

## Chapter 15

# Planning, Land and Development

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The government invests in building new infrastructure to meet the wide-ranging needs of the community, amid fast-changing global competition and regional development, and is committed to enhancing the living environment of Hong Kong through effective land use planning, urban renewal, greening and heritage conservation.

The Development Bureau consists of two policy branches: the Planning and Lands Branch and the Works Branch.

The Planning and Lands Branch draws up policies on planning, development, land use and supply, urban renewal, building safety and land registration. Its policy objectives are to facilitate Hong Kong's development through effective planning and use of land, a steady and sufficient supply of land, a facilitative building plan approval system, efficient registration of land, promotion and regulation of building safety and timely maintenance, expediting urban renewal, harbourfront enhancement and revitalising existing built-up areas.

The Works Branch formulates public works policies and coordinates and monitors public works projects. It oversees policies on increasing land supply through reclamation outside Victoria Harbour, and developing rock caverns and underground spaces; the development of Lantau and a second central business district in Kowloon East; greening and tree management; water supply; slope safety; lift and escalator safety; flood prevention; the promotion of professional services; the construction industry; and heritage conservation.

The bureau oversees the Land Registry and the departments of Architectural Services, Buildings, Civil Engineering and Development, Drainage Services, Electrical and Mechanical Services, Lands, Planning, and Water Supplies.

## **Planning**

### ***Developable Land Supply Forecast***

In October, the government updated the 10-year forecast of developable land supply and estimated that about 3,370 hectares of developable land will be made available in the next decade. Within this pool of land, sites already earmarked for housing can produce about 515,000 housing units, and sites earmarked for economic uses can provide a gross floor area of about 11,222,000 square metres. The government will continue to press ahead with various major land creation projects with a view to ensuring a stable and sustainable land supply in the long run.

### ***Streamlining Development Procedures***

The Development (Town Planning, Lands and Works) (Miscellaneous Amendments) Ordinance 2023 took effect on 1 September, streamlining statutory procedures relating to town planning, land resumption, reclamation, roads and railway works. The time required to turn 'primitive land' into 'spade-ready' sites for large-scale projects, such as New Development Areas (NDAs), will be reduced from 13 years to seven, while typical projects outside NDAs will be reduced from at least six years to four.

## **Major Land Creation Initiatives**

The government is pursuing the following studies to look into various development opportunities:

- the Northern Metropolis with a total area of 30,000 hectares of which 3,000 hectares will be newly developed;

- the Kau Yi Chau artificial islands, which total some 1,000 hectares;
- near-shore reclamation projects, including Lung Kwu Tan (together with replanning of the River Trade Terminal site and coastal areas of Tuen Mun West), Ma Liu Shui, Sunny Bay and Road P1 (Tai Ho-Sunny Bay Section);
- a new station at Pak Shek Kok on the East Rail Line to unlock the development potential of land and improve connections to the Hong Kong Science Park;
- replanning of Tseung Kwan O Area 137 for predominantly residential use; and
- cavern and underground space development.

### **Major Land Supply Initiatives in Short to Medium Term**

In the short to medium term, the most effective way of augmenting land supply is to make better use of developed sites in urban areas, new towns and land in the vicinity of infrastructure by increasing development intensity and changing land use.

The Planning Department has identified more than 210 sites with housing development potential, which are capable of providing over 310,000 flats in total, some 70 per cent of which will be public housing.

As at the year end, 173 potential housing sites had been zoned or rezoned for housing to provide about 244,600 public and 47,300 private housing flats. Statutory rezoning procedures are being carried out for another site estimated to provide about 2,700 public housing flats.

Of around 1,600 hectares of brownfield sites in the New Territories, about 60 per cent will gradually be developed into high-density housing and other uses. Redevelopment of these sites helps make better use of precious land resources and enhance land use efficiency. The government assists displaced brownfield operations to relocate their business by providing monetary compensation in parallel with facilitation services.

Under the Land Sharing Pilot Scheme, the development potential of private land will be unleashed through the provision or upgrading of infrastructure. The successful applicants, in return, are required to hand over part of their land to the government for public housing or Starter Home development. As at year end, three more applications have been endorsed in principle by the Steering Committee on Land and Housing Supply, under the authority delegated from the Chief Executive in Council. Together with three applications endorsed in principle last year by the Chief Executive in Council, a total of about 30,000 housing units, including about 21,000 public housing or Starter Home units are to be provided, involving about 40 hectares of land.

The government also facilitates development and redevelopment on existing land. The bureau has consolidated and rationalised standards and definitions in scrutinising development proposals, in order to streamline the approval process. The parallel processing of lease

modification applications with rezoning applications approved by the Town Planning Board has also been implemented.

## **Major Land Supply Initiatives in Medium to Long Term**

In the medium to long term, the government is taking forward large-scale land supply projects including developments in the Northern Metropolis and Kau Yi Chau artificial islands. These involve releasing large plots of brownfield sites and deserted agricultural land as well as reclamation in environmentally less sensitive waters.

### ***Northern Metropolis***

The Northern Metropolis covers a vast expanse of land in the northern part of Hong Kong. The metropolis is divided into four major zones – the High-end Professional Services and Logistics Hub; Innovation and Technology Zone; Boundary Commerce and Industry Zone; and Blue and Green Recreation, Tourism and Conservation Circle – each with a distinctive strategic positioning and development theme. The Northern Metropolis Action Agenda, announced in 2023, outlines the development blueprint for the metropolis. Major projects include:

#### ***Hung Shui Kiu/Ha Tsuen NDA***

The Hung Shui Kiu/Ha Tsuen NDA will provide about 66,700 new flats for an additional population of 184,000, along with 150,000 new jobs. First phase development works commenced in 2020. The first dedicated rehousing estate is expected to start intake in 2024. A land-use review study on the Lau Fau Shan, Tsim Bei Tsui and Pak Nai areas, as an extension of the NDA, was commissioned in 2022 and a public consultation on the development proposal will launch in 2024.

#### ***Yuen Long South NDA***

The Yuen Long South NDA will provide about 32,900 new flats for an additional population of 98,700 and produce about 13,700 new jobs. Site formation and infrastructure works of the first phase development and the detailed design for parts of second and third phase development commenced in August 2022. First population intake is expected in 2029. Reviews for intensification and a possible extension to cover the adjacent areas for the third phase are under way and expected to be completed in 2024.

#### ***San Tin Technopole***

The government announced the land use proposal of San Tin Technopole in May. Together with the Hong Kong-Shenzhen Innovation and Technology Park in the Loop, about 300 hectares of land will be made available for innovation and technology (I&T) development in phases, providing the space for Hong Kong to become an international I&T hub and create synergy with I&T developments in Shenzhen.

#### ***Hong Kong-Shenzhen Innovation and Technology Park in the Loop***

The Hong Kong-Shenzhen Innovation and Technology Park in the Loop will occupy 87 hectares of land. The first batch of land parcels was provided at end-2021 for superstructure development and the first batch of three buildings are being built for completion by phases from end-2024 onwards.

***Ngau Tam Mei***

A land-use review study was commissioned in 2021 to ascertain the feasibility of comprehensive development of the brownfield cluster and the wider area in Ngau Tam Mei taking account of the development potential brought about by the proposed Ngau Tam Mei Station of the Northern Link. The study will also explore land uses to complement the San Tin Technopole. The development proposal will be announced in 2024.

***Kwu Tung North/Fanling North NDA***

The Kwu Tung North/Fanling North NDA will provide about 86,200 new flats, nearly 70 per cent of which will be public housing, to accommodate an additional population of about 226,700. It will also generate about 53,100 new jobs. Development works started in 2019 for phased completion by 2031. The intake for first batch private housing started in end-2022 and the first intake for public housing is expected in 2026. A feasibility study commissioned in 2022 to review the land use of the Ma Tso Lung areas and surrounding sites, as an extension of the NDA, is also in progress. The development proposal will be announced in 2024.

***New Territories North New Town (including Lo Wu/Man Kam To)***

New Territories North New Town covers an area of about 1,500 hectares. Given its locational advantage with three boundary control points, the area can be developed into a boundary control point business district and a base for emerging industries. The related planning and engineering study was commissioned in 2021, which will formulate the land use proposals for the area.

***Kau Yi Chau Artificial Islands***

The Kau Yi Chau artificial islands will provide 1,000 hectares of land, which is planned with liveable, smart, green and resilient development strategies. They will also serve as an important transportation node connecting Hong Kong Island, Lantau Island, the airport, New Territories West and Qianhai of Shenzhen. The new railway and road network will enhance the overall traffic network of Hong Kong and ease the traffic congestion in New Territories West. The land for the islands is planned in a 'future ready' manner, and will help meet the goal of achieving carbon neutrality by 2050.

The artificial islands are also well positioned to tap the economic opportunities from overseas and the Guangdong-Hong Kong-Macao Greater Bay Area (GBA). The government released the preliminary proposals on the reclamation limits, land uses, transport infrastructure and financing options for the islands and completed the collection of public views in March. The target is to commence the reclamation works within the term of the current government.

The Committee on the Financing of Major Development Projects, led by the Financial Secretary, was established in December and will continue to explore specific financial arrangements for major land and transport infrastructure projects, including the Kau Yi Chau artificial islands.

***Tung Chung New Town Extension***

The Tung Chung New Town Extension will provide about 62,100 flats and a commercial hub with a gross floor area of about 877,000 sq m for office, retail and hotel use along with about

40,000 new jobs. Reclamation works were substantially completed in Tung Chung East and the first phase of site formation and infrastructure works started in 2021. The first population intake is expected in 2024-25.

### **Tseung Kwan O Area 137**

Tseung Kwan O Area 137, covering an area of about 100 hectares, will be developed into a predominantly residential community, providing about 50,000 units for a population of about 135,000. The government aims at commencing works progressively starting from 2025 with a view to enabling first population intake in 2030. It will be served by the Tseung Kwan O Line southern extension and Tseung Kwan O-Yau Tong tunnel recommended under the *Hong Kong Major Transport Infrastructure Development Blueprint*.

### **Cavern Development**

The government is taking forward a number of projects to relocate government facilities to caverns so as to release land for housing and other beneficial uses. The construction works for the relocation of Sha Tin Sewage Treatment Works and Diamond Hill Fresh Water and Salt Water Service reservoirs are under way.

Studies on investigation and design for the relocation of Yau Tong Group Fresh Water and Salt Water Service reservoirs and Tsuen Wan No 2 Fresh Water Service Reservoir; and feasibility studies on relocating Tuen Mun Water Treatment Works, Tsing Yi East Group Fresh Water and Salt Water Service reservoirs, and Shau Kei Wan Low Level Salt Water Service Reservoir are also under way.

Construction works of the Joint Cavern Development at Anderson Road Quarry Site for the Public Works Central Laboratory and Government Records Service's archives centre commenced in July for target completion within five years.

The government is also undertaking the study of underground quarrying and cavern development. Apart from the goal of forming development cavern spaces, underground quarrying is a local source of rock materials. The pilot site is at Lam Tei in Tuen Mun.

### **Underground Space Development**

The government continues its pilot study on underground space developments in Tsim Sha Tsui West, Causeway Bay, Happy Valley and Admiralty/Wan Chai, which is targeted for completion in 2024.

### **Revitalisation of Industrial Buildings**

As at end-2023, the Town Planning Board had approved 70 applications for the redevelopment of industrial buildings. It allowed the plot ratios of most of these applications to increase by up to 20 per cent to optimise the use of land resources, having confirmed the technical feasibility of the proposed increases in development density.

## Land Disposal

### *Land Sale Programme*

Government land is usually disposed of through public sale for private residential, commercial and other developments. The annual Land Sale Programme includes sites with potential for sale in that financial year. The government announces sites every quarter to be tendered to provide transparency and certainty for the market.

In 2023, four residential sites, one commercial site and one telecommunication station site, totalling about 5.63 hectares, were sold for about \$13.5 billion. These sites were expected to provide about 2,370 private residential flats and up to about 154,240 sq m of gross floor area for commercial or other economic uses.

### *Sites for Economic Uses*

On the supply of sites for economic uses, the Development Bureau put forth a proposal in November 2022 to develop multi-storey buildings for modern industries. It aims to promote the development of industries and accommodate brownfield operations in a land-efficient manner. The first batch of sites was included in the 2023-24 Land Sale Programme.

### *Land Exchange*

Private landowners may apply to the Lands Department for a lease modification or land exchange so as to, for instance, redevelop the site based on the town plan. The department acts as a private landlord in considering such applications. Approvals are subject to terms and conditions that may include the payment of premiums and administrative fees.

In 2023, the department concluded 94 such transactions, involving about 762.5 hectares and about \$19.7 billion in land premiums. These transactions are expected to provide about 10,170 residential flats and up to 142,200 sq m of gross floor area for commercial or other economic uses.

## Major Planning Studies and Development Projects

### *Kowloon East*

Kowloon East, comprising the Kai Tak Development and the Kwun Tong, Kowloon Bay and San Po Kong business areas, has a total area of about 514 hectares. Under the Energizing Kowloon East initiative, the area is gradually transformed into the second core business district to sustain Hong Kong's economic development.

By facilitating conversion or redevelopment of existing industrial buildings, as well as taking forward new development projects, commercial floor space in Kowloon East had doubled from 1.7 million sq m in 2012 to more than 3.4 million sq m in 2023, and will further increase to over 4 million sq m.

### *Island South*

The Development Bureau updated measures under the Invigorating Island South Conceptual Master Plan for Wong Chuk Hang, Aberdeen and Ap Lei Chau in October. Since 2021,

23 measures to improve connectivity, walkability, public spaces and the typhoon shelter waterfronts have been completed. The hiking trail between Yip Hing Street and Aberdeen Country Park was completed in December.

On major projects, site investigation works for the expansion of Aberdeen Typhoon Shelter were largely completed, while a technical feasibility study for the redevelopment and enhancement of recreation and sports facilities in Wong Chuk Hang was completed in September. A study on the Round-the-Island Trail commenced in May, with works progressively rolling out.

### **Harbourfront Enhancement**

The government continued to connect sections of promenade and provide public space along both sides of Victoria Harbour in 2023. Through collaboration with the Harbourfront Commission, 39 harbourfront sites had been opened from October 2020 to end-2023, extending the promenade along Victoria Harbour to about 27km. The longest continuous stretch, from Kennedy Town to Fortress Hill, was 9km.

During the year, 1.5km of promenades also opened in Kowloon with new harbourfront sites including Cha Kwo Ling Promenade, Tsui Ping Seaside, a promenade near Kwun Tong Ferry Pier under the Kwun Tong Action Area, a number of public open spaces under private development in Kai Tak, the Hoi Sham Park extension, a promenade at To Kwa Wan Preliminary Treatment Works, an open space at the dry weather flow interceptor in Cherry Street. The first waterfront open space in Sham Shui Po District, the Cheung Sha Wan Promenade, fully opened in July.

As part of the 'Night Vibes Hong Kong' campaign, the government organised a series of activities, including stalls selling food and beverages, concerts and drone performances, at harbourfront sites in Wan Chai, Kennedy Town and Kwun Tong between September and November.

### **Kai Tak**

The government is providing essential infrastructure to serve the phased implementation of the Kai Tak Development, which covers the former airport precinct and the adjoining areas and has a footprint of about 320 hectares.

### **Hong Kong Boundary Crossing Facilities Island of Hong Kong-Zhuhai-Macao Bridge**

The government has accepted a number of proposals by the Airport Authority Hong Kong for the development on the Hong Kong Boundary Crossing Facilities Island, including commissioning automated car parks for transfer passengers and visitors using the Hong Kong-Zhuhai-Macao Bridge, building the Airport City Link connecting it to the airport's Skycity, and constructing the Hong Kong International Aviation Academy's campus and dormitory.

### **Cycle Track Network in New Territories**

A cycle track network is being developed to connect Ma On Shan in the east to Tuen Mun and Tsuen Wan in the west. The Tuen Mun to Ma On Shan section and the Tsuen Wan waterfront



section, totalling 62km, are open, while a 1km extension to Sam Mun Tsai launched in July. Of the remaining 17km between Tsuen Wan and Tuen Mun, construction of the section from Tuen Mun to So Kwun Wat and design of the section from So Kwun Wat to Ting Kau will both commence in 2024. The design of the section between Ting Kau and Bayview Garden in Tsuen Wan is under way.

## **Urban Renewal**

Urban renewal improves living conditions in old urban areas, primarily through redevelopment and rehabilitation of dilapidated buildings. The Development Bureau formulates policy on urban renewal and oversees the work of the Urban Renewal Authority (URA). The URA also provides financial assistance and technical support to building owners for building rehabilitation and repair.

In 2023, the bureau worked with the relevant government departments and the URA to introduce new planning tools recommended by the District Study on Yau Ma Tei and Mong Kok to incentivise private redevelopment. The bureau is also working with the URA to conduct two district planning studies on Tsuen Wan and Sham Shui Po.

## **Building Development**

### ***Private Sector***

In 2023, superstructural works started at 105 sites, covering a gross floor area of 1.53 million sq m. A total of 565 buildings, with a gross floor area of 2.36 million sq m, were completed at a cost of \$102.7 billion.

### ***Public Sector***

The Architectural Services Department provides architectural and associated professional and project management services for the design, construction and upkeep of government buildings and public facilities. It explores the latest construction technologies with academics, local and mainland research and construction institutes and private sector and applies innovative building solutions, as well as inclusive and green building design to provide a more sustainable, resilient and human-centric built environment.

In 2023, the department completed 30 projects and commenced 31 projects, including Light Public Housing projects which will provide 30,000 units in five years. The department was recognised for its excellence in design of public architecture and won 40 regional and international awards in 2023.

### ***Built Heritage Conservation***

The government's heritage conservation policy is to protect, conserve and revitalise as appropriate historical and heritage sites and buildings through sustainable approaches for the benefit of present and future generations. Due regard is given to development needs in the public interest, respect for private property rights, budget considerations, cross-sectoral collaboration and the engagement of stakeholders and the public.

Thirteen projects under the Development Bureau's Revitalising Historic Buildings Through Partnership Scheme are in operation, including one that had its soft opening in December and will fully operate from the first half of 2024. Revitalisation works for two other projects are expected to complete in phases from the second half of 2024 to the second quarter of 2026. The pre-works preparation of five other projects are in progress.

The Built Heritage Conservation Fund operates two funding schemes to support public engagement and research. The first batch of projects under the Funding Scheme for Public Engagement Projects were completed and applications for the second batch were received from July to October. As regards the Funding Scheme for Thematic Research, reports of six research projects were completed and the government conducted a review of the scheme.

The Development Bureau monitors any works on or development of declared monuments, proposed monuments, graded historic buildings or buildings proposed to be graded and discuss preservation options with the owners concerned. The bureau approved grants for maintenance works at six historic buildings under the Financial Assistance for Maintenance Scheme on Built Heritage in 2023.

During the year, the bureau undertook restoration and repair works at monuments including the Man Mo Temple Compound in Sheung Wan, Tat Tak Communal Hall in Yuen Long and Morrison Building in Tuen Mun. Archaeological investigations were conducted in Tuen Mun, Tai Po, Yuen Long and Islands districts.

The Antiquities Advisory Board advises the government on antiquities and monuments. As at end-2023, grading assessment of the heritage value of 1,652 buildings had been completed to provide an objective basis for guiding conservation efforts. During the year, Tin Hau Temple at Joss House Bay in Sai Kung and the Chinese YMCA of Hong Kong in Sheung Wan were declared as monuments.

## **Development Framework**

### ***Town Planning Board***

The Town Planning Board is a statutory body that oversees the preparation and review of statutory plans and considers planning applications. In 2023, it amended 18 statutory Outline Zoning Plans and updated about 30 documents related to statutory planning, including the board's procedure and practice, guidelines, planning application forms, guidance notes and information pamphlets.

### ***Hong Kong Planning Standards and Guidelines***

The Hong Kong Planning Standards and Guidelines provide criteria for determining the scale, location and site requirements of various land uses and facilities applicable to planning studies, town plans and development control. These are reviewed from time to time by relevant bureaus and departments to take account of changes in government policies, demographic characteristics, and social and economic trends. In 2023, amendments related to open space provision, recreational facilities, urban design guidelines and electric vehicle charging facilities at vehicle parks were in progress.

### ***Planning Control and Enforcement***

The Planning Authority tackles unauthorised developments in the development permission areas and regulated areas. It may serve statutory notices on landowners, occupiers or responsible persons requiring them to stop or discontinue an unauthorised development within a specified time. A further statutory notice may be served to require reinstatement of the land. Non-compliance is a statutory offence.

In 2023, the authority discovered 367 new unauthorised developments, and issued 2,267 warning letters or reminders involving 448 cases, 1,908 enforcement notices involving 338 cases, 742 reinstatement notices involving 110 cases and 2,309 compliance notices involving 366 cases. A total of 106 defendants in 49 cases were convicted. The enforcement and prosecution actions resulted in the discontinuation of 308 unauthorised developments on 64.31 hectares of land, while another 49 occupying 9.1 hectares of land later obtained planning permission.

### ***Land Control and Lease Enforcement***

The Lands Department carries out squatter control work. There are about 375,900 surveyed squatter structures throughout the territory, and they are tolerated until they cease to exist or are to be cleared for development, environmental improvement or safety reasons.

In 2023, the department demolished 280 illegal unauthorised squatter structures that were in breach of the squatter control policy, in addition to unauthorised structures cleared in the context of land control and lease enforcement. It also handled about 16,500 cases of reported unlawful occupation of government land and about 1,780 cases involving breaches of lease conditions.

The department keeps a register of man-made slopes which records their maintenance responsibility. It inspects and maintains about 17,500 registered man-made slopes regularly, and carried out maintenance works on about 7,200 of them in 2023.

During the year, the department provided advice for about 1,150 development control submissions relating to trees and landscape on leased land and about 1,240 cases of tree issues on unallocated government land. It also conducted ad hoc vegetation maintenance work for about 23,340 cases.

### ***Small House Policy Administration***

The Lands Department administers the small house policy for indigenous villagers in the New Territories and the rebuilding of old village houses. In 2023, the department approved 686 applications to build small houses and 312 applications to rebuild old village houses. The department also processes rent exemption requisitions for indigenous villagers' rural properties.

### ***Land Conveyancing***

The department provides legal advice and conveyancing services for government land transactions. It drafts all government land disposal and lease modification documents, checks titles in land acquisitions, administers the Lands Department Consent Scheme, approves Deeds of Mutual Covenant, processes apportionments of premiums and government rents, and

recovers arrears of government rents by taking re-entry or vesting action. In 2023, it approved 39 applications for the sale of about 21,200 residential flats under construction and approved 43 Deeds of Mutual Covenant in respect of residential development.

### **Land Resumption**

Private land may be resumed for public purposes under relevant ordinances which provide compensation for the property's value and business losses. If the amount of compensation cannot be agreed, either party may seek determination by the Lands Tribunal. The department is involved in resuming land for public works, urban renewal and railway development projects. In 2023, about 39,300 sq m of private land was resumed and about \$5.44 billion of compensation was paid for resumptions supporting public works projects, including public housing development; \$229 million compensation was paid to owners of 31 resumed properties affected by 20 urban renewal projects; and \$58 million of compensation was paid in resumptions supporting railway projects.

### **Optimising Use of Vacant Government Sites under Short-term Tenancy**

The Development Bureau funds non-governmental organisations to carry out one-off, basic and essential restoration works on vacant government sites and school premises fit for community, institutional or other non-profit-making use. As at end-2023, funding had been approved to take forward community projects at 27 vacant sites or premises.

### **Land Registration**

The Land Registry registers land-related documents and keeps land records in electronic format for public search. Major types of documents include sale and purchase agreements, assignments, and mortgages and legal charges. More than 3 million land registers and about 27 million land-related documents can be retrieved electronically. In 2023, 394,417 land-related documents were lodged for registration. The registry also provides an email notification service, Property Alert, to help property owners monitor any documents delivered for registration against their properties.

Hong Kong operates a deeds registration system. To enhance title certainty and simplify conveyancing procedures, this system will be replaced with a title registration system. The Land Registry has forged consensus with key stakeholders on first implementing title registration on newly granted land, meaning land granted by the government after a specific date, and is working on the amendment legislation, with a view to introducing the relevant bill in 2024.

### **Survey, Mapping and Geospatial Information Service**

The Lands Department provides geospatial information to promote the wider use of spatial data and locational information. It formulates and implements survey, mapping and geospatial data policies and standards; maintains a data bank of geospatial and land cadastral data; supports the implementation of the Common Spatial Data Infrastructure (CSDI); and develops 3D digital maps and a Building Information Modelling-Geographic Information System Data Repository. It also carries out geodetic, mapping and land boundary surveys as well as providing cartographic and reprographic services to support land and building developments.

The department updates digital and paper maps, maintains the Land Information System, integrates geospatial data and provides free digital maps, web maps, map application programming interfaces, dashboards and mobile applications to the public. In 2023, it released the 3D digital maps covering Kowloon East and Kowloon Central for free public download. It also launched the online platform Open3Dhk to facilitate easy viewing of the 3D digital maps.

The department also maintains the geodetic survey control network and the Satellite Positioning Reference Station Network System, which form the positioning infrastructure for Hong Kong.

### ***Development of Common Spatial Data Infrastructure***

The Development Bureau releases over 750 spatial datasets at the CSDI portal for use by the government, trade and public. The bureau continues to promote the use of CSDI, including the operation of the Geospatial Lab, and organises various activities, such as exhibitions, competitions, workshops and talks, to harness the creation, analysis and applications of spatial data.

### ***Use of Building Information Modelling***

The government promotes the adoption of Building Information Modelling (BIM). A roadmap was promulgated in 2023 on the adoption of BIM for preparation and submission of building plans for consultation with the industry. Moreover, the Buildings and Lands departments are jointly developing software for automating compliance checks by the industry on the floor area information in relevant plans, which is expected to be launched in 2024.

### ***Building Safety and Maintenance***

The Development Bureau works with the Architectural Services Department, Buildings Department and partner organisations to enhance building safety and efficiency.

Building inspections and maintenance of government buildings and public facilities (except public housing) are mainly the responsibilities of the Architectural Services Department. In 2023, the total expenditure on maintenance works and refurbishment and improvement works was \$850.9 million and \$3,691.7 million respectively, involving an aggregate building floor area of 34 million sq m. The Architectural Services Department continues to apply innovative technology to enhance safety and efficiency in building maintenance works.

The Buildings Department enforces the Mandatory Building Inspection and Mandatory Window Inspection schemes to tackle building decay at its root by requiring owners of target buildings to inspect and repair their buildings and windows. In 2023, the department issued statutory notices to 603 buildings for building inspections and 592 buildings for window inspections under these schemes.

In response to several incidents in 2023 involving fallen concrete or rendering from external walls of buildings, the bureau announced measures to step up enforcement and strengthen support for owners or owners' corporations of buildings to comply with notices. The bureau also set up a standing communication mechanism to strengthen the collaboration among the

Buildings Department, the Home Affairs Department and the URA to follow up on compliance with these notices.

The government, in partnership with the URA, supports building owners in need to carry out repairs and maintenance. In 2023, subsidies and loans exceeding \$630 million were granted to eligible property owners through assistance schemes, including Operation Building Bright 2.0, the Building Maintenance Grant Scheme for Needy Owners, the Building Drainage System Repair Subsidy Scheme and the Lift Modernisation Subsidy Scheme. As at the year end, around 3,202 applications had been approved to join the 'Smart Tender' Building Rehabilitation Facilitating Services scheme at a concessionary rate, since the scheme was launched in 2016 to provide technical support to building owners in procuring services for repair works.

To tackle unauthorised building works, the Buildings Department accords priority to enforcement actions against such works that are new or under construction, and those which constitute an obvious hazard or imminent danger to life and property. The department also removes unauthorised building works that have been erected on building exteriors, including rooftops, podiums and yards; are basements; are associated with subdivided units; are found in New Territories exempted houses; or are unauthorised signboards. In 2023, the department served 9,109 statutory removal orders and removed 29,585 unauthorised building works.

To combat unauthorised building works in houses and illegal occupation of government land along the seashore of Redhill Peninsula, the Buildings and Lands departments commenced a large-scale joint operation to focus inspection on houses situated on the slope along the seashore in accordance with the risk-based enforcement approach. The departments have started to issue removal orders or rectification notices to relevant owners and will consider legal action if there is sufficient evidence.

The Buildings Department instigated 4,395 prosecution cases and secured 2,174 convictions in court for failure to comply with the removal orders, resulting in fines totalling \$15.98 million. The department launched various publicity campaigns to promote a culture of building safety.

### ***Lifts and Escalators***

The Electrical and Mechanical Services Department carries out regular inspections and updates codes of practice relating to the design, construction and maintenance of lifts and escalators. In 2023, the department continued its \$4.5 billion Lift Modernisation Subsidy Scheme with the URA to enhance the safety of old lifts. The scheme aims to subsidise the modernisation of about 8,000 old lifts.

## **Infrastructure**

### ***Infrastructure Investment***

The government builds new infrastructure and improves existing facilities to meet economic development needs and enhance the living environment. In the coming five years, the average capital works expenditure will be about \$90 billion.

### ***Project Strategy and Governance***

The bureau has been devising and implementing initiatives to strengthen the gateway process for cost management, enhance project delivery capability, lead strategic developments to improve cost-effectiveness, and enhance collaboration with international counterparts and local industry stakeholders.

#### ***'Construction 2.0'***

The government's 'Construction 2.0' initiative encourages the construction industry to reform and upgrade by advocating innovation, professionalisation and revitalisation. It also promotes the application of I&T, including high productivity construction, digitalisation of the construction industry, BIM and the Smart Site Safety System. It coordinates works departments' efforts for promoting applied research and development in public works projects to raise productivity, strengthen works supervision and quality assurance, and improve site safety.

Apart from mandating designated government buildings in capital works projects to adopt modular integrated construction (MiC), the government is formulating a series of measures to strengthen the supply chain of MiC modules and ways to enhance collaboration with the supply chain in the GBA; and is further promoting the adoption of high productivity construction such as MiC and multi-trade integrated mechanical, electrical and plumbing by the private sector, with a view to reducing labour demand and expediting housing supply.

The government monitors project delivery and operation of facilities performance through data integration and analysis under the integrated Capital Works Platform so as to lead and promote digitalisation of the construction industry.

### ***Construction Industry***

#### ***Construction Industry Council***

The Construction Industry Council supports the development of the construction industry, in particular by training construction workers. The council was allocated \$1 billion in 2022 to increase the number of training places and the amount of allowance of its training programmes, with a view to attracting more new blood to join the construction industry and upskilling and retaining in-service workers. The council has increased its training quota from 10,000 places in the 2022-23 academic year to at least about 12,000 places in each academic year from 2023-24 to 2027-28.

Among about 635,000 registered construction workers, 246,000 were semi-skilled or skilled workers. The government works with the Council to monitor the construction industry's manpower supply and demand, and support training for local workers. On the premise of attaching priority to the employment of local workers, the government launched the Labour Importation Scheme for the Construction Sector in July as a supplementary measure to alleviate the manpower shortage of the sector. The number of quotas were capped at 12,000 under the scheme.

The government also works with the council to operate the Construction Innovation and Technology Fund. As at November, about \$1,080 million had been approved since the fund's

launch in 2018, subsidising about 1,100 enterprises to adopt technologies and supporting about 15,000 technology training places.

The council administers and promotes the Registered Specialist Trade Contractors Scheme to build up the capability of contractors in 14 specialist trades. The scheme imposes registration requirements on safety, management, job experience, execution, finance and integrity management to uplift professionalism of the industry.

### *Promotion of Professional Services*

The National 14th Five-Year Plan supports the high-quality development of the GBA and the Development Bureau has been working with relevant Mainland authorities to promote measures benefitting Hong Kong, including the promulgation of a registration system in the nine Mainland cities of the GBA, which allows eligible Hong Kong architectural and engineering related enterprises and professionals to acquire equivalent qualifications in the Mainland through a simple registration process, thereby facilitating them to provide direct services in those nine cities.

Similar measures have also been promulgated in Qianhai and Hengqin. In early 2023, the Qianhai Authority appointed Hong Kong architectural and engineering consultants via open tender to provide one-stop services to implement two pilot school design projects following Hong Kong's public works project management practices, and successively launched a number of construction projects for bidding by Hong Kong contractors.

### *Pier Improvement Programme*

Among the 10 public piers covered by the first phase of the Pier Improvement Programme, the new Pak Kok Pier on Lamma Island was commissioned in 2022; construction works for seven piers are under way, of which Kau Sai Village Pier and Lai Chi Chong Pier are expected for completion in 2024; and the improvement works for two piers are under detailed design. Of the 13 public piers covered by the second phase, construction works for Sam Mun Tsai Village Pier in Tai Po and Ma Wan Chung Pier on Lantau Island, engineering feasibility studies of seven piers and detailed design of the remaining four piers are ongoing.

### **Drainage Services**

The Drainage Services Department manages about 2,810km of storm water drains and watercourses and 27 village flood pumping schemes. It carries out drainage improvement works to cater for local developments and address probable effects of climate change.

The department commenced the Yuen Long Barrage Scheme in May, which will improve the environment of the Yuen Long town nullah and enhance the flood protection level of the town centre.

The department inspects, clears and repairs drainage systems regularly. In 2023, it inspected about 2,300km and cleared about 790km of drains and watercourses.



## Slope Safety

The Civil Engineering and Development Department improves slope safety by adopting high standards and advanced technology, ensuring all new man-made slopes meet safety standards, improving the safety of existing man-made slopes and mitigating natural terrain landslide risks. The department also operates a landslip warning system to alert the public to landslide danger during periods of heavy rainfall.

Under the Landslip Prevention and Mitigation Programme, the department upgraded 152 government man-made slopes and mitigated the landslide risk of 35 natural hillside catchments in 2023. It also conducted safety screening studies for 100 private man-made slopes.

## Water Supplies

### *Water from Guangdong*

Since 1965, Hong Kong has been importing raw water from the Dongjiang River. The Dongjiang water supply agreement maintains flexibility in the daily supply rate, ensuring a reliable source of supply and avoiding wastage of precious water resources. In 2023, the city imported about 820 million cubic metres of Dongjiang water. The agreement to supply Dongjiang water to Hong Kong was renewed until 2026 with the Water Resources Department of Guangdong Province in December.

### *Water Storage and Consumption*

Full water supply was maintained throughout the year, during which 2,774 millimetres of rainfall was recorded. Storage reservoirs held 380 million cubic metres of water at the end of 2023.

There were about 3.2 million water customer accounts as at the year end. About 1,067 million cubic metres of fresh water was consumed in 2023, with an average daily supply of about 2.92 million cubic metres. Another 324 million cubic metres of sea water was supplied in 2023 for toilet flushing.

### *Total Water Management*

The government's Total Water Management Strategy focuses on containing the growth of fresh water demand and building resilience in fresh water supply with diversified water resources to cater for the extreme effects of climate change. The first stage of the Tseung Kwan O Desalination Plant started producing drinking water on 22 December.

### *Waterworks*

The main works for the in-situ re-provisioning of Sha Tin Water Treatment Works (South Works) and Siu Ho Wan Water Treatment Works extension are being carried out for commissioning in 2026 and 2028 respectively.

### *Drinking Water Safety*

The Water Supplies Department tests water samples collected from sources and the supply and distribution systems to consumers' taps to ensure the quality of drinking water.

The department's Water Safety Plan Subsidy Scheme encourages the implementation of water safety measures to further safeguard drinking water safety. By end-2023, the department had received applications from more than 1,300 eligible buildings.

In September, the department implemented a voluntary labelling scheme for drinking water dispensers and filters, which meet the requirements of drinking water safety. Registered products will carry a QR code label for consumers' easy identification.

## **Greening, Landscape and Tree Management**

The Development Bureau is responsible for formulating policies and coordinating landscape and tree management strategies and initiatives. It promotes a holistic approach to landscape and tree management, advocating adequate space allocation for new planting, proper selection of plant species, good landscape design and planting practices, and proper tree maintenance, with public safety as a paramount consideration.

The Study Sponsorship Scheme and Trainee Programme under the Urban Forestry Support Fund encourages youngsters to join the arboriculture industry. Enhanced measures for both the scheme and programme were implemented on 1 July benefitting more youngsters and practitioners of the industry. By end-2023, over 800 sponsorship applications had been received and around 190 trainees had participated in the programme.

Since the launch of the Registration Scheme for Tree Management Personnel in 2020, around 850 applicants have registered as tree management personnel. The government has been employing registered personnel in new construction and maintenance contracts to enhance the quality of tree management.

In the year, an array of enhancement measures on roadside tree planting and maintenance were developed and implemented based on the findings of a review. The measures included expanding the scope of tree risk assessment, more extensive use of technology in tree management and promulgating new guidelines on the soil volume for tree planting.

## **Websites**

Architectural Services Department: [www.archsd.gov.hk](http://www.archsd.gov.hk)

Civil Engineering and Development Department: [www.cedd.gov.hk](http://www.cedd.gov.hk)

Construction 2.0 – Time to Change: [www.psgo.gov.hk/assets/pdf/Construction-2-0-en.pdf](http://www.psgo.gov.hk/assets/pdf/Construction-2-0-en.pdf)

Development Bureau: [www.devb.gov.hk](http://www.devb.gov.hk)

Drainage Services Department: [www.dsd.gov.hk](http://www.dsd.gov.hk)

Electrical and Mechanical Services Department: [www.emsd.gov.hk](http://www.emsd.gov.hk)

Lands Department: [www.landsd.gov.hk](http://www.landsd.gov.hk)

Open3Dhk: [3d.map.gov.hk](http://3d.map.gov.hk)

Planning Department: [www.pland.gov.hk](http://www.pland.gov.hk)

Water Supplies Department: [www.wsd.gov.hk](http://www.wsd.gov.hk)