兒童之家中的傢俬除了供不同年齡的舍員共用，更會持續使用。因此，在既定的資源和成本限制下，兒童住宿照顧服務機構往往難以添購一些既耐用又適合不同年齡人士使用的訂製傢俬。

5 室內通風溫度和自然採光分佈不平均

一般來說，家舍是「L型」的住所，如圖五所示，室內的通風對流有別於未打通連接的單位，兩邊窗戶及門口的位置不一定有助室內空氣流通。加上單位多方位的坐向比一般家居更影響住戶的生活作息，容易出現廚房、睡房、客廳角落偏熱或偏暗的情況。另外，位於低層的單位本身採光較弱，以致家舍正中的學習空間和行走通道一般缺乏自然光。

4 Constraints on Furniture Costs Impede Flexibility in Selection

The selection of furniture must comply with the cost ranges recommended by the SWD. The furniture within the SGHs is not only shared among residents of different age groups but also intended for continuous use. Consequently, within the given resources and cost limitations, it is often challenging for RCCS operators to acquire custom-made furniture that is both durable and suitable for users of different age groups.

5 Uneven Distribution of Indoor Ventilation, Temperature, and Natural Lighting

In general, the layout of the residence follows an “L-shaped” structure, as illustrated in Figure 5. The indoor airflow and ventilation differ from units that have not been interconnected. The positioning of windows and entrances on both sides does not necessarily facilitate proper air circulation for this configuration. The multi-directional orientation of the SGH units, compared to typical households, significantly impacts the residents’ daily routines, leading to situations where certain areas, such as corners of the kitchen, bedroom, or living room, may become excessively warm or dimly lit. Furthermore, the units situated on lower floors receive less daylight, resulting in a lack of natural light penetration in the central learning area and corridors within the residence.

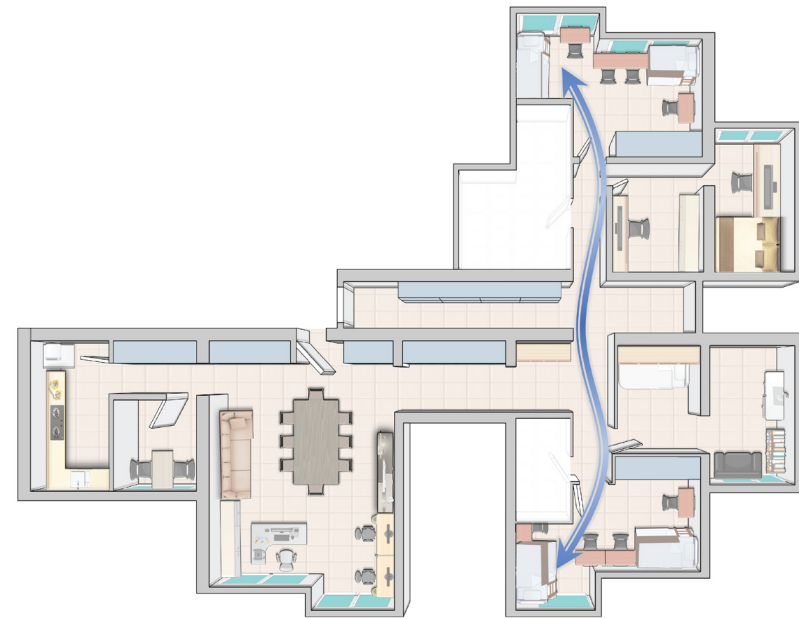
6 裝修工程期間的調遷及人手安排

兒童之家的營運機構在裝修工程期間需要另覓居所安置舍員，但往往難以於同區找到一個適合短期租賃的地方，方便舍員上學。在尋找調遷居所時，位於租金較高地區的家舍也難以於同區找到租金合理的居所。他們往往需要租用私人住宅、酒店或服務式公寓，此做法不但使裝修連帶的成本上升，由於孩子們被分散在不同的地方或房間，這也使得管理孩子的生活作息更加困難。加上家舍人手嚴重短缺，現時家舍員工已需要長時間工作，調遷居住期間的人手資源將更捉襟見肘。家舍家長和社工亦表示，兒童和青少年在短期租賃的住宿中會加劇焦慮。所以在合理可行的範圍內減少翻新工程的延誤至為重要，例如可加強與項目管理團隊的協調，解決涉及結構問題。

6 Relocation and Manpower Arrangement during Renovation Works

During the renovation period, SGH operators are required to provide alternative accommodation for the residents. However, it is often challenging to secure a suitable short-term rental location within the same area that also allows for convenient access to schools for the residents. When searching for temporary housing, it is also difficult to find affordable rentals in areas with higher living costs. Consequently, they often need to resort to renting private residences, hotels, or service apartments. This practice not only increases the overall cost associated with the renovation but also poses challenges in managing the residents' daily routines, as the children are dispersed in different places.

Moreover, staff members already have to work long hours due to severe manpower shortages within the SGHs, and the availability of manpower resources during the relocation period becomes even more constrained during the renovation period. Also, house parents and social workers reported that C&Y experience worsened anxiety in temporary accommodation. This emphasises the importance of alleviating renovation work delays as far as reasonably practicable, such as enhancing coordination with project management team to tackle any structural integrity issues.



圖五：兒童之家室內通風對流走廊

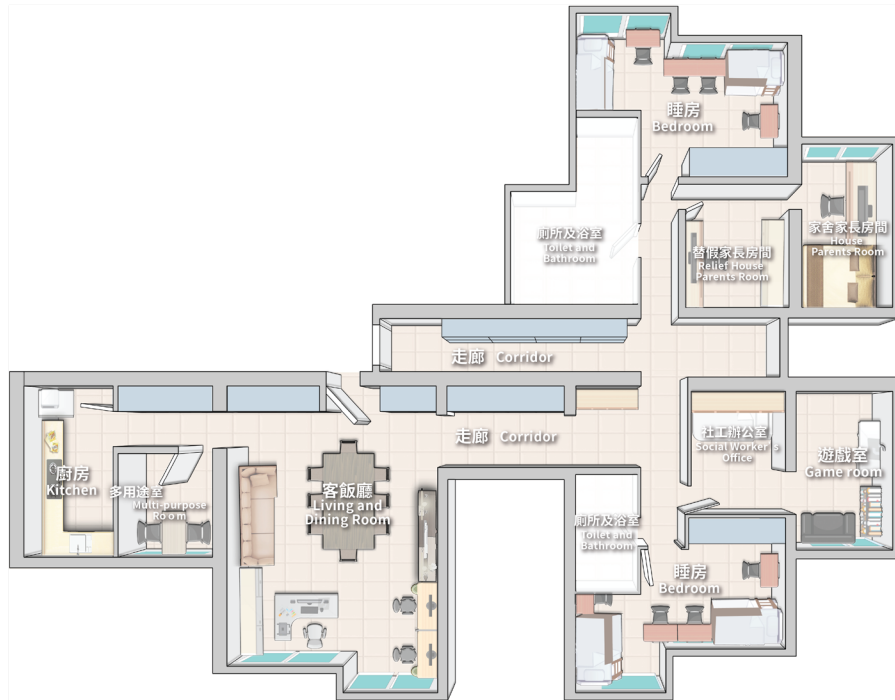
Figure 5: Indoor Airflow and Circulation Corridor in the SGHs

8 設計方案 Design Schemes

項目團隊很榮幸能與聖公會聖基道兒童院合作，為他們其中一個在典型和諧二型公共屋邨的單位創建一個新的原型設計。這概念驗證計劃展示了第六章所述的設計原則不僅適用於兒童之家，還能應用於其他兒童住宿照顧服務的空間。圖六為現有的設計及功能分區，圖七為新的設計平面圖。新設計以上述提及的8個原則作為藍本，旨在創建一個能提供正向感官刺激和具吸引力的家居環境，促進非正式學習。

The project team is honored to collaborate with S.K.H. St. Christopher's Home to create a new prototype design for one of their units in a typical Harmony 2 public housing unit, as a proof-of-concept scheme to demonstrate how the consolidated design principles detailed in Chapter 6 can be applied across beyond Small Group Homes, but also other settings of RCCS. Figure 6 represents the existing design and functional zoning, while Figure 7 showcases the new design layout plan. The new design is based on the 8 principles mentioned above and aims to create a homely environment that provides positive sensory stimulation and attractive aesthetics, thus promoting informal learning.

8 - 設計方案 Design Schemes



圖六：現有的設計及功能分區
Figure 6: Existing Design and Functional Zoning



圖七：新兒童之家設計平面圖
Figure 7: Layout Plan of the New SGHs Design

設計方案

行動項目展示了兩個設計方案，原有家舍安排是三層均為8人的混齡家舍，年齡為4至18歲以內。現時家舍的營運機構往往不能自行選擇新入住的舍員的年齡和性別，所以無法避免年齡相距較大的舍員同住，亦容易因為作息習慣不同而產生摩擦。

設計方案一以年齡及性別分層，每層仍然保留8名舍員，底層4至12歲為兒童混合宿舍，其餘兩層為10至18歲為青少年男/女宿舍；當中有10-12歲的少年可因應情況選擇住宿的樓層以便順利過渡。

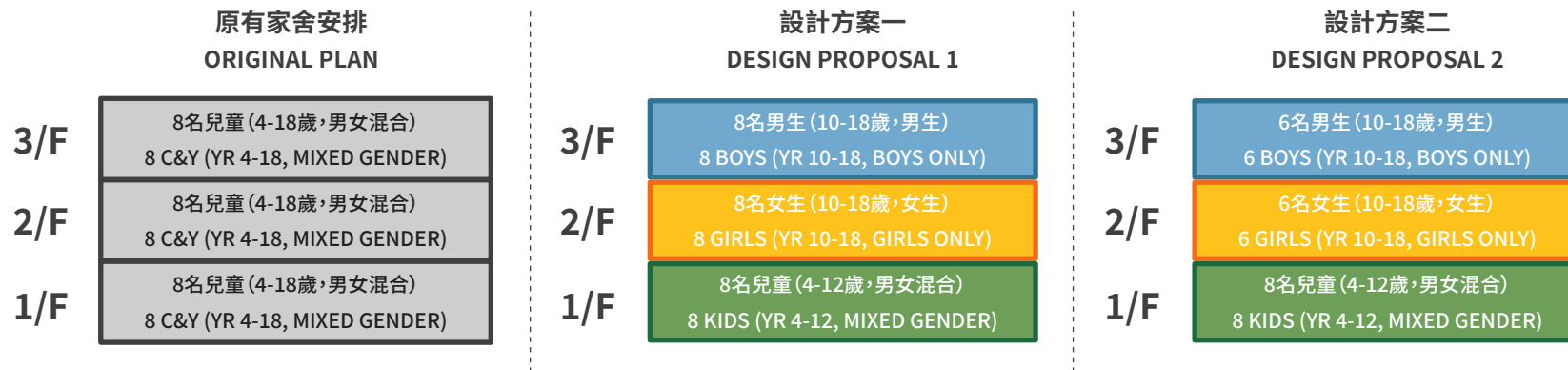
設計方案二雖然都以年齡及性別分層，但除了底層維持容納8名舍員，會調低二三樓家舍可照料的人數至6名舍員，提升每名舍員的人均空間，亦減輕家舍職員的照顧壓力。

Design Proposal

The action project presents two design proposals for the existing SGH, which currently consists of three floors with mixed-age households accommodating 8 residents each, aged from 4 to 18 years old. The current NGO operators of SGHs cannot choose the incoming residents based on their age and gender, resulting in a mix of residents with significant age differences and potential conflicts arising from different daily routines.

Design Proposal 1 segregates residents based on age and gender. Each floor still accommodates 8 residents, with the ground floor designated as a mixed C&Y's dormitory for ages 4 to 12, while the remaining two floors serve as separate teenage boys/girls dormitories for ages 10 to 18. Within this proposal, the 10 to 12-year-old residents have the option to choose their floor of residence based on their specific transitional needs.

Design Proposal 2 also segregates residents based on age and gender but the capacity of each household has been modified. While the ground floor remains capable of accommodating 8 residents, the capacity of the second and third floors is reduced to 6 residents each. This adjustment allows for increased individual space per resident and alleviates the caregiving pressure on the SGH staff.



圖八：設計方案與每家家舍可容納的人數與男女比例
Figure 8: Design Proposals and Capacity with Gender Ratios for Each SGH Household

整體家舍室內環境更新:改善空間布局

有關於「房中房」的設計安排,設計團隊考慮到正家長房間與替假家長房間很少情況會共同使用,建議將兩者安排相鄰位置,以保障各人私隱;另外,有見於舍員反映當社工房位於多用途室外,會降低他們使用的意欲,因此在空間面積許可的情況下,建議成組房間變成多用途室,而社工房則轉移至客廳及廚房旁邊的房間(參圖九)。

為確保符合《消防安全(建築物)條例》和避免影響牆身結構,項目團隊不建議移除分隔雙走廊的結構牆;反而透過安裝地板貼紙和閱讀角落,鼓勵舍員於此空間進行各種動態和靜態活動(參圖十)。

Overall Interior Environment Upgrades: Improving Spatial Layout

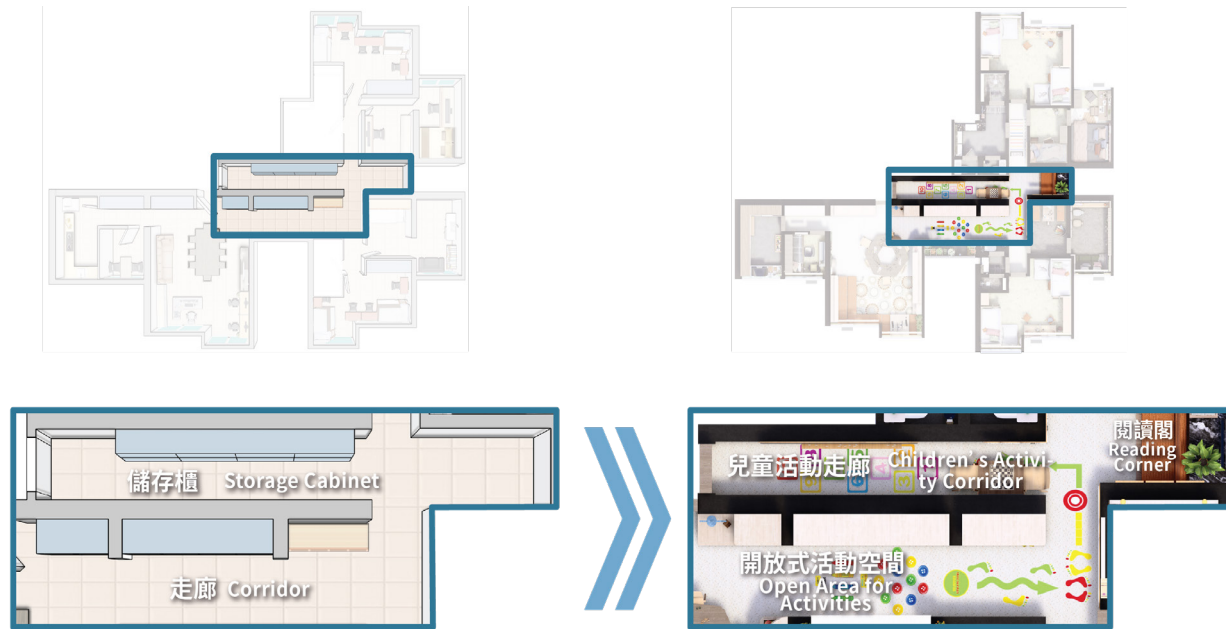
Regarding the design arrangement of “Room within a Room”, the design team has taken into consideration that the main house parent’s room and the relief parent’s room are rarely used simultaneously. Therefore, it is recommended to locate these two rooms adjacent to each other to ensure privacy for the occupants.



圖九:「房中房」的優化設計方案
Figure 9: Optimised Design Proposal for “Room within a Room”

Additionally, considering the feedback from residents that having the social worker's room located outside the multi-purpose room reduces their willingness to access the room, it is suggested that the rooms be transformed into a multi-purpose room if space allows, while the social worker's room can then be relocated to the room adjacent to the living room and kitchen area (Figure 9).

To ensure compliance with Fire Safety (Buildings) Ordinance and avoid impacting the structural walls, the project team does not recommend removing the partitioning structural wall between the double corridors. Instead, it is suggested to enhance the space by installing floor stickers and creating a reading corner, encouraging residents to engage in various dynamic and passive activities within this area (Figure 10).

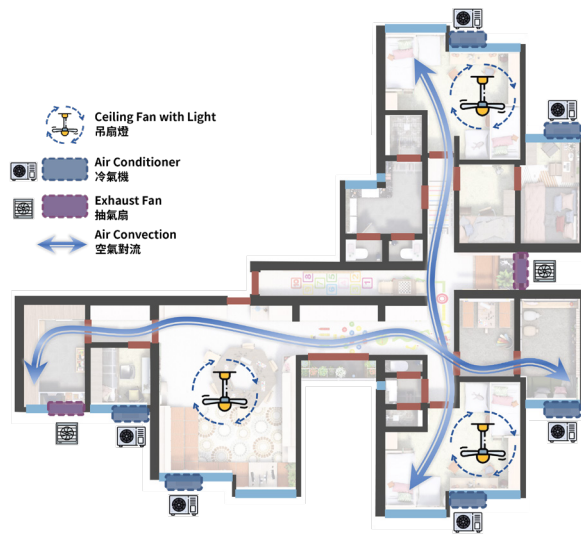


圖十：「雙走廊」的優化設計
Figure 10: Optimised Design for “Double Corridors”

整體家舍室內環境更新:改善通風和優化熱舒適度

安裝吊扇燈和抽氣扇促進空氣流通,配合適當使用冷氣,將有助提升兒童之家的內部通風和熱舒適度。

設計方案涵蓋不同措施以確保熱舒適度,包括使用窗簾、磨砂窗貼、防曬隔熱玻璃薄膜和露台植物等。



圖十一:優化家舍內部通風的設計
Figure 11: Design for Optimising Interior Ventilation

Overall Interior Environment Upgrades: Improving Ventilation and Optimising Thermal Comfort

To enhance air circulation and improve the thermal comfort of the SGHs, the installation of ceiling fan lights and exhaust fans is proposed. These measures, in combination with the appropriate use of air-conditioning, will promote better internal ventilation within the household.

The design proposal includes various measures to ensure thermal comfort within the SGHs. These measures encompass the use of curtains, frosted window films, sun control window films, and balcony plants.



圖十二:日照問題解決方案
Figure 12: Solutions for Excessive Sunlight Issues

1 設計方案一：分齡8人家舍

Design proposal 1: Age-segregated 8-person household

此方案維持與現時每間家舍相同的舍員人數，即每層8名舍員，總共照料24名舍員。底層為男女混合層，主要由年紀較輕的舍員組成，設計方面注重童趣，亦注重兒童的個人感官發展。二三樓為男生或女生家舍，無論在整體設計、傢俬選用、佈局和配置等，都傾向滿足青少年對於私人空間的需求。

This design proposal maintains the same number of residents per household as the current setup, with 8 residents per floor and a total of 24 residents to be cared for. The ground floor serves as a mixed-gender floor, predominantly for younger residents, with a design that emphasises a playful and child-friendly atmosphere, focusing on the sensory development of children. The second and third floors are dedicated to housing either male or female residents, with an overall design, furniture selection, layout, and configuration that cater to the needs for personal space for youths.

3/F

8名男生(10-18歲, 男生)
8 BOYS (YR 10-18, BOYS ONLY)

2/F

8名女生(10-18歲, 女生)
8 GIRLS (YR 10-18, GIRLS ONLY)

1/F

8名兒童(4-12歲, 男女混合)
8 KIDS (YR 4-12, MIXED GENDER)

底層客廳 Ground Floor Living Room

底層客廳主要由年紀較輕的舍員使用，無論用色和布置都配合童趣主題，了解兒童舍員通常會於客廳活動，所以客廳主要採取開放式的空間佈局，提高可視性。

The ground floor living room is primarily used by younger residents. It is designed with playful themes in terms of colour and layout arrangement, to facilitate children's group activities in the living room. Therefore, an open plan layout is adopted for the living room to enhance visibility.



圖十三：底層客廳效果圖

Figure 13: Renderings of the Ground Floor Living Room

高度開放式空間

通過將客廳、餐廳與遊戲活動區域等，不同功能相結合的形式，統一成一個整體的綜合空間，使孩子們可以自由地玩耍，繪畫和共同參與其他遊戲。同時，這種空間佈局也使空間層次不會過於複雜，從而方便日常家舍職員的管理。

選擇不同的家具和色彩搭配來微妙地定義不同區域，以給予舍員一種家庭和共同生活的感覺，同時令空間可以靈活使用。

Highly Open-plan Area

By combining the living room, dining area, and game/activity zones into one integrated space, the ground floor living room provides a cohesive environment where children can freely play, draw, and engage in various activities together. This layout ensures that the space is not overly complex, making it easier for daily management by the SGHs staff. Different areas within the space are subtly defined through the selection of furniture and colour combinations, giving residents a sense of home and communal living while allowing for flexibility in the use of space.



建材物料考慮、圓弧設計確保安全性

由於大部分時間年幼的舍員都在室內度過，使用無毒、低/無甲醛的建材以此保障有安全和健康的環境。舉例來說，使用矽藻泥作為牆壁塗料可以吸收空氣中的有害物質。此外，在考慮到孩子的安全措施時，除了要避免甲醛，住宅空間也應根據舍員不同成長階段的行為活動進行考量。當他們年齡漸長且活躍好動時，圓角設計的傢俱、牆角或加裝防護措施都能避免碰撞的風險。

客廳地面廣泛採用塑膠地板，具有一定的彈性和吸震功能，使行走、活動和玩耍更加舒適。此外，塑膠地板表面光滑，不容易吸附灰塵、污垢和液體飛濺，方便日常清潔。

Wise Selection of Building Materials and Rounded Edge Design for Safety

Since younger residents will spend most of their time indoors, it is crucial to create a safe and healthy environment by using non-toxic, low/zero formaldehyde building materials. For instance, employing diatom mud as wall coating helps absorb harmful substances in the air. Additionally, in terms of safety measures for children, apart from avoiding formaldehyde, the residential space should also take into account the behavioral activities of children in different stages of growth. As they age and become more active, furniture with rounded edges, corner protection measures, and other safety precautions can help prevent collision.

The flooring of the living room predominantly features resilient vinyl flooring, providing a certain level of flexibility and shock absorption for comfortable walking, movement, and play. Moreover, the smooth surface of the vinyl flooring is resistant to dust, dirt, and liquid spills, making it easy to clean on a daily basis.

兒童睡房 Children's Bedrooms

有童年逆境經驗(ACE)創傷經歷、年幼和初到家舍的舍員往往難以入睡或容易驚醒。一個安全舒適的休息空間能讓年幼舍員有效放鬆，幫助他們從小建立良好的睡眠習慣和進行創傷療愈。

Children who have Adverse Childhood Experience (ACEs), are young, or are new to the SGH often struggle to fall asleep or wake up easily. A safe and comfortable resting space can effectively help young residents relax and establish healthy sleep patterns and facilitate trauma healing.



圖十四：兒童睡房效果圖
Figure 14: Renderings of the Children's Bedroom

明確分隔睡眠和學習空間

現時家舍廣為採用「碌架床」。雖然上下格床的舍員有機會互相影響作息，但空間運用上更有效率，亦可以明確劃分休息空間和學習空間，故舍員可在學習期間更專注。舍員離開學習區域的干擾，例如書籍、電腦或學習材料，可以更容易進入休息狀態，保障休息品質。

睡房亦設置了可調光燈和隔音設施，減少外來刺激影響睡眠，為舍員提供一個寧靜的睡眠環境。

鼓勵孩子參與收納 培養自主管理和責任感

提供不同層次的收納空間，例如開放式的展示架、床底下的收納抽屜、碌架床的樓梯收納抽屜、帶鎖的衣櫃和書桌抽屜等。此外，根據孩子的身高調整櫃體的高度，讓不同年齡的舍員都能參與分類和將物品放回正確的位置，可以培養孩子們對空間的責任感，讓他們學會重視環境的清潔和整理。同時，這也能讓他們自主完成事情，建立對自我的明確掌握感。

Clear Separation of Sleeping and Learning Areas

Currently, bunk beds are widely used in the SGHs setting. While the residents in upper and lower bunks may influence each other's sleeping routines, this spatial arrangement is more efficient and allows for a clear distinction between rest and study areas. This enables residents to focus more during their study periods. Minimising disruptions from the learning area, such as books, computers, or study materials, makes it easier for residents to enter a restful state and ensures their sleep quality.

The bedrooms are also equipped with adjustable lighting and soundproofing facilities to reduce external stimuli that may affect sleep, providing a peaceful sleeping environment for the residents.

Encouraging Children's Involvement in Organisation to Foster Ownership and Responsibility

Various levels of storage spaces are provided, such as open display shelves, storage drawers under the beds, storage drawers in the stairs of the bunk beds, lockable wardrobes, and desk drawers. Additionally, cabinet heights are adjusted according to the children's height, allowing residents of different ages to participate in categorising and returning items to their proper places. This helps cultivate a sense of responsibility for their surroundings, teaching them to value cleanliness and organisation. It also empowers them to independently complete tasks and develop a clear sense of self-control.

提升傢私的年齡適用度

由於舍員年齡跨度較大，使用能調節高度的椅子，方便舍員可根據自己的身高來調整椅子上的坐墊高度。這樣的椅子能提供舒適的坐姿，減少姿勢不良或過度彎腰等不適當的坐姿問題，亦能提升舍員的學習效率和專注力。

冷氣機出風口及風扇燈避免正對床位

為了保持良好的睡眠空間，設置風扇燈以增加空氣的流通，但佈局上應避免冷氣機及風扇出口的位置正對床位。如需要可以考慮添加空調擋風板以增強空氣流通，從而平衡房間的熱舒適度。

Enhancing the Age-Appropriateness of Furniture

Given the wide age range of the residents, chairs with adjustable heights are used, allowing residents to adjust the seat cushion height based on their own body height. Such chairs provide comfortable sitting positions, reducing the likelihood of improper posture or excessive bending, thus enhancing the residents' learning efficiency and focus.

Positioning of Air Conditioning Outlets and Fan Lights Away from Bedspaces

Fan lights are installed to improve air circulation to provide a good sleep environment. Avoid positioning air conditioning outlets and fan vents directly facing the beds. If necessary, consider adding air conditioning deflectors to enhance air circulation and ensure thermal comfort.



青少年睡房 Teenagers' Bedrooms

有別於兒童舍員，青少年舍員通常在睡房溫習和做功課。但睡房也是舍員們的休息空間，故明確分隔睡眠和學習空間對舍員的有效休息和專注至為重要，亦提供青少年舍員渴望的個人空間。

In contrast to younger children, teenage residents typically use their bedrooms for studying and doing homework. However, the bedroom is also a space for them to rest. Therefore, it is crucial to clearly separate the sleeping and learning areas to ensure effective rest and focus for the residents, while also providing them with the personal space they desire.



圖十五：青少年睡房效果圖
Figure 15: Renderings of the Teenagers' Bedroom

睡房規劃學習空間 符合成長需求

營造一個專注的學習環境，能減少分心和干擾，有助於提高學習效率，培養對學習的興趣和自律能力。舍員們隨著年紀漸長，學習壓力和學業負擔亦可能會影響他們的情緒和壓力水平。有一個專門的學習空間，舍員可以將學習壓力留在這個區域，進入睡眠空間時可以得到放鬆和舒適的休息，有助於維持心理健康和情緒平衡。

適當的空間配色可以讓舍員專注於學習，同時確保他們有安穩的休息環境。在選擇椅子時，盡量提供可調節高度的椅子，避免因姿勢不良而對脊椎成長造成負面影響。同時，在規劃書桌位置時建議安排在充足的自然光下，讓舍員在學習時能看到遠處的景色，也不用擔心光線不足或眼睛疲勞對視力造成影響。

Designing a Learning Space that Meets Growth Development Needs

Creating a focused learning environment reduces distractions and improves learning efficiency, fostering interests in learning and self-discipline. As teenagers grow older, academic pressures and workload may also affect their emotions and stress levels. Having a dedicated learning space allows residents to leave their academic pressures in that area and enter the sleeping space for relaxation, comfort and rest, contributing to managing their mental health and emotional stability.

Appropriate colour schemes can help residents concentrate on their studies while ensuring they have a calm and peaceful rest environment. When selecting chairs, it is advisable to provide adjustable-height chairs to mitigate the negative impact on spinal growth due to poor postures. Additionally, when planning the desk position, consider arranging them in areas with ample natural light, allowing residents to have a view of the distance while studying, so as to avoid insufficient lighting or eye strain.

書桌之間設置靈活隔板

書桌之間設置靈活的隔板，有效保障他們每個人的專屬空間，並在學習的過程中可減少互相之間的打擾。

睡房採用低飽和度的冷色系牆身

牆身配色選用低飽和度的冷色系配色，使整體空間具有冷靜情緒和集中專注力的作用。

Flexible Dividers between Desks

Installing flexible dividers between desks ensures individual spaces for each resident and minimises disruptions during learning.

Low Saturation, Cool Colour Palette for Bedroom Walls

The wall colour palette should consist of low-saturation, cool colours, creating an overall atmosphere of calmness and enhancing concentration.



2 設計方案二：分齡6人家舍 Design proposal 2: Age-segregated 6-person household

此方案整體減少4名舍員，每間睡房各減少1名，除了可以沿用符合該年齡組別的傢俬設計和佈局外，騰出的空間可確保二三樓的青少年擁有較多的私人空間，包括設有一整座上床下桌的傢俬。

This proposal showcases a reduction of the number of residents by 4 in total, with each bedroom accommodating 1 fewer resident. In addition to maintaining furniture designs and layouts suitable for the respective age groups, the freed-up space ensures that youths on the second and third floors have more private areas, including furniture with loft beds combo.

3/F

6名男生(10-18歲, 男生)
6 BOYS (YR 10-18, BOYS ONLY)

2/F

6名女生(10-18歲, 女生)
6 GIRLS (YR 10-18, GIRLS ONLY)

1/F

8名兒童(4-12歲, 男女混合)
8 KIDS (YR 4-12, MIXED GENDER)

客廳
Living Room



圖十六：客廳效果圖
Figure 16: Renderings of the Living Room

使用階梯地台 創造收納空間

將客廳合理地劃分區域，利用高度差異做成階梯形式，使用底部帶有收納功能的座椅，同時在客廳內劃分不同的空間，有效提升收納容量。

自由組合傢私設計

以小梯形桌子為基本單位，可按需要自由拼湊成餐桌或活動用桌子，當舍員需要在客廳各自做功課時也可拼成獨立的小桌形式，形成獨立的做功課空間。根據不同的場合和活動需要進行傢俱的重新整合，能提高空間的適應性和實用性。

Utilising Staggered Platforms for Storage Solutions

The living room will be divided into distinct zones using staggered platforms with varying floor levels. These platforms will incorporate seating with built-in storage compartments, effectively maximising the available storage capacity within the living room.

Flexible Furniture Configurations

Using trapezoidal tables as modular units, residents can freely arrange them to form dining tables or activity tables as needed. When residents need to study individually in the living room, these tables can be reconfigured into separate workstations, providing dedicated study spaces. By adapting the furniture arrangement to different occasions and activities, the versatility and practicality of the space can be enhanced.



8 - 設計方案 Design Schemes

固定傢俱 穩固重心

為了避免孩子們在玩耍時撞到大型的傢俱和電器導致受傷，建議將傢俱配置盡量固定於牆壁上。例如，將電視機固定在牆上比直接放在電視櫃上更安全可靠，避免可能發生砸傷或壓傷事故。

確保空氣流通和舒適度

吊扇燈結合了燈具和風扇的功能，可以同時提供照明和促進室內空氣流通，減輕對冷氣機的依賴，從而節省能源和電費。

健康食品觸手可及

設有獨立的健康食品區域，在舍員可接觸到的地方提供水果、全穀物、蛋白質食品、健康的脂肪和低糖飲料等健康食品，以減少他們進食零食，促進他們健康成長和發展，從小培養良好的飲食習慣。

家居整體配色色系偏柔和和明亮

天花、地板和牆身配色應該偏柔和和明亮，客廳牆身色系應為柔和暖色系，使整體空間感受較放鬆及開朗。地面可選帶有細花紋路的水磨石，避免使用大型或花俏的圖案，減少感觀刺激，並將孩子的專注力集中在牆身人體高度，增加互動。地面可選實用性較高的塑膠地板，方便清潔打理。

Secure Fixtures with a Stable Balance

To ensure the safety of children during playtime, it is recommended to secure large furniture pieces and appliances to the walls. For instance, it is safer to mount the television on the wall rather than placing it on a TV stand, to avoid potential accidents such as tipping or crushing injuries.

Promoting Air Circulation and Comfort

Combining ceiling fans with lighting fixtures serves the dual purpose of providing illumination and promoting indoor air circulation. This reduces reliance on air conditioning systems, resulting in energy and cost savings.

Accessible Healthy Food Zone

Including a dedicated area for healthy food options, such as fruits, whole grains, protein-rich foods, healthy fats, and low-sugar beverages, within easy reach of the residents encourages them to choose nutritious options over snacks. This fosters their healthy growth and development while instilling good dietary habits from an early age.

Soft and Bright Colour Palette for Overall Interior Design

The colour scheme for the ceiling, flooring, and walls should lean towards soft and bright tones. The living room walls should feature a warm and gentle colour palette to create a relaxed and uplifting atmosphere. The flooring can incorporate subtle patterns in terrazzo, avoiding the use of large or ornate designs to minimise sensory stimuli and direct children's focus towards the vertical surfaces, thus enhancing interaction. Practical vinyl flooring is recommended for its ease of maintenance and durability.

睡房 Bedrooms



圖十七:睡房效果圖
Figure 17: Renderings of the Bedroom

營造舍員的個人空間

團隊將創傷知情的照顧和設計原則融入睡房的設計考量中打造舍員專屬的空間，例如上床下桌的設計、獨立的收納空間和窗台，讓他們可以在那裡閱讀和其他舍員聊天談心等活動。此外，亦建議在床邊安裝可調光度的燈具，以減低在睡房內的刺激感，這樣也能增強他們對自己私人空間的控制感。

在衣櫃內配置獨立的可上鎖抽屜和直身鏡。舍員們可以在自己的個人空間打扮和整理自己後再進入房外的公共空間。這些設施在一般家庭的環境中可能是基本配置，但往往在家舍裏會礙於空間或成本等考慮而未能提供。提供這些配置有助於增強孩子們的自我意識和責任感。

上床下桌的設計以及它們在房間的位置能大幅度的增加舍員的自主性，滿足他們的不同喜好，更具有個人風格，而且減少不同作息時間的舍員互相干擾的情況。無論房間大小，建議將家具放置在遠離窗戶的位置，讓光線滲透整個房間和促進空氣流通。

Creating Personal Space for Residents

The team has integrated trauma-informed care design principles in bedroom design, aiming to create a personalised space for each resident. Features such as loft bed combos, independent storage spaces, and window nooks are incorporated to provide areas for reading and socialising with other residents. Additionally, it is recommended to install adjustable lighting fixtures near the beds, reducing stimuli within the bedrooms and enhancing their sense of control over their personal space.

Individual lockable drawers and full-length mirrors are included within the wardrobes. Residents can dress up and groom in their own personal space before entering the communal areas. While these facilities may be considered basic in a typical home environment, they are often overlooked in SGH & RCCS settings due to space or cost constraints. Providing these amenities help to strengthen children's self-awareness and sense of responsibility.

The design of loft bed combos, as well as their positioning within the room, greatly enhances residents' autonomy, catering to their individual preferences and personal style. This design also minimises disturbances among residents with different sleep schedules. Regardless of the room size, it is advised to place furniture away from windows to allow light to permeate the entire room and promote air circulation.

公共舒適窗台空間

窗邊的個人空間以天花木框作區間，並設有軟墊長凳，讓該處成為舒適溫馨的閱讀或個人休息角落。提供書桌以外的休憩區域，增加舍員之間的交流互動。



Comfortable Space at the Common Window Nook

The area by the windows is divided by ceiling-mounted wooden frames, creating personal spaces, and equipped with cushioned benches, transforming it into a cozy corner for reading or personal relaxation. Providing a designated area for rest and leisure, apart from the study desk, encourages interaction and communication among residents.



家舍其餘空間的設計方案 The Design Approach for Other Residential Spaces

除了睡房和客廳外，兩個設計方案的多媒體學習空間、社工辦公室、廁所及浴室、廚房和走廊等空間均為相同。

Apart from the bedrooms and living room, the design approach for the remaining spaces of the two design proposals, including the multi-media learning area, social worker's office, toilets and bathrooms, kitchen, and corridors, remains the same.



多媒體學習空間 Multi-media Learning Area



圖十八：多媒體學習空間效果圖
Figure 18: Renderings of the Multi-media Learning Area

8 - 設計方案 Design Schemes

提供多媒體及多感官配置，讓舍員們或和家舍家長一同觀看電影、展示學習材料、支援虛擬實境學習或提供遙距醫療和會診、視像輔導和約見等的體驗。多用途室的設計可以創造一個豐富的學習及娛樂環境，亦有助於促進人際關係、合作和互動技能的發展。

童趣的裝飾可以為兒童營造一個有趣的環境，包括引入類大自然的元素，使兒童在室內感到快樂和舒適，並激發兒童的創造力和想像力。

The multi-media learning area is designed to provide residents with a multi-media and multi-sensory environment for screening, presenting learning materials, supporting virtual reality learning experiences, and facilitating telehealth consultations and remote counselling sessions. The versatile design of this space creates a rich learning and entertainment environment, promoting the development of interpersonal relationships, collaboration, and interactive skills.

The use of playful and childlike decorations creates an engaging environment for children, including elements inspired by nature, making the indoor space joyful and comfortable, while stimulating their creativity and imagination.



此空間也可做為訓練情緒管理的空間。舍員入住兒童之家的原因迥異，但大多遭受童年逆境經驗 (ACEs) 或有特殊學習需要，故有時候會容易情緒波動或感到不安。提供一個冷靜情緒的房間可讓他們學習管理情緒、釋放壓力，並找到自己情緒的正確調節方式，培養自我解決問題的能力。

透過使用模組化家具，家舍職員亦可將此空間轉化成為疾病隔離室，供患有具傳染性疾病的舍員暫時入住，方便家舍職員集中照顧和隔離，減低傳染給其他同住舍員的風險。

This space can also serve as a room for emotional management training. Residents are admitted to the SGHs for various reasons, often having adverse childhood experiences (ACEs) or SEN, which can sometimes be easily agitated or become anxious. Providing a calming room allows them to learn about emotional regulation, release stress, and find appropriate ways to manage their emotions, fostering their problem-solving and self-help abilities.

Additionally, this room can be used as a sick bay for residents with communicable diseases. Staff can easily set the room up as a temporary sick bay with the modular furniture to provide focused care and reduce the risk of cross-infection.



圖十九：安靜室效果圖
Figure 19: Renderings of the Quiet Room



色彩設計穩定居住者的情緒

過於五彩繽紛的空間設計可能在無形中加深居住者的焦慮和煩躁感。因此，建議使用低飽和度和低亮度的色彩來設計空間。適度留白的空間也能使高彩度的元素融入空間，使空間能隨著節日變得不同色調，豐富生活體驗。

房間內適宜選用自然通風和光照，有助於冷靜情緒或促進隔離生病舍員的身心恢復健康。

添加牆墊減輕碰撞風險

此房間作為具有多用途的房間，在沒有需要隔離和穩定情緒的舍員時，具備作為多媒體活動空間的條件，舍員們可以在這個房間活動，所以在牆上添加牆墊能有效減輕碰撞帶來的傷害。牆墊還可以作為額外的隔音設施。

Colour Design to Stabilise Residents' emotions

Excessively vibrant designs can inadvertently exacerbate residents' anxiety and restlessness. Therefore, it is recommended to use low saturation and low brightness colours in the design. Moderately blank colour spaces can also allow highly saturated colour elements to blend into the space, providing the opportunity to change the colour scheme during festive occasions and enriching the residents' living experience.

Optimal natural ventilation and lighting are conducive to maintaining a calm atmosphere and supporting the physical and mental well-being of residents, whether for emotional stability or the recovery of unwell residents.

Adding Wall Padding to Mitigate Collision

As a multi-purpose room, when there are no residents requiring isolation or emotional stabilisation, it can function as a multi-media activity space where residents can engage in activities. Therefore, adding wall padding effectively reduces the risk of injuries from collisions within the room. The wall padding can also act as additional soundproofing facility.

社工辦公室 Social Worker's Office

可上鎖的文件櫃用來存放舍員的個案文件，以確保其安全性和私隱度，防止未經授權者存取或洩露敏感資訊。

社工有時候會使用這房間與舍員討論個案情況及進行訪談，故此空間亦提供一張舒適的椅子或沙發，讓舍員進行談話時感到放鬆和自在，有助建立信任，更容易打開心扉，分享他們的困擾或經歷。

社工辦公室亦備有一張掀床，為社工或其他家舍職員提供緊急住宿選擇。

Lockable filing cabinets are provided in the social worker's office to ensure the security and privacy of residents' case files, preventing unauthorised access or disclosure of sensitive information.

Social workers sometimes use this room to discuss cases and conduct interviews with the residents. Therefore, the space also provides a comfortable chair or sofa to create a relaxed and comfortable atmosphere for residents during conversations. This helps to build trust and encourages residents to open up and share their concerns or experiences.

The social worker's office is also equipped with a fold-out bed, providing social workers or other staff members emergency accommodation options where required.

圖二十：社工辦公室效果圖

Figure 20: Renderings of the Social Worker's Office



閱讀閣
Reading corner



圖二十一：閱讀閣效果圖
Figure 21: Rendering of the Reading Corner

寧靜的角落空間

此閱讀角原本是屋邨內的一條公共走廊盡頭，設有喉管或水箱等公共設施。但由於三個公屋單位已打通為一個家舍，故此空間亦納入家舍的範圍內。為顧及定期維修水箱的需要，此空間被規劃成閱讀角，水箱亦只用了一道可向外開的櫃門遮蓋，坐墊亦可以完全移開，方便維修時可以輕鬆檢查水箱。不需維修的時候，舍員可安坐閱讀，享受一個較為隱蔽獨立的空間，進行靜態活動。

晴空燈增加自然光照

使用晴空燈模擬藍天和自然陽光，提升舍員在家的正面感官刺激和幸福感。

A Tranquil Corner Space

Originally located at the end of a public corridor within the public rental housing estate, the reading corner has communal utility fixtures such as pipes or water tanks. However, as the three public housing units are combined into one home, they are incorporated into the household. To accommodate the need for regular maintenance of the water tank, the area is repurposed as a flexible reading corner. The water tank is now covered by a cabinet door that can be opened outward, and the seating cushions can be completely removed, allowing for easy inspection of the water tank during maintenance. When not in need of repairs, residents can comfortably sit and enjoy reading in a relatively secluded and independent space for quiet activities.

Artificial Skylight to Enhance Daylight Supply

The use of artificial skylight lamps creates the simulation of a blue sky and natural sunlight, enhancing the positive sensory stimulation and sense of well-being for residents within their homes.

廁所及浴室 Toilets and Bathrooms



圖二十二：廁所及浴室效果圖
Figure 22: Renderings of the Toilet and Bathroom

8 - 設計方案 Design Schemes

洗手盆的高低配置

洗手間配置有不同高度的洗手盆，滿足不同年齡或身高的舍員需求，洗手盆下面亦設有可上鎖的地櫃作存放清潔用品之用。

乾濕分離

把馬桶與浴室分別劃分成單獨的區域，做到乾濕分離，洗手間更加乾燥與安全。同時，浴室地面容易有污垢和積水；通過乾濕分離，把淋浴的水、髒污都限制在局部區域，更方便日常洗手間的清潔與打理。

此外，洗手間和浴室採用具高防水性和耐用性的通體磚作地板材料，能有效防止水分滲透到牆壁和地板中，減少霉菌滋生。

大面積的鏡子和儲物空間

在多數量的洗手盆上方做成整體的大面積鏡子，並且在鏡子後面作為有儲存空間的櫃子。可盡量滿足多人口對儲存空間的大量需求，讓每個人都有一個獨立放置洗滌和個人護理用品的區域。

Height-Adjusted Basin Configuration

The washroom includes washbasins set at different heights to accommodate the needs of residents of different ages or heights. Lockable base cabinets are provided under the washbasins for storing cleaning supplies.

Separating Wet and Dry Areas

The toilet and bathroom areas are segregated into different zones, achieving dry and wet separation and ensuring a drier and safer environment in the washroom. Additionally, bathroom floors are prone to dirt and standing water. By separating wet and dry zones, shower water and dirt are confined to specific areas, making it easier to clean and maintain the washroom on a daily basis.

Furthermore, the washroom and bathroom feature fully waterproof and durable flooring materials, effectively preventing water penetration into the walls and floors, thus reducing the growth of mold.

Ample Mirror and Storage Space

A large continuous mirror is installed above most of the washbasins, with cabinets behind the mirror providing additional storage space. This design caters to the high demand for storage space, allowing each individual to have a separate area for storing toiletries and personal care items.



廚房 Kitchen



圖二十三：廚房效果圖
Figure 23: Renderings of the Kitchen

鼓勵舍員參與備餐和煮食 提升生活和自理能力

廚房和烹飪活動是家庭生活的重要部分。

不同舍員都在共創工作坊表示喜愛和同伴、家舍家長或家務助理一起烹飪和分享食物。為保障舍員的安全，現時家舍普遍不鼓勵年幼舍員進入廚房參與備餐和煮食。但為了培養他們的自理能力和自信心，建議廚房預留一定的低檯面區域，並配合抽拉式腳踏作為特定空間，讓不同年齡的舍員可以參與煮食的過程，學習自己處理食材、安全地使用烹飪工具和遵從家務助理、家長和其他舍員的建議完成任務。透過一起討論食材選擇、食譜和烹飪技巧，促進舍員之間的交流和情感連結。讓舍員參與煮食的過程還能培養他們的社交和自理能力，尤其是為離院生做好獨立生活的準備。

由於家舍人員眾多，每次用餐後都要清洗大量碗碟和餐具，使用洗碗機可以大幅度節省洗碗的時間和精力。洗碗機通常具有清潔消毒的功能，能徹底清洗和消毒餐具和廚具，減少細菌和病毒滋生，保障舍員的健康。

此外，若位置許可，應考慮安裝抽濕機於廚房中，以改善室內空氣品質，降低濕度，預防黴菌和霉菌生長，去除異味和油煙，並確保家居結構和電器的耐用性，有助營造一個乾燥、清潔、舒適和健康的廚房環境。



Encouraging Residents' Participation in Meal Preparation and Cooking to Enhance Life Skills and Independence

The kitchen and cooking activities are essential parts of family life.

Residents in the co-creation workshops have expressed their enjoyment of cooking and sharing meals with peers, house parents, or domestic helpers. Currently, for safety reasons, it is not a common practice to involve younger residents in meal preparation and cooking activities. However, in order to foster their life skills and confidence, it is recommended to designate a specific area within the kitchen with a lower countertop level and a pull-out step where residents of different age groups can participate in the cooking process. This allows them to learn how to handle ingredients, use cooking utensils safely, and follow the guidance of staff, house parents, and fellow residents to complete tasks. Discussing ingredient choices, recipes, and cooking techniques together promotes communication and emotional connections among the residents. Involving residents in the cooking process also helps develop their social and independent living skills, particularly for graduates-to-be in their preparation for transitioning out of the SGHs.

Given the large number of residents, there is a significant amount of dishwashing and utensil cleaning required after each meal. The use of a dishwasher can greatly save time and effort in dishwashing. Dishwashers typically have cleaning and sanitising functions, thoroughly washing and disinfecting tableware and kitchen utensils, reducing the growth of bacteria and viruses, and ensuring the residents' health.

Additionally, if space permits, it is advisable to install a dehumidifier in the kitchen to improve indoor air quality, reduce humidity, prevent mold and mildew growth, eliminate odours and fumes, and ensure the durability of the home's structure and appliances. This helps create a dry, clean, comfortable, and healthy kitchen environment.



走廊
Corridor



圖二十四：走廊效果圖
Figure 24: Renderings of the Corridor

地面增加具有學習或者運動類型的貼紙

考慮到家舍中不同年齡階段的舍員，在開闊的活動空間地面增加具有學習或者運動類型的貼紙，不僅可以展現童趣，還可以作為舍員之間玩耍的活動空間，豐富舍員的生活樂趣。

燈飾設計避免眩光 保護眼睛

由於孩子的視力仍在發育階段，他們的視覺系統較為敏感和脆弱。強烈的光線、直射的陽光或裸露的光源可能對他們的眼睛造成損害。因此，在室內要嚴格控制產生眩光，使用柔和的光線、適當的窗簾設計以及可調節光度的燈掣，以保護他們的視力健康。此外，室內燈光也可以提供簡單的視覺趣味，例如雲朵和星光主題。同時，建議在牆腳附近加上夜燈，讓孩子晚上也能安全地活動。

植物露台

此位置在公共屋邨的佈局通常為放置外露喉管的地方，納入家舍範圍後則往往因為喉管老化、漏水等情況為家舍的室內空間帶來負面影響。妥善修葺喉管後，此地方可放置不同類型的植物，透過與大自然接觸，有助放鬆心情和減輕壓力，舍員在觀察植物的成長和細膩的變化的同時也可學習如何照顧小生命，培養責任感。親生物設計是創傷知情設計和WELL健康建築標準™中的要素，項目團隊建議在家舍中引入綠色元素。

此外，植物通過光合作用吸收二氧化碳並釋放氧氣，有助於改善露台和室內空氣的品質。

Flooring with Educational or Sports-themed Stickers

Considering the different age groups of residents in the SGHs, adding educational or sports-themed stickers on the open activity space floor not only adds a playful touch but also creates an area for residents to engage in playful activities, enriching their overall experience.

Lighting Design to Avoid Glare and Protect the Eyes

As children's vision is still in the developmental stage, their visual system is more sensitive and delicate. Intense lighting, direct sunlight, or exposed light sources can potentially harm their vision. Therefore, it is crucial to control glare indoors by using soft lighting, appropriate curtain designs, and adjustable dimmer switches to safeguard their visual health. Additionally, indoor lighting can provide a visual delight, such as cloud and starry sky themes. It is also recommended to include night foot lamps to ensure safe movement during nighttime.

Planted Balcony

This location in public rental housing layouts is typically allocated for exposed pipes. However, once incorporated into the SGH household, these areas often become an eyesore due to ageing and leaky pipes. After proper repair of the pipes, different types of plants can be placed there. Connecting with nature helps relax the mind and reduce stress. Residents can observe the growth and delicate changes of plants while learning how to care for them, fostering a sense of responsibility. Biophilia is a very important element for trauma-informed care, as well as under the WELL Building Standard™. The project team recommends introducing green elements at home.

Furthermore, plants absorb carbon dioxide and release oxygen through photosynthesis, contributing to the improvement of air quality in the balcony and indoor areas.

洗衣機放置在露台

將洗衣機放置在露台可節省室內空間，亦可以減少當洗衣機運作時對室內造成噪音和潮濕的狀況，提供更好的居住環境。但同時亦要確保洗衣機周圍的環境防水和防潮，露台地面應該能夠有效排水，避免水患和積水。

露台小菜園

也可以在露台上種植一些容易生長的蔬菜，這也是現代家庭園藝生活的一部分。菜市場、超市買的蔬菜有機會殘留農藥和化肥，長期攝取會影響健康。在家的露台種菜一般不會使用農藥和化肥，則較為健康，能進食自己親手種植出的有機蔬菜，可有助培養成就感和滿足感，建立積極的自我認知。

Positioning of Washing Machine in the Balcony

Placing the washing machine in the balcony saves indoor space and reduces noise and humidity caused by its operation, providing a better living environment. However, it is important to ensure waterproofing and moisture control in the surrounding area. The balcony floor should also have effective drainage to prevent the accumulation of stagnant water.

Balcony Vegetable Garden

Another possibility is to cultivate some easily grown vegetables in the balcony, as part of modern home gardening. Vegetables bought from markets or supermarkets may contain residual pesticides and fertilisers, which may impact health with prolonged intake. Cultivating vegetables in the balcony without the use of pesticides and fertilisers promotes a healthier lifestyle. Eating organic vegetables grown with one's own hands helps cultivate a sense of achievement and fulfilment, establishing a positive identity.



後走廊
Rear Corridor



圖二十五：後走廊效果圖
Figure 25: Renderings of the Rear Corridor

牆身讓小孩盡情發揮想像力

小孩子喜歡塗鴉和畫畫，如果在家舍設置黑板或白板牆讓他們隨意繪畫，這將成為家庭成員互動、留言和傳達訊息的媒介。此外，選擇使用水性黑板漆料可能有助於避免產生粉塵。

雙重走廊的不同功能

長期居住於家舍的成員動輒十多人，故每天需要清洗和晾乾衣物的數量龐大。除了使用雙重走廊的牆身設置空間讓舍員隨意繪畫外，此空間亦可安裝天花板電動晾衣架，晾乾清洗後的衣物。除了在雙走廊盡頭安裝抽氣扇促進單位內的空氣流通，亦建議放置抽濕機讓牆身不會因為長期濕氣而引起發黴等情況，亦加快乾衣效率。

Encourage Children's Imagination on the Wall

Children enjoy doodling and drawing. If chalkboard or whiteboard walls are installed in the household, it provides them with a space to freely express their creativity. These interactive walls can also serve as a medium for family members to leave messages and communicate with each other. Additionally, opting for water-based chalkboard paint may help minimise dust particles.

Different Functions of the Double Corridor

With a large number of regular residents residing in the household, there is a substantial amount of laundry that needs to be done daily. In addition to providing space on the walls of the double corridor for residents to freely draw, this area can also accommodate ceiling-mounted electric drying racks for laundered clothes. However, proper air circulation should be considered. In addition to installing an extractor fan at the end of the double corridor to boost air circulation in the flat, it is recommended to install dehumidifiers to prevent the walls from becoming moldy due to prolonged exposure to moisture and to improve the efficiency of clothes drying.



9 總結設計原則及後續實踐方向

Design Principles Summary and Follow-up Implementation

兒童之家的環境改善工程計劃陸續進行中，不少兒童之家的營運機構都希望在有限的資源和既有環境設定下，以孩子為本及創傷知情的設計概念為兒童之家的兒童及青少年提供一個有「家」的感覺之住所，配合服務理念。由於有特殊學習需要的兒童和青少年的舍員比例高，這些設計方向亦有助建立具有安全感的家居空間，減低不必要的外來刺激或專注提供優質的感官刺激，舒緩舍員情緒，從而協助家舍職員及家長更有效關注整體舍員的身心情況。

由於單位長時間被密集使用、舍員更替頻繁、以及童年逆境經驗 (ACEs) 帶來的情緒問題，故應以住戶的健康和安全考量為先，配合耐用的家具和裝飾。仔細選擇和放置不同設備可以提升舍員的身體和認知技能，並促進舍員交流和社交發展，協助他們過渡至獨立生活。

為保障兒童和青少年的健康發展和個人成長，以及確保家舍職員有健康和安全的工作環境，以下原則和實踐方向揉合了WELL 建築標準™的指引，旨在提升室內空間影響身心健康的10個主要範疇，包括空氣、水質、營養、光線、運動、熱舒適度、聲環境、材料、精神及社區等多項元素（詳情請參閱附錄一）。

J.C.DISI希望藉「重塑未來兒童之家的設計」的社創行動項目，通過連串以自創桌上遊戲方式進行用家參與活動，加上專業建築師的設計與分析，探索兒童住宿照顧服務的可塑性，總結出以下八個設計原則和實踐方向，為各單位進行環境改善工程計劃的不同階段提供指引和參考價值，期望這些策略可以在實踐中進一步細化，以滿足不同家舍成員的需求。

The ongoing EIPs in the SGHs aim to create a sense of home for C&Y, taking into consideration the limited resources and existing spatial constraints, along with a child-centred and trauma-informed care design concept that aligns with the service philosophy. Given the high proportion of C&Y with SEN, these design directions also contribute to establishing a secure and comforting living environment, reducing unnecessary negative stimuli and focusing on providing high-quality sensory stimulation to alleviate residents' emotional triggers. This, in turn, assists the staff and house parents in effectively care for the overall physical and mental well-being of the residents.

Considering the intensive use of units over extended periods, frequent turnover of residents, and managing the effects of Adverse Childhood Experiences (ACEs), prioritising the health and safety of the occupants is crucial, which calls for durable furniture and decorations. Thoughtful selection and positioning of different equipment also enhance residents' physical and cognitive skills, promote communication and social development, and aid their transition to independent living.

To ensure the healthy development and personal growth of C&Y, as well as to provide a healthy and safe working environment for the staff, these principles and implementation directions also integrate the essence of the WELL Building Standard™, so that the ten key aspects of indoor spaces that impact physical and mental well-being, including air, water quality, nutrition, light, movement, thermal comfort, sound, materials, mind, and community, can be enhanced and realised in the SGHs setting (refer to Appendix I for details).

Through the “Reimagining Small Group Homes for the Future” social innovation action project, J.C.DISI seeks to explore the future possibility of RCCS service transformation. This involves a series of user engagement activities conducted through original board games, along with the expertise of professional architects in design and analysis. The following eight design principles and implementation directions are summarised to guide and provide references for different stages of the EIPs. It is expected that these strategies can be further refined in practice to meet the diverse needs of the SGHs residents.

原則一
Principle 1

確保單位的現存結構性問題已經解決或確定解決方案
Ensuring the existing structural issues in the units are resolved or that the solutions have been identified



好處
Benefits

- 保障舍員和家舍職員的健康和安全
 - 改善兒童的居住環境質素
 - 加強家舍安全和耐用性
 - 及早進行結構安全改善或確定改善方案，配合整體環境改善工程的時間表
- Safeguard the health and safety of residents and staff members
 - Improve the quality of living environment for children
 - Improve the health, safety and durability of the homes
 - Address structural safety improvements or identify improvement plans at an early stage to align with the overall schedule of the EIPs



策略
Strategies

- 徹底審視現有單位的結構狀況
 - 加強政策部門與兒童住宿照顧服務機構和工程團隊的溝通
- Thoroughly assess the structural condition of the existing units
 - Strengthen communication between the relevant Government departments, RCCS operators and contractors



實踐
Implementation

家舍職員/設計師/政府部門

- 設計團隊與社會福利署和作為物業管理機構的房屋委員會或房屋署進行協商及家舍實地考察
- 盡量縮短調遷的時間，減輕舍員和家舍職員長時間居住在陌生地方所帶來的精神和經濟壓力
- 社會福利署應盡可能簡化採購和招標處理的行政程序，減省家舍職員的行政壓力
- 房屋署應提供必要的結構保養和升級

Staff Members/Designers/Government Departments

- The design team should engage in negotiations and conduct on-site visits with SWD, as well as the Housing Authority or Housing Department, which serves as the property management body
- Minimise the decanting period to alleviate the mental and financial stress of the residents and staff due to prolonged stays in unfamiliar places
- SWD should streamline the administrative procedures for procurement and tendering processes, thus reducing the administrative burdens on the staff members
- Housing Department should carry out necessary structural maintenance and upgrades for the homes

原則二
Principle 2

增強家居氣氛以去除院舍氛圍
Deinstitutionalisation and Enhancing the Sense of Home



好處
Benefits

- 增強依附感
- 助新來者適應環境
- 加強舍員和家舍職員之間的良性互動
- Enhance a sense of belonging
- Facilitate newcomers' adaptation to the environment
- Foster positive interactions between residents and staff members



策略
Strategies

- 建立自我認同感
- 容許個人化的小細節
- 尊重兒童及青少年的話語權
- Establish a sense of ownership within the living spaces
- Allow for personalisation
- Respect the voices and opinions of C&Y



實踐
Implementation

家舍職員/設計師

- 開始設計前進行用家參與活動，了解成員對家舍環境的意見
- 訂定舍員可以參與設計/選擇的家居範疇

Staff Members/Designers

- Conduct user engagement activities before the design process to understand residents' perspectives on the spatial environment
- Define specific aspects of home furnishings and decor in which residents can participate in the design/selection process

舍員

- 兒童及青少年對傢俬選擇有不同程度的參與權，包括選擇款式、顏色和質感 (C02.1)
- 提供適合不同年齡及使用者身高的傢俬和浴室用品，配合不同成長期的需要 (V02.2, V02.3)
- 自行組裝小型收納層架或洞洞板
- 有機會展示其創作或自行選擇喜愛的床單被鋪

Residents

- C&Y should have varying degrees of involvement in furniture selection, including the decision for styles, colours, and textures (C02.1)
- Provide furniture and bathroom items suitable for different ages and users' heights, catering to the needs of different growth stages (V02.2, V02.3)
- Allow residents to assemble small storage shelves or pegboards themselves
- Provide opportunities for residents to showcase their artwork or choose their preferred beddings

原則三 Principle 3

尊重個人私隱同時兼顧照料 Respect Privacy while Balancing Caregiving Needs



好處 Benefits

- 有助放鬆及情感釋放
- 可享受個人時間亦可促進社交機會
- 保障安全
- Facilitates relaxation and emotional release
- Provides personal time while socialising
- Ensures safety



策略 Strategies

- 提供半開放空間
- 增強隔音
- 保留可視性
- Provide semi-open spaces
- Enhance sound insulation
- Maintain visibility



實踐 Implementation

設計師

- 保留走廊的可視性
- 在走廊提供半開放式社交位置和獨立座墊空間(M07.1, M08.1)
- 兩組上下架床的位置避免平行放置, 免得直接與隔壁床格舍員對視
- 適當運用可拉式遮簾以保障私隱 (M03.4)
- 考慮使用半透明材質作部分間隔牆身的物料
- 多用途室和社工辦公室的牆身鋪設吸音物料 (S03.1, S03.2)
- 睡房安置隔音門, 如酒店房間規格的門 (S03.1, S03.2)
- 於家舍顯眼位置擺放共享日曆, 幫助舍員理解其他人的日常, 從而建立歸屬感

家舍職員

- 與舍員充分溝通, 在尊重舍員私隱同時確保職員可掌握家舍狀況, 例如使用半開放式空間的安排、可用遮簾的時間等 (C02.1)

Designers

- Preserve visibility in corridors
- Provide semi-open and individual seating spaces along corridors (M07.1, M08.1)
- Avoid placing bunk beds in a directly facing position with neighbouring beds
- Utilise retractable curtains to enhance privacy (M03.4)
- Use semi-transparent materials for partition walls
- Use sound-absorbing wall materials for multi-purpose room and social worker's office (S03.1, S03.2)
- Install soundproof doors in bedrooms, such as those used by hotels (S03.1, S03.2)
- Display a shared calendar in prominent locations to help residents understand their daily routines and foster a sense of belonging

Staff

- Communicate extensively with residents, respecting their privacy while ensuring staff are aware of the household situation, such as arrangements for using semi-open spaces and time allowed for curtains use to increase sense of privacy (C02.1)

原則四
Principle 4

提供舒適的休息空間
Provide Comfortable Space for Resting



好處
Benefits

- 保持良好生活作息
- 增強安全感
- Maintains a healthy daily routine
- Enhances a sense of security



策略
Strategies

- 減低負面的五感刺激
- 明確的區域布局
- 提供專屬休息位置
- Reduce negative sensory stimulation
- Clear area layout
- Provide dedicated resting areas



實踐
Implementation

設計師

- 於學習及休息區域提供可自行調較色調和不同亮度的燈光配置 (L04.1, L09.1)
- 採用整套的上床下桌組合
- 提供個人儲物櫃
- 為舍員提供柔軟的座椅和裝飾，減少他們對觸覺、壓力、疼痛和溫度的敏感性
- 使用親自然材質 (M09.1)
- 採用冷色及柔和色調，如藍色、綠色和紫色，營造寧靜和舒適的氛圍 (L07.1, L08.1)
- 重視使用柔軟的材質作裝飾陳列，以增強舒適感和溫馨感
- 提供舒適的床褥及被鋪

家舍職員

- 於混齡家舍儘量安排年齡或作息時間相仿的舍員同睡附近床格，確保舍員休息不被打擾

Designers

- Offer adjustable lighting with varying tones and brightness in the study and rest areas (L04.1, L09.1)
- Utilise loft bed combos
- Provide personal storage cabinets
- Offer soft seating and decor to reduce sensitivity to touch, pressure, pain, and temperature
- Use natural materials (M09.1)
- Create a tranquil and comfortable atmosphere through the use of cool and soft colour tones such as blue, green, and purple (L07.1, L08.1)
- Prioritise the use of soft materials for decorative displays to enhance comfort and coziness
- Provide comfortable mattresses and bedding

Staff

- Arrange residents of similar ages or sleep patterns to sleep near each other as much as possible in mixed-age households to ensure uninterrupted rest

原則五
Principle 5

重視健康設計
Prioritise Health in Design



好處
Benefits

- 減少環境刺激
- 促進身心健康
- Reduce environmental stimuli
- Promote physical and mental well-being



策略
Strategies

- 應用WELL健康建築標準
- 考慮光源和日照方位
- 充分使用自然材質
- 重視空氣流通和體感舒適度
- Apply the principles of the WELL Building Standard™
- Consider lighting sources and daylight orientation
- Utilise natural materials as much as possible
- Prioritise air circulation and thermal comfort



實踐
Implementation

設計師

- 提供充足的自然光，以提高學習專注力，並藉晝夜節律確保作息定時和睡眠質素 (M02.1, L05.1)
- 根據不同房間的使用需求，選擇適當的日照方位，如避免陽光直射床位和休息空間、使用天窗燈、安裝遮光窗簾等 (L05.2, L06.1, L09.2)
- 減低眩光或閃光刺激，使燈光均勻地分布在室內，以避免過於刺眼的明亮區域和黑暗的角落 (L04.1)
- 於大廳安裝電燈吊扇促進空氣流通 (A06.1, A06.2, A13.1)
- 於十字走廊盡頭安裝抽氣扇以助空氣對流 (A03.1)
- 使用不含甲醛的油漆或使用硅藻泥作牆面塗料以淨化室內空氣品質 (A05.2)
- 提供室內綠化，種植小型盆栽 (A12.1, M09.1)
- 控制室內氣味，包括香氛和廚房煮食的氣味，降低環境對嗅覺的刺激

家舍職員

- 鼓勵舍員學習照顧盆栽，培養責任心 (A08.2)

Designers

- Provide ample natural light to enhance focus and concentration, and regulate circadian rhythms for regular sleep patterns and quality (M02.1, L05.1)
- Choose appropriate daylight orientations based on the needs of different room layouts, such as avoiding direct sunlight on beds and resting areas, utilising artificial skylights, and installing blackout curtains (L05.2, L06.1, L09.2)
- Minimise glare and flickering stimuli by evenly distributing lighting indoors, avoiding excessively bright areas and dark corners that strain the eyes (L04.1)
- Install ceiling fans in common areas to facilitate air circulation (A06.1, A06.2, A13.1)
- Install exhaust fans at the ends of cross-corridors to promote airflow (A03.1)
- Use paint without formaldehyde or apply diatom mud coatings to purify indoor air quality (A05.2)
- Incorporate indoor greenery by having small potted plants (A12.1, M09.1)
- Control indoor odours, including fragrances and cooking smells, to minimise olfactory stimuli

Staff Members:

- Encourage residents to learn and take care of potted plants to foster a sense of responsibility (A08.2)

原則六
Principle 6

彈性用途設計
Design for Flexible Use



好處
Benefits

- 增強可變性
- 應付不同時段的生活作息需要
- 節省空間

- Enhance adaptability
- Cater to the varying needs from daily routines
- Efficient use of space



策略
Strategies

- 一物多用/一房多用
- 提供多樣性和可伸縮的傢俬
- 配合舍員不同成長階段的需要

- Multi-functional use of spaces and rooms
- Provide diverse and adjustable furniture
- Accommodate the evolving needs of residents at different growth stages



實踐
Implementation

設計師

- 於大廳使用可拼的組合桌子代替傳統大飯桌
- 多用途室盡量保持簡潔，隨時用作休憩區域、靜態活動室、輔導室及隔離病格
- 於家舍傢俬配置收納空間，例如在多用途室放置地台沙發床，用作普通座位，同時在床底包含收納位置
- 提供可調整的多元收納空間，放置私人物品、小型物品、常用物品、非常用物品、大型物件、個案文件等
- 提供不同高度及可上鎖的儲物位置
- 提供不同高度的座椅/可調整高度的書枱(V02.2, V02.3)
- 於天花板配置軌道，方便日後隔間大廳區域作不同用途
- 在桌子位置和上格床位增設插座，減少使用拖把以確保安全

Designers

- Use modular tables in common areas instead of traditional large dining tables
- Keep multi-purpose rooms clutter-free, to be used as relaxing areas, passive activity rooms, counselling rooms, and sick bays as needed
- Incorporate storage spaces into furniture, such as including platform sofas in multi-purpose rooms for both seating and storage purposes underneath
- Provide adjustable and versatile storage spaces for personal belongings, small items, frequently/infrequently used items, large objects, case files, etc.
- Offer storage locations at different heights and lockable options
- Provide chairs and desks of varying heights or adjustable desk heights (V02.2, V02.3)
- Install ceiling-mounted tracks to facilitate future partitioning of common areas for different use
- Add sockets at desk height and upper level of bunk bed to reduce the use of extension cords and improve safety

家舍職員

- 翻新工程注意留白空間，讓舍員共同參與空間設計或傢俬組裝
- 教導舍員如何安排收納空間及定期斷捨離以騰空更多儲物位置
- 定期檢視舍員的座椅和書枱高度是否適合個人成長需要

Staff:

- During renovation projects, ensure the inclusion of “un-designed” spaces to allow residents to participate in the space design or furniture assembly
- Educate residents on organising storage spaces and regularly declutter to create more storage spaces
- Regularly assess the height of residents’ chairs and desks to accommodate their individual growth needs

原則七
Principle 7

為不同家舍成員而設
Designed for Different Household Members



好處
Benefits

- 顧及每位家舍成員的需要
- Address the needs of each resident



策略
Strategies

- 功能性強且低刺激性的環境
- 考慮不同年齡層需要的室內空間
- 為未來的需要提供基本配置
- Create functional and low-stimulus environments
- Consider indoor spaces that cater to different age groups' needs
- Provide basic configurations for future needs.



實踐
Implementation

- 設立感官室
- 減低並控制環境對五感的刺激
- 為幼童提供互動觸感牆
- 為青少年提供額外的課本儲物空間
- 為自閉症舍員提供額外的活動空間，使他們與其他舍員保持較舒適的距離
- 避免多用途室設於社工室內的房間
- 為未來科技更新作準備，提供基礎設施配備，如高速和穩定的Wi-Fi網絡並於轉角位置增設路由器
- 多功能室應具備擁有優質感官刺激的擴充實境和虛擬實境功能，用於與原生家庭進行視像會議、遙距輔導和線上學習課程
- 張貼引導運動的牆身和通道貼紙(A09.1,V06.1,V08.1,V09.1)
- Establish a sensory room
- Reduce and control environmental stimuli that affect the five senses
- Provide interactive tactile walls for young children
- Provide additional textbook storage space for teenagers
- Allocate additional activity spaces for residents with autism to maintain a comfortable distance from other residents
- Avoid placing multi-purpose rooms within social workers' office
- Prepare for future technological advancements by providing infrastructure such as high-speed and stable Wi-Fi networks, with routers placed at corner locations to boost network stability
- Include augmented reality and virtual reality features in multi-purpose rooms to offer high-quality sensory stimulation, facilitating video conferences with bio-families, remote counseling, and online learning
- Install wall graphics and floor stickers to guide exercise (A09.1, V06.1, V08.1, V09.1)

原則八
Principle 8

耐用及低維修成本
Durability and Low Maintenance Cost



好處
Benefits

- 提高可持續性
- 合符成本效益
- 減少浪費, 保護環境

- Enhance sustainability
- Align with cost-effectiveness
- Reduce waste and protect the environment



策略
Strategies

- 注重物料選材
- 選擇市面上的貨源

- Prioritise material selection
- Choose readily available resources from the market



實踐
Implementation

設計師

- 選擇易於清潔及耐用的地板, 如地磚和膠地板
- 選擇耐用並提供產品保養的傢俬
- 避免使用特製傢俬以減低維修成本
- 選用圓角傢俬, 保障兒童的安全
- 用拼貼地毯取代傳統大地毯, 方便更換
- 於容易潮濕的區域, 例如晾衣服的地方, 放置抽濕機, 減少發霉機會 (W07.2, W07.3, T07.1)
- 選用防滑地板
- 使用防潮油漆

Designers

- Select easy-to-clean and durable flooring options such as tiles and vinyl flooring
- Choose furniture that is durable and comes with maintenance support
- Avoid using customised furniture to minimise maintenance costs
- Opt for furniture with rounded corners to ensure child safety
- Use modular carpeting instead of traditional large carpets for easier replacement
- Place dehumidifiers in areas prone to moisture, such as laundry areas, to minimise the chance of mold (W07.2, W07.3, T07.1)
- Install slip-resistant flooring
- Use moisture-resistant paint

家舍職員

- 與舍員一同訂立使用新傢俬和設施的安排和規則, 從小培育舍員珍惜家中之物

Staff:

- Collaborate with residents to establish rules and arrangements for using new furniture and facilities, fostering a sense of appreciation for their home belongings from an early age

10

結語 Conclusion

本報告總結了「重塑未來兒童之家的設計」行動項目的過程及成果。這行動項目不僅制定室內空間設計概念及考慮，還從用家的角度重新思考環境改善工程的可塑性，揭示了在業界進行系統性改變的潛力。

我們希望這種以舍員為中心的方法能夠在兒童之家的環境改善工程得到更廣泛應用，並期望日後兒童之家的環境改善工程不僅是一個室內空間的改造，更是從用家需求出發的設計項目，為舍員充權的同時，更為他們和家舍職員創造更健康及安全的居住和工作環境。

This report summarises the process and outcomes of the “Reimagining Small Group Homes for the Future” action project. This initiative not only establishes concepts and considerations for interior design but also rethinks the flexibility of EIPs from the perspective of the users, revealing the potential for system changes within the RCCS sector.

We hope that this user-centric approach can be widely applied to EIPs in SGHs. We also envision that EIPs in SGHs will not only focus on transforming indoor spaces but also prioritise design initiatives driven by user needs. By empowering the residents and creating healthier and safer living and working environments for them and the residential staff, we aim to go beyond mere physical renovations and foster a sense of ownership within the SGH community.

附錄一：WELL健康建築標準™

Appendix I: WELL Building Standard™

空氣 AIR

ID	Part Name
A01.1	Meet Thresholds for Particulate Matter 顆粒物閾值
A01.2	Meet Thresholds for Organic Gases 揮發性氣體閾值
A01.3	Meet Thresholds for Inorganic Gases 無機氣體閾值
A01.4	Meet Thresholds for Radon 氡閾值
A01.5	Measure Air Parameters 檢測空氣參數
A02.1	Prohibit Indoor Smoking 禁止室內吸煙
A02.2	Prohibit Outdoor Smoking 禁止室外吸煙
A03.1	Ensure Adequate Ventilation 通風合規
A04.1	Mitigate Construction Pollution 施工污染管理
A05.1	Meet Enhanced Thresholds for Particulate Matter 顆粒物加強閾值
A05.2	Meet Enhanced Thresholds for Organic Gases 揮發性氣體加強閾值
A05.3	Meet Enhanced Thresholds for Inorganic Gases 無機氣體加強閾值
A06.1	Increase Outdoor Air Supply 增加新風供給
A06.2	Improve Ventilation Effectiveness 提高通風效率
A07.1	Provide Operable Windows 提供可開啟窗
A07.2	Manage Window Use 管理窗戶使用
A08.1	Install Indoor Air Monitors 安裝室內空氣監測器
A08.2	Promote Air Quality Awareness 促進空氣品質感知
A09.1	Design Healthy Entryways 設計健康入口通道
A09.2	Perform Envelope Commissioning 執行圍護結構調試
A10.1	Manage Combustion 燃燒管理
A11.1	Manage Pollution and Exhaust 管理污染和廢氣
A12.1	Implement Particle Filtration 實施顆粒物過濾
A13.1	Improve Supply Air 改善進風品質
A14.1	Implement Ultraviolet Treatment for HVAC Surfaces 對暖通空調系統表面實施紫外線處理

水 WATER

ID	Part Name
W01.1	Verify Water Quality Indicators 驗證基本水質指標
W02.1	Meet Chemical Thresholds 滿足飲用水化學閾值要求
W02.2	Meet Thresholds for Organics and Pesticides 滿足有機化合物和農藥閾值要求
W03.1	Monitor Chemical and Biological Water Quality 監測化學和生物水質
W03.2	Implement Legionella Management Plan 實施軍團菌管理計畫
W04.1	Meet Thresholds for Drinking Water Taste 滿足飲用水口感的閾值要求
W05.1	Assess and Maintain Drinking Water Quality 評估和維護飲用水量質
W05.2	Promote Drinking Water Transparency 提高飲用水信息透明度
W06.1	Ensure Drinking Water Access 保證飲用水可及性
W07.1	Design Envelope for Moisture Protection 圍護結構防潮設計
W07.2	Design Interiors for Moisture Management 室內防潮管理設計
W07.3	Implement Mold and Moisture Management Plan 實施防潮防霉管理計畫
W08.1	Provide Bathroom Accommodations 提供浴室設施
W08.2	Enhance Bathroom Accommodations 改善浴室設施
W08.3	Support Effective Handwashing 支持有效洗手
W08.4	Provide Handwashing Supplies and Signage 提供洗手用具及標牌
W09B.1	Implement Safety Plan for Non-Potable Water Capture and Reuse 實施非飲用水收集和再利用的安全計畫

營養 NOURISHMENT

ID	Part Name
N01.1	Provide Fruits and Vegetables 提供水果蔬菜
N01.2	Promote Fruit and Vegetable Visibility 提高水果蔬菜可見性
N02.1	Provide Nutritional Information 提供營養成分資訊
N02.2	Address Food Allergens 處理食物過敏源
N02.3	Label Sugar Content 標注糖分含量
N03.1	Limit Total Sugars 限值總糖分
N03.2	Promote Whole Grains 推廣全穀物
N04.1	Optimise Food Advertising 優化食品廣告
N05.1	Limit Artificial Ingredients 限值人工添加劑
N06.1	Promote Healthy Portions 推廣健康成分
N07.1	Provide Nutrition Education 提供營養教育
N08.1	Support Mindful Eating 支持用心飲食
N09.1	Accommodate Special Diets 提供特殊飲食
N09.2	Label Food Allergens and Intolerance 食物過敏源和不耐受標籤
N10.1	Provide Meal Support 提供膳食支援
N11.1	Implement Responsible Sourcing 實施負責採購
N12.1	Provide Gardening Space 提供園藝空間
N13.1	Ensure Local Food Access 易於獲取食物
N14.1	Limit Red and Processed Meats 限值紅肉及加工肉類

光 LIGHT

ID	Part Name
L01.1	Provide Indoor Light 提供室內照明
L02.1	Provide Visual Acuity 視覺照明設計
L03.1	Meet Lighting for Day-Active People 適合白天活動人員的照明
L04.1	Manage Glare from Electric Lighting 眩光控制
L05.1	Implement Daylight Plan 實施自然採光計畫
L05.2	Integrate Solar Shading 集成遮陽措施
L06.1	Conduct Daylight Simulation 執行自然採光模擬
L07.1	Balance Visual Lighting 平衡視覺照明
L08.1	Enhance Color Rendering Quality 提高顯色品質
L08.2	Manage Flicker 管理頻閃
L09.1	Enhance Occupant Controllability 增強使用者的控制權
L09.2	Provide Supplemental Lighting 補充照明

附錄一：WELL健康建築標準™(續)

Appendix I: WELL Building Standard™(Continued)

運動 MOVEMENT	
ID	Part Name
V01.1	Design Active Buildings and Communities 設計積極的建築及社區
V02.1	Support Visual Ergonomics 支援視覺人體工學
V02.2	Provide Height-Adjustable Work Surfaces 提供可調節高度的工作台面
V02.3	Provide Chair Adjustability 提供座椅靈活性
V02.4	Provide Support at Standing Workstations 提供站立工位元的支撐設備
V02.5	Provide Workstation Orientation 提供工位元情況介紹
V03.1	Design Aesthetic Staircases 設計具有美感的樓梯
V03.2	Integrate Point-of-Decision Signage 決策提示點標記
V03.3	Promote Visible Stairs 推廣可見樓梯
V04.1	Provide Cycling Infrastructure 提供騎行基礎設施
V04.2	Provide Showers, Lockers and Changing Facilities 提供淋浴設施、儲物櫃和更衣設施
V05.1	Select Sites with Pedestrian-friendly Streets 場地鄰近行人友好街道
V05.2	Select Sites with Access to Mass Transit 場地可到達公共交通
V06.1	Offer Physical Activity Opportunities 提供體育活動機會
V07.1	Provide Active Workstations 提供健身工位
V08.1	Provide Indoor Activity Spaces 提供室內活動空間
V08.2	Provide Outdoor Physical Activity Space 提供室外體育活動場所
V09.1	Offer Physical Activity Incentives 促進鍛煉
V10.1	Provide Self-Monitoring Tools 提供自我監測工具
V11β.1	Implement an Ergonomics Program 實施人體工學計劃
V11β.2	Commit to Ergonomic Improvements 人體工學改進承諾
V11β.3	Support Remote Work Ergonomics 遠端人體工學支援

熱舒適 THERMAL COMFORT	
ID	Part Name
T01.1	Provide Acceptable Thermal Environment 提供可接受的熱舒適環境
T01.2	Measure Thermal Parameters 檢測熱舒適參數
T02.1	Survey for Thermal Comfort 熱舒適調查
T03.1	Provide Thermostat Control 提供恆溫控制
T04.1	Provide Personal Cooling Options 提供個人供冷方案
T04.2	Provide Personal Heating Options 提高個人供暖方案
T04.3	Allow Flexible Dress Code 靈活的著裝規範
T05.1	Implement Radiant Heating 安裝輻射供暖
T05.2	Implement Radiant Cooling 安裝輻射制冷
T06.1	Monitor Thermal Environment 監測熱環境
T07.1	Manage Relative Humidity 相對濕度管理
T08β.1	Provide Windows with Multiple Opening Modes 提供具有多種開啟模式的窗戶
T09β.1	Manage Outdoor Heat 管理室外熱量
T09β.2	Avoid Excessive Wind 避免風力過大
T09β.3	Support Outdoor Nature Access 支持室外自然接觸

聲環境 SOUND

ID	Part Name
S01.1	Label Acoustic Zones 雜訊地圖
S01.2	Provide Acoustic Design Plan 提供聲學設計規劃
S02.1	Limit Background Noise Levels 背景噪音等級限制
S03.1	Design for Sound Isolation at Walls and Doors 牆體和門的隔音設計
S03.2	Achieve Sound Isolation at Walls 牆體隔音
S04.1	Achieve Reverberation Time Thresholds 符合混響時間閾值
S05.1	Implement Sound Reducing Surfaces 採用消音表面
S06.1	Provide Minimum Background Sound 提供最低背景雜訊
S06.2	Provide Enhanced Speech Reduction 進一步減少語音音量
S07β.1	Specify Impact Noise Reducing Flooring 指定抗撞擊聲地板
S07β.2	Meet Thresholds for Impact Noise Rating 滿足撞擊聲等級的閾值
S08β.1	Provide Enhanced Speech Intelligibility 增強語音清晰度
S08β.2	Prioritise Audio Devices and Policies 優先考慮的音訊設備和政策
S09β.1	Implement a Hearing Health Conservation Program 實施聽力健康保護方案

材料 MATERIALS

ID	Part Name
X01.1	Restrict Asbestos 限值石棉
X01.2	Restrict Mercury 限值汞
X01.3	Restrict Lead 限值鉛
X02.1	Manage Asbestos Hazards 石棉危害管理
X02.2	Manage Lead Paint Hazards 鉛塗料危害管理
X02.3	Manage Polychlorinated Biphenyl (PCB) Hazards 多氯聯苯危害物管理
X03.1	Manage Exterior CCA Hazards 外部砷化鉻銅危害管理
X03.2	Manage Lead Hazards 鉛危害管理
X04.1	Assess and Mitigate Site Hazards 場地整治
X05.1	Select Compliant Interior Furnishings 選擇合規的室內傢俱
X05.2	Select Compliant Architectural and Interior Products 選擇合規的建築及室內產品
X06.1	Limit VOCs from Wet-Applied Products 限制濕塗產品中的揮發性有機化合物
X06.2	Restrict VOC Emissions from Furniture, Architectural and Interior Products 限制傢俱、建築及室內產品中的揮發性有機化合物排放
X07.1	Select Products with Disclosed Ingredients 材料透明度
X07.2	Select Products with Enhanced Ingredient Disclosure 提升產品成分透明度
X07.3	Select Products with Third-Party Verified Ingredients 協力廠商認證產品成分
X08.1	Select Materials with Enhanced Chemical Restrictions 選擇增強化學限制的材料
X08.2	Select Optimised Products 選擇優化材料
X09.1	Implement a Waste Management Plan 實施施工廢棄物管理計劃
X10.1	Manage Pests 害蟲管理和農藥使用
X11.1	Improve Cleaning Practices 改進清潔方案
X11.2	Select Preferred Cleaning Products 選擇更好的清潔產品
X12β.1	Reduce Respiratory Particle Exposure 減少呼吸道顆粒接觸
X12β.2	Address Surface Hand Touch 解決手部接觸表面

附錄一：WELL健康建築標準™(續)

Appendix I: WELL Building Standard™(Continued)

精神 MIND

ID	Part Name
M01.1	Promote Mental Health and Well-being 推廣心理健康及福祉
M02.1	Provide Connection to Nature 提供自然接觸
M02.2	Provide Connection to Place 提供場所連接
M03.1	Offer Mental Health Screening 提供心理健康篩查
M03.2	Offer Mental Health Services 提供心理健康服務
M03.3	Offer Employee Mental Health Support 提供工作場所支持
M03.4	Support Mental Health Recovery 支持心理健康恢復
M04.1	Offer Mental Health Education 心理健康教育
M04.2	Offer Mental Health Education for Managers 管理人員心理健康教育
M05.1	Develop Stress Management Plan 抗壓管理
M06.1	Support Healthy Working Hours 支持健康工作時間
M06.2	Provide Nap Policy and Space 提供午睡政策和空間
M07.1	Provide Restorative Space 提供有助恢復的空間
M08.1	Provide Restorative Programming 提供有助恢復的計畫
M09.1	Provide Nature Access Indoors 提供室內自然接觸
M09.2	Provide Nature Access Outdoors 提高室外自然接觸
M10.1	Provide Tobacco Cessation Resources 提供戒煙資源
M10.2	Limit Tobacco Availability 限值煙草供應
M11.1	Offer Substance Use Education 提供毒品和酒精使用教育
M11.2	Provide Substance Use and Addiction Services 提供物質使用成癮醫療服務

社區 COMMUNITY

ID	Part Name
C01.1	Provide WELL Feature Guide 健康意識
C02.1	Facilitate Stakeholder Charrette 促進利益相關者專家研討會
C02.2	Promote Health-Oriented Mission 推廣健康導向的使命
C03.1	Develop Emergency Preparedness Plan 制定應急準備計畫
C04.1	Select Project Survey 選擇項目調查
C04.2	Administer Survey and Report Results 管理調查及報告結果
C05.1	Utilise Enhanced Survey 增強調查
C05.2	Utilise Pre- and Post-Occupancy Survey 開展入住前和入住後調查
C05.3	Implement Action Plan 行動計畫實施
C05.4	Facilitate Interviews, Focus Groups and/or Observation 設置焦點小組及巡查
C06.1	Promote Health Benefits 推廣健康福利
C06.2	Offer On-Demand Health Services 按需提供健康服務
C06.3	Offer Sick Leave 提供病假
C06.4	Support Community Immunity 支持社區免疫計畫
C07.1	Promote Culture of Health 推廣健康文化
C07.2	Establish Health Promotion Leader 健康促進協調員
C08.1	Offer New Parent Leave 提供育兒假
C09.1	Offer Workplace Breastfeeding Support 提供工作場所母乳餵養支援
C09.2	Design Lactation Room 設計哺乳室
C10.1	Offer Childcare Support 提供幼兒看護支援
C10.2	Offer Family Leave 提供家庭假期
C10.3	Offer Bereavement Support 提供喪親支援
C11.1	Promote Community Engagement 推廣社區參與
C11.2	Provide Community Space 提供社區空間

社區(續) COMMUNITY (CONT' D)

ID	Part Name
C12.1	Promote Diversity and Inclusion 多樣性和包容性
C13.1	Integrate Universal Design 無障礙和通用設計
C14.1	Promote Emergency Resources 促進應急資源
C14.2	Provide Opioid Response Kit and Training 提供阿片類藥物反應包和培訓
C15β.1	Promote Business Continuity 促進業務連續性
C15β.2	Support Emergency Resilience 支援緊急應變能力
C15β.3	Facilitate Healthy Re-entry 促進健康再進入
C15β.4	Establish Health Entry Requirements 建立健康進入要求
C16β.1	Allocate Affordable Units 住房分配
C17β.1	Disclose Labor Practices 勞工待遇披露
C17β.2	Implement Responsible Labor Practices 實施負責任的勞工待遇
C18β.1	Support Victims of Domestic Violence 暴力及家暴應對支持

創新 INNOVATION

ID	Part Name
I01	Propose Innovation 與健康相關的創新措施
I02.1	Achieve WELL AP 專案執行過程中有一位WELL AP
I03.1	Offer WELL Educational Tours 提供WELL教育之旅
I04.1	Complete Health and Well-Being Programs 完成健康及福祉項目
I05.1	Achieve Green Building Certification 實現綠色建築認證
I06β.1	Carbon Inventory 碳排放清單
I06β.2	Carbon Reduction Goal 碳排放減少目標
I06β.3	Carbon Reduction 碳排放減少
I06β.4	Carbon Neutrality 碳中和

關於理大賽馬會社創「騷·IN·廬」

About PolyU Jockey Club “Operation Solnno”

由香港理工大學(理大)賽馬會社會創新設計院主辦及香港賽馬會慈善信託基金捐助,於2018年8月1日正式開展,計劃為期三年,以期匯集社會各方,以創新理念和務實可行的社會創新方案,應對多項社會挑戰,共同改善香港的生活。以應對香港「雙老化」(即人口老化及住屋老化)的複合效應為工作的策略焦點,聯合學術界、非政府組織、專業團體、熱心的社會人士、企業和政府,攜手構建創新方案,並按此制訂建議的實際行動。

Organised by the Jockey Club Design Institute for Social Innovation (J.C.DISI) at The Hong Kong Polytechnic University (PolyU) and funded by The Hong Kong Jockey Club Charities Trust, the 3-year social innovation project commenced on 1 August 2018 aims to innovate solutions, in collaboration with a wide spectrum of stakeholders, to respond to social challenges with a view to improving life in Hong Kong. J.C.DISI puts its strategic focus on tackling the combined impact of “Double Ageing” (ageing of people and buildings) in Hong Kong, the programme would engage the trans-disciplinary forces of academia, non-governmental organisations, professional bodies, members of the public, corporations and the Government to generate innovative ideas and practical actions.

項目四大範疇 The Four Pillars Of The Project



ONE FROM HUNDRED THOUSAND
「十萬分之一」社創研討會

「十萬分之一」社創研討會 - J.C.DISI相信,假若每十萬人之中有一人,即香港七百多萬人口當中的七十多名市民,能貢獻時間、熱誠、知識與創意,攜手合作,定能為特定的社會議題帶來創新的解決方案。透過一系列的參與式研討會及工作坊,收集市民對社會議題的意見、促進討論,並共同設計務實和創新的方案。

“One from Hundred Thousand” Social Innovation Symposium — to organise a series of participatory symposia and workshops open to the public to collect views on social issues, facilitate discussion, and co-create solutions. J.C.DISI names the platform based on the belief that if one person from every 100,000 people (i.e. 70+ persons from the 7 million+ population of Hong Kong) can sit together and contribute their time, passion, knowledge and creativity, they can innovate solutions for specific problems.



DESIGN EDUCATION
啟迪創新習作

啟迪創新習作 - 將社會創新和設計思維引入中學課程,培育青年成為社會創新推動者,內容包括為中學師生開設社會創新工作坊、製作多媒體互動教材等等。

“SolInno Design Education” — to introduce social innovation and design thinking into the curriculum of secondary school education to nurture students as social innovators. Social innovation workshops will be organised for students and teachers and multimedia interactive teaching kits will be developed in this regard.



ACTION PROJECTS
社創行動項目

社創行動項目 - 聯合非政府組織、專業團體和學術界,把「十萬分之一」社創研討會上衍生出來的創新理念,轉化成可以執行的設計及專案原型。

“SolInno Action Projects” — to collaborate with non-governmental organisations, professional bodies and academia for developing innovative ideas generated at “One from Hundred Thousand” Social Innovation Symposium into designs or prototypes.



KNOWLEDGE PLATFORM
社創知識平台

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“SolInno Knowledge Platform” — to document and disseminate for public use the social innovation experience and knowledge generated from the programme through various formats, including academic papers, videos, design and practice guidelines, case study reports, workshops, regional and international conferences and exhibitions.

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康復治療科學系 Department of Rehabilitation Sciences

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香港理工大學賽馬會社會創新設計院
Jockey Club Design Institute for Social Innovation,
The Hong Kong Polytechnic University

電話： (852) 3400 3433
Tel:

電郵： disi.enquiry@polyu.edu.hk
Email:

網址： www.polyujcsoinno.hk
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