



# 2023 MAJOR WORK PLANS







# TABLE OF CONTENTS

	<b>Executive Director's Message</b>	8
	Chapter 01 Innovation and Industry Professionalism	10
	Preamble Initiatives	11
l.1	Facilitating Design for Safety	12
L.2	Developing Safety Performance Scheme	12
L.3	Promoting and Facilitating Wider Use of MiC in Private Development Projects	12
L.4	Initiating Study on MiC and MiMEP Eco-system	12
L.5	Developing CIC Master Class on AI for Construction	12
L.6	Promulgating Strategies and Plans towards Carbon Neutrality for Hong Kong Construction Industry	12
L.7	Promoting CIC Sustainable Finance Certification Scheme (SFCS)	12
L.8	Enhancing CIC Carbon Assessment Tool (CAT)	12
L.9	Launching CIC Smart Waste Management Tool	13
L.10	Setting up CIC Guangdong Representative Office	13
L.11	Offering Construction Industry National Affairs Class	13
L.12	Setting up CIC GBA Hub	13

1.13	Identifying Practical Solutions Bringing Significant Gain to Construction Productivity	13
1.14	Revamping Manpower Forecast Model for Professionals, Technical and Site Supervisory Personnel	13
1.15	Completing the Overall Review of CITF	13
1.16	Reviewing the CITF Pre-approved Lists	14
1.17	Driving Adoption of Innovation and Technology (I&T)	14
1.18	Facilitating Sharing of Technical Knowledge and Resources on MiC	14
1.19	Exploring and Promoting the Relocation and Reinstallation Process of MiC	14
1.20	Enhancing Terms in Construction Contracts	14
1.21	Developing a Set of BIM Harmonisation Guidelines for Digital Hong Kong	14
1.22	Developing BIM-related Digital Solutions	15
1.23	Developing Training Courses on Digitalisation to Meet Market Needs (e.g. on Reality Modelling, 4D Simulation, Drawings Generation, etc.)	15
1.24	Completing the Revamp of CIC BIM Space	15
1.25	Organising CIC BIM Competition	15
1.26	Organising CIC Sustainable Construction Award 2023	15
1.27	Establishing a Digital Resource Centre with Object Library to Facilitate MiC and MiMEP Adoption	15
1.28	Completing the Study on Digitalising Construction for Enhancing Project Delivery	15

Chapte	er 02	16
Prof	essional Enhancement;	
Tale	nt Development	
Preamb Initiativ		17
2.1	Meeting the Demand in Hot Trades by Training Quality Talent for the Industry	18
2.2	Building a Centre for Smart Construction and Safety Excellence in Kowloon Bay Campus	18
2.3	Implementing a Revamp of Full-time Short Programmes of HKIC	18
2.4	Obtaining the Qualifications Framework (QF) Accreditation	18
2.5	Reducing the Number of Complaints on Enquiries and Application for Programmes	18
2.6	Shortening the Waiting Time for Attempting Trade Test	18
2.7	Uplifting the Facilities of Campuses	19
2.8	Enhancing the Training Capacity in Training Grounds	19
2.9	Enhancing the Services of Safety Training	19
2.10	Enhancing HKIC Trainings on Construction Technologies by Deepening the Craft Skills and Knowledge of Teaching Staff & Upgrading of Training Workshops	19
2.11	Launching Master Classes to Facilitate the Implementation of Construction 2.0 and to meet the training needs of construction practitioners	20
2.12	Launching New Programmes on Management and National Affairs to Meet the Training Needs	20
2.13	Launching New Part-time Programmes and Introducing New Technology to Existing Programmes to Drive Skill Upgrading in the Industry	20
2.14	Enhancing the BIM Competency of In-service Professionals to Dovetail with the Industry's Technological Development	20

2.15	Providing CIC Approved Technical Talents Training Programmes (CICATP)	20
2.16	Achieving the Target Employment and Retention Rates of Graduates	21
2.17	Improving the Passing Rate of Trade Tests	21
2.18	Enhancing Efficiency of Collaborative Training Scheme	21
2.19	Enhancing Quality of Collaborative Training Scheme	21
2.20	Reforming STEM Alliance to STEAM Alliance	22
2.21	Enhancing the Recognition of Trade Test Qualification	22
2.22	Establishing a "Visiting Scholar / Guest Lecturer Scheme"	22
2.23	Cultivating Positive Values and Attitudes (Moral and National Education) of Students	22
2.24	Strengthening Network and Partnership with Employers, Outstanding Alumni and Apprentices	22
Chapt	er 03	23
Emb	orace Transformation;	
Nur	ture Professional Workforce	
Pream Initiati		24
3.1	Building up the Brand for Distinguished Specialist Trade Contractors	25
3.2	Deterring Malpractice among Specialist Trade Contractor Sector	25
3.3	Striving for Professionalism of Specialist Trade Contractors	25
3.4	Expanding the Coverage of the Specialist Trades	25
3.5	Smoothing the Registration of the Grandfathered Companies for the New Designated Trades	25
3.6	Advocating Professionalism and Cross-disciplinary Collaboration among Specialist Trades to Enable Continuous Improvement and Sustainable Development	26

3.7	Elevating the Capability of Supervisors of the Specialist Trade Contractors	26
3.8	Strengthening Competencies and Skills of Frontline Practitioners	26
3.9	Alleviating the Foreseen Acute Demand for Skilled and Semi-skilled Workers	26
3.10	Developing a Solidarity and Caring Culture by Enhancing Construction Environment	26
3.11	Offering Medical Examination Scheme for Registered Skilled and Semi-Skilled Workers	26
3.12	Widening the Use of Workers' Data through Digital Enablement	27
3.13	Upholding Efficient and Excellent One-Stop Services	27
3.14	Driving Professionalism for Specialist Trade Contractors through RSTCS	27
3.15	Driving Professionalism for Frontline Supervisors through the Technically Competent Persons Registration Scheme (TCPRS)	27
3.16	Enforcing the Construction Workers Registration Ordinance (CWRO)	27
Chapt	er 04	28
Enh	ancing Governance and	
Stre	ngthening Competitiveness	
Preamb Initiativ		29
4.1	Promoting and Increasing Industry Usage of Levy E-service 2.0 to Enhance Operational Efficiency and Communication with the Contractors and Authorised Persons	30
4.2	Promoting and Increasing Agility for Efficient Budget Utilisation	30
4.3	Uplifting Payments via Electronic Platforms to 85% of Total Transactions	30
4.4	Speeding Up Month End Financial Closing (+33% from Now) after Month End	30

4.5	Extending and Enhancing Digitalisation Initiatives in Procurement Process to Increase Overall Operation Efficiency	30
4.6	Enhancing and Standardising the Terms and Conditions of All Procurement Related Legal Binding Documents to Minimise Any Potential Legal Risk	31
4.7	Reviewing Procurement Manual to Improve and Streamline the Procurement Process	31
4.8	Setup of the Training Ground at the Northern Extension of STT 1560 at Tai Po	31
4.9	Conducting Replacement Work of Existing Lifts (Total 7 Nos.) at Kowloon Bay Campus (KBC), Kwai Chung Campus (KCC) and Sheung Shui Campus (SSC)	31
4.10	Implementing BIM-FM Platform for Kwai Chung Campus and Sheung Shui Campus	31
4.11	Upgrading CCTV System with AI Features at Kowloon Bay Campus, Aberdeen Trade Test Centre, Zero Carbon Park and Tai Po Training Ground (Phase 1)	31
4.12	Setting Up a Centralised Control Platform for Real-Time Monitoring of CIC Facilities	32
4.13	Implementing Risk Assessment on CIC's Divisions and Departments	32
4.14	Reviewing the Annual Update of Policies and Procedures	32
4.15	Assuring Effectiveness, Efficiency and Value for Money of CIC Operations	32
4.16	Strengthening Corporate Governance and Enhancing Secretariat Performance of the Organisation	33
4.17	Bolstering Connectivity with Industry Leaders for Long-Term Developments of the CIC	33
4.18	Enhancing IT Governance	33
4.19	Enhancing Project Governance and Strategic Management	33

4.20	Implementing Workspace Digitalisation	33
4.21	Enhancing Digital Channels and User Experience	34
4.22	Advocating Big Data and Data-Driven Culture	34
4.23	Enhancing Cybersecurity	34
4.24	Enhancing the Disaster Recovery Plan and Shorten Recovery Time	34
4.25	Enhancing Performance of Network	34
4.26	Encouraging Waste Separation and Recycling in CIC Workplace	34
4.27	Encouraging Artificial Intelligence (AI) & Robotic Process Automation	35
4.28	Developing a Central Workplace Management System	35
4.29	Organising Construction Industry-wide PR Campaign	35
4.30	Strengthening the Industry Communications and Networks	35
4.31	Leading the Industry towards Low Carbon Adoptions	35
4.32	Broadening Social Networks for Enhancing Brand Engagement	35
4.33	Implementing New Initiatives of Renewable Energy	35
4.34	Enhancing Effectiveness by Streamlining Work Process and Digitising Safety Monitoring and Analysis	36
4.35	Enhancing Continuous Learning Opportunities for Staff	36
4.36	Continuing with the Corporate Culture Building Journey, with Focus on Strengthen the Core Value of "Integrated" and Encourage Cross Team Collaboration	36

# Executive Director's Message

The year 2022 marked the 15<sup>th</sup> anniversary of the CIC. Riding on a number of notable milestones, the CIC is now opening a new chapter and turning a new page in 2023 to embrace the future developments of the construction industry. Construction is Hong Kong's fifth-largest employer, contributing more than 4 percent of our GDP. Hong Kong's annual construction volume is expected to grow to more than HK\$300 billion in the years ahead. Being the Executive Director of the CIC, I shall strive to lead the organisation for the betterment of the industry.

There were many notable large-scale infrastructure construction projects in Hong Kong in the past few decades, e.g. the construction of a new airport in the 1990s and the expansion of its third runway, new town developments from reclamation or re-planning of land uses, etc. In the coming decade, the strategic developments in the Northern Metropolis and the Kau Yi Chau Artificial Islands in the Central Waters would undoubtedly provide additional land and create a tremendous amount of opportunities for the construction industry.

Along the directions of enhancing quantity, speed, efficiency and quality, the CIC will spare no effort in supporting the Government to formulate measures to uplift the productivity of the construction industry, drive the development of high productivity construction methods e.g. Modular Integrated Construction (MiC) across the industry, and continue to lead the region in the application of MiC in projects and works. We shall also actively encourage the industry to widely adopt innovative technologies to improve construction productivity, cost effectiveness and site safety.

On the aspect of construction safety, both the Government and the CIC have attached great importance to site safety. We have joined hands to reshape the site safety culture in collaboration with the industry stakeholders and allocated resources to different initiatives. Looking ahead, we will continue to review the safety management system of construction works and adopt a multi-pronged approach by implementing measures on various fronts, including project design, tender evaluation, contract provisions, works supervision, technology application, regulation of contractors, as well as publicity and promotion, with a view to uplifting site safety performance. We will also promote the use of new construction methods and innovative technologies to uplift site safety and enhance safety management, and provide training to practitioners.

On workers training and talents development, as Hong Kong's volume of overall construction output will continue to grow, the demand for skilled workers and new blood to join the industry is enormous. In 2022, to facilitate the implementation of Construction 2.0, the CIC launched a series of Master Classes, such as MiC Project Implementation, Common Data Environment, Design for Safety, etc. which were all well-received by industry practitioners. In 2023, apart from the ongoing initiatives, the Hong Kong Institute of Construction (HKIC) aims to continue the upgrading of training content and to explore collaboration of training with the GBA counterparts to support the upskilling of workers/practitioners and to meet the manpower demand.

Looking forward, I am confident that we, together with the Government's support, would be able to lead and assist the stakeholders to take forward sustainable developments of the industry.

Ir Albert CHENG Ting-ning Executive Director

January 2023



#### **Preamble**

The success and future of the construction industry will depend on the adequacy of human resources with matching skills. To meet the Government's ambitious housing and infrastructure development programmes, as well as the need of private development projects, the volume of construction works will continue to increase in the foreseeable future. For both public and private sector works, the construction expenditure forecast will reach \$290B in Year 2023/2024. The corresponding demand for manpower in the construction industry will increase significantly.

However, like many other cities around the world, Hong Kong is facing a decrease in labour force due to ageing population and declining fertility rate. To meet this challenge and increase productivity, it is important that the construction industry introduces more use of innovative technology to replace the traditional "labour-intensive" work mode, and nurtures construction talents with professional and advanced knowledge and skills to support the extensive application of innovative technology.

The CIC is charged with the responsibility to bring the construction industry to the forefront of innovative technology and professionalism to meet the needs. With this in mind, in 2023, the CIC will promote and facilitate more use of innovative technology, like MiC, MiMEP, BIM, etc., in the construction industry. The CIC will also develop more training courses for the industry, such as the Master Class on AI for Construction, Training Courses on Digitalisation on Reality Modelling, 4D simulation and Drawing Generation, etc.

While pushing for the adoption of innovative technology and professionalism, the CIC will also put top priority on the work for safety of our construction personnel in their work, and environment and sustainability, by promoting more use of smart safety devices for worker's well-being monitoring, hazardous area zoning/access control, etc., facilitating Design for Safety in temporary works design, launching the pilot scheme on Design for Safety management system, promulgating strategies and plans towards carbon neutrality for the Hong Kong construction industry, promoting the CIC Sustainable Finance Certification Scheme, enhancing the CIC Carbon Assessment Tool, etc.

#### **Initiatives**

#### 1.1 Facilitating Design for Safety

 Develop training programme on Design for Safety for the construction industry and launch the pilot scheme on Design for Safety management system by Q4 2023

#### 1.2 Developing Safety Performance Scheme

 Develop the Safety Performance Scheme for organisation and workers for the construction industry; and implement trial on the developed Scheme by Q4 2023

#### 1.3 Promoting and Facilitating Wider Use of MiC in Private Development Projects

 Organise an international conference and a technical forum on MiC by Q4 2023

#### 1.4 Initiating Study on MiC and MiMEP Eco-system

 Conduct a study on the MiC and MiMEP eco-system by Q4 2023 to facilitate more industry involvement in MiC and MiMEP

#### 1.5 Developing CIC Master Class on AI for Construction

 Form a course Advisory Panel, develop course contents and teaching materials, and identify and invite AI experts in construction to deliver the course by Q1 2023

### 1.6 Promulgating Strategies and Plans towards Carbon Neutrality for Hong Kong Construction Industry

 Develop strategies and plans towards carbon neutrality for the Hong Kong Construction Industry; and seek stakeholders' advice on refining the strategies and plans by Q2 2023

#### 1.7 Promoting CIC Sustainable Finance Certification Scheme (SFCS)

 Engage stakeholders including financial institutions, developers, main contractors, and subcontractors; and initiate collaboration with financial institutions on green finance by Q4 2023

#### 1.8 Enhancing CIC Carbon Assessment Tool (CAT)

 Finalise functions upgrade and data analysis of CAT; and engage stakeholders to promote the upgraded functions of CAT by Q4 2023

#### 1.9 Launching CIC Smart Waste Management Tool

 Develop the one-stop service bilingual digital platform for waste management, conduct trials for pilot projects and provide training sessions, and implement the incentive programme including provision of training by Q4 2023

#### 1.10 Setting up CIC Guangdong Representative Office

- Arrange Guangdong office registration and open bank account by O4 2023
- Arrange the following activities by Q4 2023: one visit for CIC to meet counterparts; one technical study tour to GBA; two business themed workshops/seminars; three business exchange activities to GBA; and one business matching conference

#### 1.11 Offering Construction Industry National Affairs Class

 Deliver National Affairs class in March, June, September and December every year, to assist Hong Kong industry stakeholders to integrate into the national and GBA development

#### 1.12 Setting up CIC GBA Hub

 Build up a GBA Hub for business connection between Hong Kong industry stakeholders and GBA talents, technologies, and supply chains by Q2 2023

### 1.13 Identifying Practical Solutions Bringing Significant Gain to Construction Productivity

 Scout new technologies, construction methods, and advanced materials both locally and internationally; assess the productivity gain potentials; and prioritise the solutions and promote to the industry by Q4 2023

### 1.14 Revamping Manpower Forecast Model for Professionals, Technical and Site Supervisory Personnel

 Evaluate prevailing manpower forecasting models worldwide, review the manpower discipline, establish a practical manpower forecasting model, forecast the manpower demand and supply, and verify the manpower forecasts by Q4 2023

#### 1.15 Completing the Overall Review of CITF

 Complete the Overall Review of CITF after its four years of operation to assess the achievements and identify the way forward by Q3 2023

#### 1.16 Reviewing the CITF Pre-approved Lists

 Conduct an annual review of the Pre-approved BIM Training List, Preapproved BIM Software List and Pre-approved Technologies List by Q4 2023 to assess their suitability for the industry and identify the way forward

#### 1.17 Driving Adoption of Innovation and Technology (I&T)

- Scout for advanced ready-for-adoption construction technologies to showcase at the iHub physical center and digital platform by Q4 2023
- Organise engagement activities for Small and Medium Enterprise (SME) contractors, research institute/technology startups, clients and experienced practitioners to facilitate matching on a collaborative platform by Q4 2023
- Organise conferences/webinars and produce videos to promote the adoption of I&T in construction projects by Q4 2023
- Develop reference materials/guidelines for use by the industry to implement smart site management by Q4 2023
- Organise overseas study tour to develop global network with overseas technology suppliers and research institute by Q3 2023

#### 1.18 Facilitating Sharing of Technical Knowledge and Resources on MiC

 Promote and showcase the latest MiC/MiMEP technologies and solutions in the MiC Resources Centre throughout the year

#### 1.19 Exploring and Promoting the Relocation and Reinstallation Process of MiC

 Conduct a technical reporting on the relocation of the "Nam Cheong 220" project by Q3 2023

#### 1.20 Enhancing Terms in Construction Contracts

 Complete a study to review the terms in existing construction contracts to identify the pain points that the industry is facing, and make recommendations to enhance them by Q4 2023

### 1.21 Developing a Set of BIM Harmonisation Guidelines for Digital Hong Kong

 Produce appropriate additional information required for BIM models, based on the use cases identified in the Report on 3D Spatial and BIM Data Use Case Requirements of the Hong Kong Construction Industry, for reference by the industry (both public and private sectors/organisations) to support the Government's initiative of developing the Common Spatial Data Infrastructure (CSDI) and Hong Kong as a Smart City by Q4 2023

#### 1.22 Developing BIM-related Digital Solutions

 Collaborate with industry stakeholders and relevant government departments to identify and develop quick win BIM-related digital solutions, such as plugins, through consultancy services or R&D projects tentatively by Q4 2023

### 1.23 Developing Training Courses on Digitalisation to Meet Market Needs (e.g. on Reality Modelling, 4D Simulation, Drawings Generation, etc.)

• Identify the topic(s) of training and develop the courses by Q4 2023

#### 1.24 Completing the Revamp of CIC BIM Space

 Complete the revamp of the CIC BIM Space based on the recommendations given in the Construction Digitalisation Roadmap by Q1 2023

#### 1.25 Organising CIC BIM Competition

 Organise the competition annually to enhance the BIM skills and knowledge of the higher education students in Hong Kong through a collaborative and competitive learning approach by Q2 2023

#### 1.26 Organising CIC Sustainable Construction Award 2023

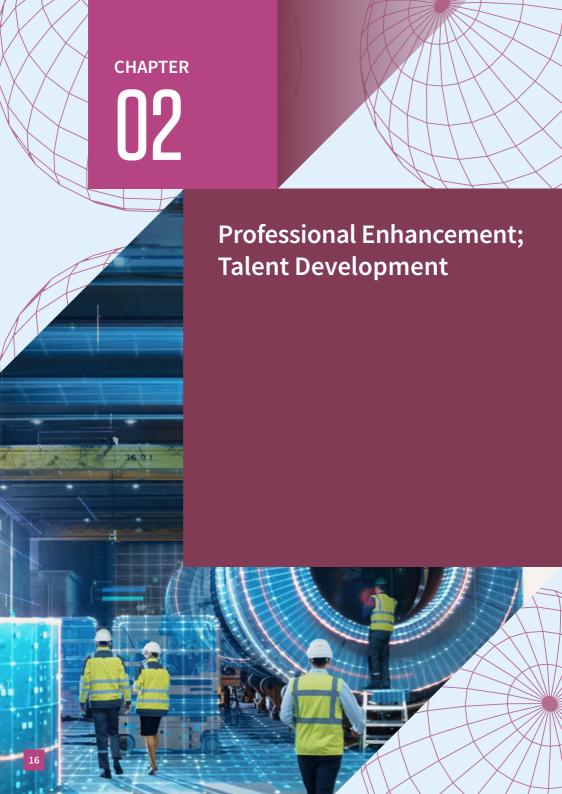
 Promote the award to the industry and invite applications; conduct assessment for the applications; and organise the award presentation ceremony by Q4 2023

### 1.27 Establishing a Digital Resource Centre with Object Library to Facilitate MiC and MiMEP Adoption

 Determine the MiC / MiMEP objects collection framework; engage relevant industry stakeholders; consolidate, classify, and upload to form the object library; and promote the adoption of the object library to the industry by Q4 2023

### 1.28 Completing the Study on Digitalising Construction for Enhancing Project Delivery

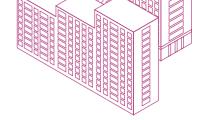
 Solicit worldwide best practices of digitalised construction, assess the "digital maturity" of construction projects in Hong Kong, recommend priorities for driving the adoption of digital technologies, compile a best practice guidebook with model specifications, and design, develop as well as deliver a training course by Q4 2023



#### **Preamble**

The CIC is dedicated to driving the development of the construction industry in Hong Kong. The Hong Kong Institute of Construction (HKIC), as one of CIC's member organisations, is also committed to developing new programmes/ schemes and revamping the existing ones with the aim of introducing new construction technology in its trainings. In addition, HKIC has been integrating its programmes into the Vocational and Professional Education and Training system in Hong Kong through active participation in the Qualifications Framework to attract young talents to join the construction industry after receiving training in HKIC.

The Chief Executive, in his "2022 Policy Address", announced the acceleration of development of the "Northern Metropolis" and a series of transport infrastructure, together with an "enhancing quantity, speed, efficiency and quality" direction for housing supply policy, hence the construction industry will have more pressing needs for manpower and training in the coming years. To better prepare for the future and seize the opportunities, HKIC, in partnership with industry stakeholders, will further stretch its service capacity to bring in new blood to the industry and provide existing practitioners with adequate training to effectively elevate their professional skills.



#### **Initiatives**

### 2.1 Meeting the Demand in Hot Trades by Training Quality Talent for the Industry

Provide 10,000 trained workforce by end of 2023

### 2.2 Building a Centre for Smart Construction and Safety Excellence in Kowloon Bay Campus

- Convert the present levelling workshop into an integrated training centre by December 2023
- Offer modularised programmes in MiC, MiMEP, BIM and enhance safety training in the new integrated centre by end of 2023

#### 2.3 Implementing a Revamp of Full-time Short Programmes of HKIC

 Revamp eight full-time short programmes to adopt a modular training mode and to include construction technology into the curriculum by Q2 2023

#### 2.4 Obtaining the Qualifications Framework (QF) Accreditation

- Obtain accreditation at QF Level 2 for eight full-time short programmes by end of 2023
- Complete the framework of self-evaluation of HKIC in 2023 for the submission of application for "Programme Area Accreditation" at QF Level 3

### 2.5 Reducing the Number of Complaints on Enquiries and Application for Programmes

- Launch the online application platform on HKIC website by Q1 2023
- Prepare the FAQ for the frontline staff to handle enquiries from applicants or students effectively by Q1 2023

#### 2.6 Shortening the Waiting Time for Attempting Trade Test

 Improve scheduling approach and methodology with the assistance of e-scheduling system by Q2 2023

#### 2.7 Uplifting the Facilities of Campuses

- Set up a multi-trade workshop for cross trades training in Sheung Shui Campus and Kwai Chung Campus respectively by Q4 2023 to simulate actual environment of multiple trades working at the same work front
- Convert the front yard near the flag poles area in KBC into a 'Meister Corridor' with landmark fixtures and sitting out facilities by October 2023

#### 2.8 Enhancing the Training Capacity in Training Grounds

- Relocate the Tuen Mun Training Ground to Siu Lam and enhance the loadshifting machinery operation training and testing throughput by December 2023
- Regroup part of the training zones in Tai Po Training Ground and set up one more gantry crane and one more tower crane by October 2023

#### 2.9 Enhancing the Services of Safety Training

- Offer seven days a week training schedule and allow trainees to attend training during non-office hours so as to increase training capacity of Safety Experience Training Centre from Q1 2023
- Provide transparent and user friendly self-service solutions from Q3 2023
- Improve class scheduling methodology via e-scheduling system with an aim of shortening waiting time for attending training programmes by Q4 2023

# 2.10 Enhancing HKIC Trainings on Construction Technologies by Deepening the Craft Skills and Knowledge of Teaching Staff & Upgrading of Training Workshops

- Consult Trade Advisory Panels and conduct necessary upgrading of training workshops and training programmes for construction technologies by Q4 2023
- Set up key performance indicators for teaching staff to pursue excellence in professional ethics and new technology applications in teaching and learning by Q4 2023

# 2.11 Launching Master Classes to Facilitate the Implementation of Construction 2.0 and to Meet the Training Needs of Construction Practitioners

 Develop courses in Artificial Intelligence (A.I.), Modern Methods of Construction (MMC) etc. in collaboration with Industry Development team four times a year

### 2.12 Launching New Programmes on Management and National Affairs to Meet the Training Needs

- Launch various new programmes in collaboration with Industry
   Development team and external training parties, including
  - National Affairs Class
  - NEC4 ECC Project Manager Accreditation
  - CIC Sustainable Finance Certification Scheme (SFCS)

# 2.13 Launching New Part-time Programmes and Introducing New Technology to Existing Programmes to Drive Skill Upgrading in the Industry

- Offer new part-time intensive programmes on Gas Metal Arc Welding (S690 Steel) from Q2 2023
- Introduce robotic welding training in the curriculum of Diploma in Construction (Metal Works & Welding) programme by Q3 2023

### 2.14 Enhancing the BIM Competency of In-service Professionals to Dovetail with the Industry's Technological Development

 Promote four major levels of BIM Training to construction professionals, including BIM Manager, BIM coordinator, BIM Modeller and BIM Viewer

### 2.15 Providing CIC Approved Technical Talents Training Programmes (CICATP)

Provide 620 training quotas for CICATP-Senior Tradesmen
 Programme by December 2023



#### 2.16 Achieving the Target Employment and Retention Rates of Graduates

- Strengthen the career guidance and counselling services, refine the career advising scheme by December 2023
- Issue the Construction Glossary by end of 2023 for Ethnic Minorities graduates
- Establish "Employer Subsidies Scheme" by end of 2023 for Enhanced Construction Manpower Training Scheme employers sponsored by Development Bureau

#### 2.17 Improving the Passing Rate of Trade Tests

- Work with training institutes to provide pre-trade test training course/ briefing by Q4 2023
- Carry out quality check on training courses provided by recognised training institutes

#### 2.18 Enhancing Efficiency of Collaborative Training Scheme

- Review various Collaborative Training Schemes by June 2023
- Formulate procedures for transferring employers' applications to appropriate schemes, due to the discontinuation of Advanced Construction Manpower Training Scheme-Structured On-thejob, Contractor Cooperative Training Scheme and Contractor Cooperative Training Scheme (E&M Trades)
- Enhance the Intermediate Tradesman Collaborative Training
   Scheme recruitment arrangement to increase the number of participated employers and interview opportunities for job seekers
- Liaise with stakeholders to include more manpower shortage trade that not provided by campuses

#### 2.19 Enhancing Quality of Collaborative Training Scheme

- Review the performance evaluation mechanism for site trainers
- Recognise the outstanding employers and site trainers by September 2023
- Optimise the site inspection mechanism by December 2023

#### 2.20 Reforming STEM Alliance to STEAM Alliance

- Review the composition and terms of reference of steering group for Hong Kong Institute of Construction Management Board's approval
- Enhance school list of the alliance by January 2023
- Launch of STEAM Alliance by April 2023
- Plan and implement the events for 2023 in April 2023

#### 2.21 Enhancing the Recognition of Trade Test Qualification

 Organise exchange meeting and centre visit by Q4 2023 with an aim of increasing industry's understanding of skilled workers' professional level

#### 2.22 Establishing a "Visiting Scholar / Guest Lecturer Scheme"

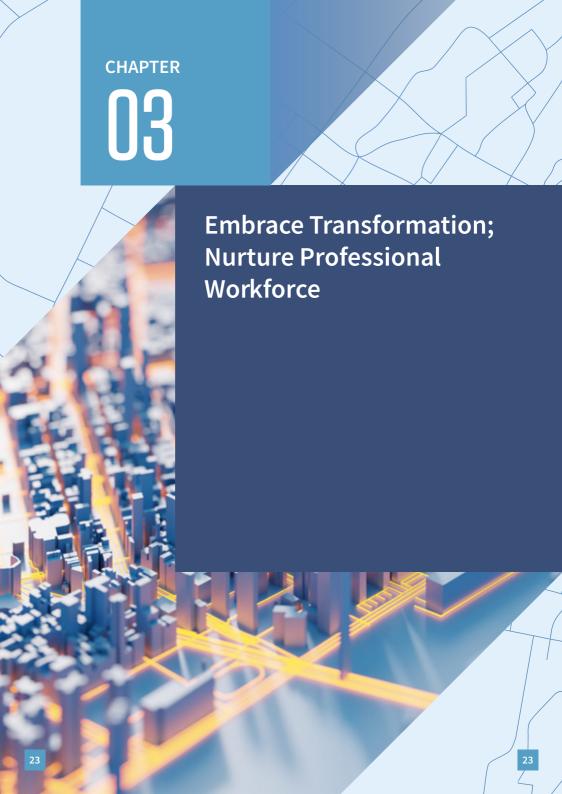
- Finalise the framework and details for the Scheme by mid-2023
- Organise an "Appointment of Visiting Scholar / Guest Lecturer Ceremony" by Q3 2023

### 2.23 Cultivating Positive Values and Attitudes (Moral and National Education) of Students

 Nurture students with the ten positive values and attitudes through various teaching and learning activities, including "Perseverance", "Respect for Others", "Responsibility", "National Identity", "Commitment", "Integrity", "Care for Others", "Law-abidingness", "Empathy" and "Diligence"

### 2.24 Strengthening Network and Partnership with Employers, Outstanding Alumni and Apprentices

- Organise the third Outstanding Apprentices Award by December 2023
- Develop talents of outstanding alumni and outstanding apprentices, motivate their participation in HKIC activities
- Conduct regular meetings with employer associations and put collaborative effort on joint-recruitment activities. Further increase the number of approved employers.



#### **Preamble**

The CIC drives professionalism through registration. A variety of catalysts are introduced in 2023 to attract more new joiners, to upskill frontline practitioners and to continue to develop the specialist trade contractors.

In 2023, the CIC will focus on enabling the front-line practitioners to adapt to the transformation of the construction industry. Registration schemes drive the professional development by:

- Continuous Professional Development (CPD) of the management of the registered companies in areas of Legislation and Industry Development, Construction Specialist Trades Management, Construction Technologies Adoption and Corporate Governance;
- Continuous Competency Development (CCD) for registered Technically Competent Persons under three pillars, namely Statutory Requirements, Advanced Construction Practices and Environment, Health and Safety; and
- Construction Workers Professional Development Scheme enabling upskilling of registered general workers.

The structured professional development allows the front-line practitioners to embrace industry transformation in digital construction, advanced materials and new technologies, and the rise of smart construction. A series of new training programs and good specialist trade practice manuals will be promulgated in 2023, to lead and reform the industry.

The construction industry sustains growth by designing, building and maintaining assets which generate livability and wellness for citizens of Hong Kong. Specialist Trade Contractors are vital in the delivery of the whole construction life cycle. The CIC will share the valuable trade experiences of the specialist trade contractors and simultaneously step-up regulatory actions to deter improper practices. The Registered Specialist Trade Contractors Scheme will continue to enhance listing requirements and expand designated trade to uphold professionalism as well as driving development of the sector.

Our frontline practitioners also represent a group of multi talents. Promulgating safer and healthier work environment will attract more new joiners. The CIC strives to provide smart and efficient registration services to bring values to registrants and to unite the workforce.

#### **Initiatives**

#### Reinvigorating the Image of the Specialist Trade Contractors of the Industry

- 3.1 Building up the Brand for Distinguished Specialist Trade Contractors
  - Launch the enhanced registration requirements of the Registered Specialist Trade Contractors Scheme (RSTCS) for eight designated trades by Q1 2023
- 3.2 Deterring Malpractice among Specialist Trade Contractor Sector
  - Conduct immediate regulatory actions by Q1 2023 against the registered companies upon serious incidents in construction sites
- 3.3 Striving for Professionalism of Specialist Trade Contractors
  - Perform holistic review of the registration requirements of the registered subcontractors by Q4 2023
- 3.4 Expanding the Coverage of the Specialist Trades
  - Expand the designated trades under Registered Specialist Trade Contractors (RSTC) by Q4 2023
- 3.5 Smoothing the Registration of the Grandfathered Companies for the New Designated Trades
  - Complete transitional arrangements for the grandfathered Group 1 RSTCs of the ninth and tenth designated trades (Suspended Ceiling and Tower Crane (Erecting, Dismantling and Altering Height)) by Q3 2023
  - Complete the Group 2 registration for RSTC under the eleventh designated trade (Building Drainage Installation) by Q3 2023



### Engaging with Stakeholders of the Industry to Continue Increasing the Capability of the Frontline Practitioners

- 3.6 Advocating Professionalism and Cross-disciplinary Collaboration among Specialist Trades to Enable Continuous Improvement and Sustainable Development
  - Collaborate with trade associations, Hong Kong Institute of Construction (HKIC) and other stakeholders to promulgate good practice of designated trades by Q4 2023
- 3.7 Elevating the Capability of Supervisors of the Specialist Trade Contractors
  - Organise training programmes, in collaboration with HKIC, to foster the frontline leaders of specialist trade contractors by Q4 2023
- 3.8 Strengthening Competencies and Skills of Frontline Practitioners
  - Formulate development programmes for registered workers on best practices of trades, use of technology and enhanced collaboration by Q4 2023
- 3.9 Alleviating the Foreseen Acute Demand for Skilled and Semi-skilled Workers
  - Launch the Construction Workers Professional Development Scheme to incentivize Registered General Workers to upskill to become skilled / semi-skilled workers by Q4 2023

Improving the Image of the Industry through a Coordinated Approach to Health and Safety

- 3.10 Developing a Solidarity and Caring Culture by Enhancing Construction Environment
  - Encourage stakeholders to enhance worker facilities in construction sites to uplift workers' occupational health and safety by Q4 2023
- 3.11 Offering Medical Examination Scheme for Registered Skilled and Semi-Skilled Workers
  - Provide medical examination for construction workers to alert health issues and promote healthy lifestyle



### Bringing Forward Smart, Digital and Customer Oriented Registration Services

#### 3.12 Widening the Use of Workers' Data through Digital Enablement

 Develop dashboard by Q3 2023 in analysis of registered worker data and daily attendance record, to provide insightful information for CIC and industry stakeholders to formulate training and worker deployment strategy

#### 3.13 Upholding Efficient and Excellent One-Stop Services

- Provide quality worker registration services and one-stop services on course and trade test applications, as well as other CIC initiatives and industry news to construction workers at Kowloon Bay and Nam Cheong Service Centres
- Promote e-channels including easyJob app and web-based electronic form for workers' registration

### 3.14 Driving Professionalism for Specialist Trade Contractors through RSTCS

Leverage RSTCS portal to process RSTCS applications

### 3.15 Driving Professionalism for Frontline Supervisors through the Technically Competent Persons Registration Scheme (TCPRS)

Adopt TCPRS portal and/or TCPRS app to process TCPRS applications

#### Driving Compliance to the Construction Workers Registration Ordinance

#### 3.16 Enforcing the Construction Workers Registration Ordinance (CWRO)

- Conduct site inspection by adopting proactive and preventive approach
- Conduct compliance check on the submission of Daily Attendance Records (DAR)
- Investigate and prosecute offenders for breaching the requirements of the CWRO
- Publicize and educate about the requirements of the CWRO to the industry practitioners



#### **Preamble**

Good corporate governance has always been regarded as a solid foundation for the sustainability of organisations. Times of uncertainty, such as the COVID-19 pandemic, have created challenges for the operation and development of organisations in different sectors and industries. At such times, corporate governance plays an especially important role in guiding organisations' development and protecting stakeholders' interests.

For the CIC, uncertainties in the past three years have challenged our businesses and operations, and have pushed us to adapt and address a range of issues, from staffing and logistics, to cybersecurity and communications. With effective corporate governance and sustainability practices, we have enabled CIC to pull through those difficult times and go further. The various initiatives of our Departments in the Corporate Services Division for 2023 aim at enhancing CIC's environmental, social and governance (ESG) practices and bolstering its long-term sustainability.

At the same time, the organisation's competitiveness should not be overlooked. To meet this goal, we develop our staff members' potential by introducing continuous learning programmes, succession planning, etc. Besides, we shall continue in 2023 to promote workplace digitalisation, implement Building Information Modelling – Facilities Management (BIM-FM) platform for the HKIC Kwai Chung Campus and Sheung Shui Campus, promote and increase industry usage of Levy E-Service 2.0 to enhance operational efficiency and communication with the contractors and authorised persons of the whole industry.

The CIC is firmly committed to building its hardware and software, both internally and externally, to meet the industry needs and to tackle all sorts of challenges and difficulties. Being the backbone of the organisation, the Corporate Services Division stands ready to support the CIC's work and development in all relevant areas.

#### **Initiatives**

# 4.1 Promoting and Increasing Industry Usage of Levy E-service 2.0 to Enhance Operational Efficiency and Communication with the Contractors and Authorised Persons

- Seek assistance from Development Bureau to enforce the use of E-Service 2.0 by relevant contractors and authorised persons for all governmental projects
- In coordination with key construction associations, promote the use of E-Service 2.0

#### 4.2 Promoting and Increasing Agility for Efficient Budget Utilisation

- Enhance Enterprise Resource Planning (ERP) System to increase flexibility of budget utilisation
- Collaborate with ITD for streamlining the approval flow and exploring financial reports revamp or new financial reports development

### 4.3 Uplifting Payments via Electronic Platforms to 85% of Total Transactions

- Enhance ERP payment module to allow batch payment processing
- Collaborate with ITD to streamline payment workflow

### 4.4 Speeding Up Month End Financial Closing (+33% from Now) after Month End

- Review and streamline existing month end closing procedures by upgrading ERP or automating process flow
- Liaise with various departments to shorten the departmental report submission time

### 4.5 Extending and Enhancing Digitalisation Initiatives in Procurement Process to Increase Overall Operation Efficiency

- Implement fully the e-tendering system at RFx process
- Digitalise the Tender Approval Form

- 4.6 Enhancing and Standardising the Terms and Conditions of All Procurement Related Legal Binding Documents to Minimise Any Potential Legal Risk
  - Edit, combine, standardise and enhance Procurement documents including COT, GCC, GCE and Assignment Brief in professional manner
- 4.7 Reviewing Procurement Manual to Improve and Streamline the Procurement Process
  - Propose, edit and enhance the Procurement Manual
- 4.8 Setup of the Training Ground at the Northern Extension of STT 1560 at Tai Po
  - Carry out tree felling and tree transplanting works
  - Arrange site clearance and site formation
  - Conduct E&M services installation
- 4.9 Conducting Replacement Work of Existing Lifts (Total 7 Nos.) at Kowloon Bay Campus (KBC), Kwai Chung Campus (KCC) and Sheung Shui Campus (SSC)
  - Replace 3 lifts at KBC
  - Replace 1 lift at KCC
  - Replace 3 lifts at SSC
- 4.10 Implementing BIM-FM Platform for Kwai Chung Campus and Sheung Shui Campus
  - Select suitable IoT devices for smart facilities management
  - Install IoT devices at designated locations of the campus buildings
  - Integrate BIM and IoT devices into the Estates Office Management System
- 4.11 Upgrading CCTV System with AI Features at Kowloon Bay Campus, Aberdeen Trade Test Centre, Zero Carbon Park and Tai Po Training Ground (Phase 1)

- Select suitable CCTV solution for the CCTV system upgrade
- Select applicable AI features to integrate with the CCTV system, as well as transmitting useful data and information to existing facility management system, to comply different kinds of performance and outcomes of smart facility management and operation

### 4.12 Setting Up a Centralised Control Platform for Real-Time Monitoring of CIC Facilities

- Revamp useful information based on data collected from existing ELV systems and IoT equipment in CIC premises
- Display revamped information through a centralised control platform for real-time monitoring of various conditions of CIC facilities in the premises

#### 4.13 Implementing Risk Assessment on CIC's Divisions and Departments

- Identify risks and mitigating measures to reduce risks by CIC's Divisions and Departments
- Assess the impact and likelihood of risks on CIC's operation.
   Determine if the mitigating measures result in lower residual risks

#### 4.14 Reviewing the Annual Update of Policies and Procedures

- Facilitate the annual review on policies and procedures update by CIC's Divisions and Departments
- Provide advice and insights on policies and procedures updates from controls perspective

### 4.15 Assuring Effectiveness, Efficiency and Value for Money of CIC Operations

- Adopt a combination of audit methodologies such as data analytics to review adequacy and effectiveness of financial, operational, and compliance controls on the major operational functions
- Identify areas and procedure that can be improved in CIC through investigation of complaints and suspicious cases
- · Propose audit recommendations by making reference to best

practices of the industry to assist the management to improve effectiveness and efficiency of the CIC operations

### **4.16** Strengthening Corporate Governance and Enhancing Secretariat Performance of the Organisation

- Advise on the best way forward/direction on governance issues and strategies
- Prepare, review and update secretariat guidelines, work procedures and mechanisms for the improvement of corporate governance
- Conduct training for secretariat staff, review their relevant performance and provide guidance for work enhancement

### 4.17 Bolstering Connectivity with Industry Leaders for Long-Term Developments of the CIC

- Support the development of the CIC Fellows and execute its initiatives by hosting various events
- Organise high-level meetings/forums and provide communication platforms for industry leaders to drive continued and sustainable development of the CIC

#### 4.18 Enhancing IT Governance

- Implement IT Service Management at CIC
- Develop Standard Operating Procedures and Service Levels for IT Services

#### 4.19 Enhancing Project Governance and Strategic Management

 Implement strategic Portfolio Management and Project Management Platform

#### 4.20 Implementing Workspace Digitalisation

- Develop a self-service portal for staff to request administrative support and IT services
- Implement an e-Signature Platform in Procurement and HR Department

 Develop a Customer Service Platform for tracking enquires across different channels

#### 4.21 Enhancing Digital Channels and User Experience

- Develop a SuperApp to incorporate electronic construction worker registration card
- Deploy a "Build Force" website to incorporate all workers' information into a single site
- Evolve iHub from a tour registration platform into an online community
- Revamp CIC & HKIC main sites and manage them with a central web content management platform

#### 4.22 Advocating Big Data and Data-Driven Culture

• Implement Data Management Platform

#### 4.23 Enhancing Cybersecurity

- Further enhance cybersecurity
- Enhance web application and API security

#### 4.24 Enhancing the Disaster Recovery Plan and Shorten Recovery Time

• Enhance the Disaster Recovery Plan and shorten Recovery Time

#### 4.25 Enhancing Performance of Network

- Implement network bandwidth control and prioritisation technologies
- Enhance site-to-site network speed from the slowest 10Mbps to 1000Mbps
- Consolidate 19 internet connection points to two for easier monitoring and higher speed

#### 4.26 Encouraging Waste Separation and Recycling in CIC Workplace

- Conduct pilot project for the intelligent Green Recycle Station
- Launch a Carbon Reduction Campaign to promote waste separation

#### 4.27 Encouraging Artificial Intelligence (AI) & Robotic Process Automation

 Enhance the robotic automation for virtual reception, cleaning and disinfection and security at CIC premises

#### 4.28 Developing a Central Workplace Management System

Deploy Smart Office Operation Management System

#### 4.29 Organising Construction Industry-wide PR Campaign

- Launch STEAM portals to schools teachers and students for enhancing the public understanding towards the industry
- Launch TV programmes for building the industry image
- Organise a series of Master Talks on construction industry to enhance the industry image

#### 4.30 Strengthening the Industry Communications and Networks

- Enhance and develop the mainland China social media platform
- Organise regular industry networking events
- Enhance the variety of publicity to strengthen the reach of target audiences

#### 4.31 Leading the Industry towards Low Carbon Adoptions

 Initiate a series of creative and sustainable activities including the first ESG Summit and Electrical Vehicle Exhibition

#### 4.32 Broadening Social Networks for Enhancing Brand Engagement

Strengthen the collaboration with different stakeholders to organise events

#### 4.33 Implementing New Initiatives of Renewable Energy

 Operate the new bio-diesel generator set and explore the enhancement of solar energy in collaboration with energy key stakeholders and adoptions of new technologies



### 4.34 Enhancing Effectiveness by Streamlining Work Process and Digitising Safety Monitoring and Analysis

- Review existing related major work progress
- Decide enhancement area and select related solution
- Coordinate with related department to implement enhancement measures
- Conduct trial run on new process workflow and fine-tune work arrangement

#### 4.35 Enhancing Continuous Learning Opportunities for Staff

- Monitor the implementation of the Career GPS Programme, including Internal and External Mentors, for Talent Development and Succession Planning
- Develop a tailor-made Talent Development Plan for all levels of staff to facilitate the grooming of multiple channels and layers of successors
- Implement the Talent Development Plan including exploring learning opportunities from industry stakeholders

# 4.36 Continuing with the Corporate Culture Building Journey, with Focus on Strengthen the Core Value of "Integrated" and Encourage Cross Team Collaboration

- Develop and implement the promotion of initiatives to strengthen the core value of "Integrated", including Team Building Workshop, Job Enrichment Program, Work Experience Program, etc.
- Review and enhance the Staff Orientation Program











#### **Construction Industry Council**

38/F, COS Centre, 56 Tsun Yip Street, Kwun Tong, Kowloon

www.cic.hk

(852) 2100 9000

enquiry@cic.hk

**(852) 2100 9090** 

f CICHK whice in Construction Industry Council



▶ hkcic © cic\_hk W Construction Industry Council Hong Kong