### MESSAGE FROM THE DIRECTOR

We foster innovation as the driving force for high-quality development. From building mutual bonds for a green future and smart safety solutions to enhancing livelihood and social well-being, ArchSD creates positive impacts through sustainable buildings and communities.

Michael LI, JP
Director of Architectural Services

In a rapidly evolving world facing climate challenges and increasing demands for cost and resource efficiency, the ArchSD transforms constraints into opportunities for innovation. Our focus is on achieving more with less by fostering a sustainable, resilient, and inclusive built environment for Hong Kong through innovative partnerships with stakeholders.

# ACCELERATING GREEN AND TECHNOLOGICAL INNOVATIONS

Our strategic approach to sustainability is grounded in concrete action. Last year, we launched our Carbon Neutrality Strategic Framework, establishing a cornerstone for achieving deep decarbonisation across all our projects. To ensure holistic carbon management, we have also started integrating carbon appraisal from the initial design phase through to construction.

This commitment is demonstrated through our robust trials and pioneering applications. These include employing reinforced concrete Modular Integrated Construction (MiC) for the Po Leung



Po Leung Kuk Siu Hon Sum Primary School

Kuk Siu Hon Sum Primary School, and piloting an "Advancing Net Zero" design that achieved a remarkable 60% reduction in embodied carbon during the refurbishment of toilet blocks at the Central and Western District Promenade's Pet Garden. Furthermore, the integration of blue-green concept at Tseung Kwan O South Park exemplifies our progress. Collectively, these initiatives mark significant strides in turning our sustainability commitment into tangible reality.

The Light Public Housing project offers breakthrough opportunities for pioneering the MiC approach, utilising full prefabrication

for multi-storey residential development and building cores (e.g. lift shafts, staircases, and electrical and mechanical plant rooms). This project has not only set a new benchmark for highrise construction speed in Hong Kong, but also redefined public development by simultaneously prioritising productivity, quality, and social inclusion while reducing environmental impact. Building on this achievement, we are exploring ways to increase the adoption of these smart, modular technologies for other building types, including schools, offices, and hospitals. Our goal is to leverage greater standardisation to achieve safer, more cost-effective, higher-quality and efficient outcomes.



Light Public Housing at Choi Hing Road, Ngau Tau Kok

#### PRIORITISING SMART SAFETY

Safety is at the heart of our operations. To provide a safer working environment, all ArchSD contracts, including capital works and term contracts, now adhere to the Smart Site Safety System (4S), raising safety standards through close collaboration with our contractors. Moving forward, we will continue to enforce stringent compliance, while advancing the use of AI, robotics, and smart devices, such as remote access systems for tower cranes and smart watches to monitor workers' vital signs. These technologies allow us to strengthen inspection, identify issues, correct inappropriate work habits, and proactively prevent hazards, such as heat stress.



**Smart Hong Kong Pavilion** 

# ENHANCING SOCIAL INCLUSION AND WELL-BEING

We design to serve and uplift our communities. The Light Public Housing project is a prime example of building smart for better living, providing an effective modular solution to tackle Hong Kong's housing shortage and directly improve the living environment for grassroots communities. Through community-centric design, the project incorporates essential ancillary facilities, actively gauging and adapting to diverse needs to foster social inclusion.

In 2024, we achieved significant milestones in creating vibrant, inclusive, and liveable communities. Our efforts ranged from elderly-friendly designs at the North District Community Health Centre Building that promote community health, to delivering cultural landmarks such as the East Kowloon Cultural Centre and preserving the historic Tai Fu Tai Mansion through Heritage BIM. Projects like the Sha Tau Kok Visitor Facilities and the Po Pin Chau Viewing Platform further demonstrate our commitment to revitalising urban living, protecting pristine landscapes, and enhancing the quality of life for residents and visitors alike.



East Kowloon Cultural Centre



Po Pin Chau Viewing Platform

# COLLABORATIVE INNOVATIONS FOR THE FUTURE

Our accomplishments are a testament to our culture of innovation and collaboration, which have incubated advancements in techniques, technologies, and materials. We are proud to have received over 80 industry awards, including the prestigious Global and Hong Kong Most Innovative Knowledge Enterprise (MIKE) Award, which affirm our excellence in innovation, project management, creative design, and environmental stewardship.



Hong Kong Most Innovative Knowledge Enterprise (MIKE) Award

I extend my heartfelt gratitude to our dedicated team and partners. Together, we will continue to advance high-quality development, strengthen community bonds, and fulfil the aspirations of our communities.



**Michael LI, JP**Director of Architectural Services