

Legislative Council Panel on Development

**Initiatives of Development Bureau
in the Chief Executive's 2021 Policy Address
and Policy Address Supplement**

INTRODUCTION

The Chief Executive delivered her Policy Address entitled “Building a Bright Future Together” on 6 October 2021. This is complemented by the Policy Address Supplement (PA Supplement). Relevant extracts from the two documents covering initiatives under Development Bureau (DEVB) are set out at **Annex**. This paper highlights the major initiatives therein.

POLICY ADDRESS AND PA SUPPLEMENT INITIATIVES

Hong Kong 2030+ Study

2. The final report of the “Hong Kong 2030+: Towards a Planning Vision and Strategy Transcending 2030” (Hong Kong 2030+) Study was released on 8 October 2021. Taking into account the Outline of the 14th Five-Year Plan for National Economic and Social Development of the People’s Republic of China and the Long Range Objectives Through the Year 2035 (the 14th Five-Year Plan) and the development of the Guangdong-Hong Kong-Macao Greater Bay Area (GBA), as well as the community’s aspirations for a better living environment, we have updated the land demand projections for three broad categories of land uses, viz housing, economic uses, as well as uses covering Government, Institution and Community (GIC) facilities, open space and transport infrastructure. The final projections suggest that from 2019 to 2048, the overall demand for land would be about 6 200 hectares (ha), considerably higher than the initial estimate of about 4 800 ha suggested in 2016. This is because the Government has taken a more visionary, forward looking and capacity creating approach in making the projections, assuming:

- (a) an enhancement in home space when working out the overall land requirement for accommodating demand for an additional 1 million housing units, which would translate into average living space per

person at 20 square metres/215 square feet (after an assumed 10 per cent home space enhancement) and 22 square metres/237 square feet (after an assumed 20 per cent home space enhancement);

- (b) much stepped up demand for land to drive economic development leveraging on the opportunities arising from the 14th Five-Year Plan and the Outline Development Plan for the GBA. It has assumed, for instance, a demand of at least 340 ha of land for promoting the development of science, innovation and technology-related industries; and
- (c) enhancement in the provision targets of GIC facilities, open space and transport infrastructure. For instance, the land per person ratio for open space has been increased to 3.5 square metres/38 square feet per person, higher than the assumed target of 2.5 square metres/27 square feet adopted in the Year 2016 round of projection and the actual provision of 2.7 square metres/29 square feet.

3. The Hong Kong 2030+ also reinforces the adoption of a multi-pronged land supply strategy, setting out overall land supply of 7 300 ha to meet the projected land requirement over the same 30-year period. This estimated supply comprises a committed land supply of about 3 200 ha (largely supply to be generated from various land development projects which are ongoing or are at relatively advanced stages of planning) and possible solution spaces of about 4 100 ha to be available in the medium to long term. The latter are regarded as "solution spaces" because they would help address the 3 000 ha of land shortfall when one takes the projected demand minus the committed land supply. The estimated overall land supply forms part of the conceptual spatial framework for the future development of Hong Kong. That framework shows a close-knit network of two metropolises (i.e. the Harbour Metropolis and the Northern Metropolis) and two development axes (i.e. Western Economic Corridor and Eastern Knowledge and Technology Corridor) with existing, committed and proposed urban nodes, and the conceptual transport links. The majority of solution spaces comes from potential supply from the two Metropolises, including 1 000 ha from Kau Yi Chau Artificial Islands representing an expansion of the Harbour Metropolis and close to 2 300 ha from the Northern Metropolis. The estimated overall supply would enable us to meet the shortfall in the medium to long term, while

allowing capacity to respond to the ever-changing circumstances in the years ahead.

Major land supply initiatives to be pursued/underway

4. We are pursuing/will pursue the following studies to look into various development opportunities:

- (a) San Tin/Lok Ma Chau Development Node – The study to finalise the land use proposals and draw up the detailed works design will commence in October 2021. In view of the Northern Metropolis Development Strategy (the Development Strategy), we will suitably adjust the study scope to cover additional area in the vicinity newly identified for the development of the San Tin Technopole.
- (b) NTN New Town and Man Kam To – The Planning and Engineering Study will commence in October 2021 to formulate land use proposals for the two development areas. In the study process, we will seek to extend the coverage to cover adjoining areas (such as the proposed Lo Wu (South) Station) as recommended under the Development Strategy.
- (c) Hung Shui Kiu/Ha Tsuen NDA – A review of the development intensity is underway. To follow up on the Development Strategy, we will carry out preparatory work for a study to examine expansion of the NDA to cover Lau Fau Shan and Tsim Bei Tsui and the development potential in areas from Lau Fau Shan to Pak Nai, with a view to commencing the study within 2022.
- (d) Kwu Tung North NDA – Detailed design of the Remaining Phase development of the NDA is underway. We will separately embark on the preparatory work for a new study to explore the development potential of the Ma Tso Lung area as recommended by the Development Strategy, with a view to commencing the study within 2022.
- (e) Lung Kwu Tan/Tuen Mun West – Our target is to seek funding approval from the LegCo in the first half of next year to kick start the planning and engineering study for the Lung Kwu Tan

reclamation (about 220 ha) and the re-planning of Tuen Mun West Area (about 220 ha). The study will look into different development options involving different combination of land uses.

- (f) Ma Liu Shui Reclamation – We will also revive the Ma Liu Shui Reclamation which, together with the relocation of the Sha Tin Sewage Treatment Works to caverns, will provide around 90 ha of land mainly for innovation and technology. Our target is to seek funding approval from the LegCo in the first half of next year to commence the related study.
- (g) Kau Yi Chau Artificial Islands – In December 2020, the Government obtained funding approval from LegCo for the studies related to the 1 000-ha artificial islands in the Central Waters. The studies commenced in June 2021. The development of the artificial islands can bring enormous social benefits to the future of Hong Kong, in terms of increasing supply of public housing, easing traffic congestion and providing more job opportunities
- (h) “Green Belt” Review – Rezoning is an important source of housing land supply in recent years, making up about 35% to 40% of the land for the 10-year public housing production in the LTHS, and sites on “Green Belt” zoning has been one of the major components of such rezoning efforts. As compared with the country parks (making up about 40% of land in Hong Kong), land zoned “Green Belt” (making up about 14.5% of land in Hong Kong) has relatively lower ecological value. Earlier rounds of “Green Belt” review, focusing on government land and sites with lower gradient and closer to built-up areas, has accounted for about 30% of the 210 sites identified for rezoning for residential development. The Planning Department will conduct a new round of review of land zoned “Green Belt”, this time targeting at sites with higher gradient and farther away from the built-up area but still with roads in the vicinity, and covering even private land. Our initial estimate is that the review will cover around 300 ha or 2% of land zoned Green Belt. The preliminary screening is expected to be completed in mid-2022. Technical studies to further ascertain the feasibility of selected sites will follow.

Progress of New Development Areas/New Town Extension projects

5. Meanwhile, several New Development Area (NDA) projects (including Kwu Tung North/Fanling North NDA, Hung Shui Kiu/Ha Tsuen NDA, Yuen Long South Development) and the Tung Chung New Town Extension (TCNTE) have been progressing well. These projects, together with massive formed land in Kai Tak and Anderson Road ex-quarry area, have become a major source of land supply, making up about 40% of the land for the 10-year public housing production in the Long Term Housing Supply Strategy (LTHS) from 2022-23 to 2031-32.

Land Resumption

6. In boosting housing land supply, we will also be making extensive use of the Lands Resumption Ordinance (Cap. 124) (LRO) and other applicable ordinances¹ to resume private land. The above NDA projects and other miscellaneous land development projects at more advanced stages of planning would involve resumption of as many as 700 ha of land, of which close to 500 ha are due for resumption in the five-year period from 2022-23 to 2026-27. This is much more than the 90 ha of land resumed in the past two years, and far exceeding the 20 ha over the five years' period before that.

Cavern Development

7. We are taking forward a number of projects for relocating government facilities to caverns. Construction of the main caverns for relocating the Sha Tin Sewage Treatment Works commenced in July 2021. Detailed design for relocating Diamond Hill Fresh Water and Salt Water Service Reservoirs to caverns will be completed within this year. We will also commence the investigation and design for relocating Public Works Central Laboratory in Kowloon Bay, Yau Tong Group Fresh Water and Salt Water Service Reservoirs and Tsuen Wan No. 2 Fresh Water Service Reservoir to caverns starting from end-2021.

¹ Such as the Roads (Works, Use and Compensation) Ordinance (Cap. 370)

Expediting Urban Renewal

District Planning Studies

8. URA has completed the District Study for Yau Ma Tei and Mong Kok (Yau Mong District Study) and the summary of findings and recommendations was reported to the Development Panel on 28 September 2021. URA will shortly engage various professional bodies and relevant stakeholders and seek their views on the recommended Master Renewal Concept Plan and implementation approach of the proposed planning tools including transfer of plot ratio and street consolidation areas. At the same time, we are working closely with URA to finalise the implementation details of such tools which could also be applicable to other districts and redevelopment projects by private sector where appropriate. Subject to further refinement and assessment as necessary, URA aims at promulgating guidelines and kick-starting the first batch of zoning amendments (whichever is applicable) in 2022.

9. With reference to the experience of the Yau Mong District Study, we have invited URA to commence similar district planning studies on the old districts of Tsuen Wan and Sham Shui Po with a view to formulating concept plans for the renewal of these two districts. The planning studies would, amongst others, examine the existing land use, road network, public open space and Government, Institution or Community facilities in the two districts and explore the scope for increasing development intensity. Subject to the approval of the URA Board, the two district planning studies would be commenced in due course, with a view to completion in around two years' time.

Reviewing Compulsory Sale Thresholds

10. The existing thresholds (viz. the majority owner owns not less than 80% of undivided shares in three classes of lots such as those with buildings all aged 50 years or more², and the 90% threshold for other cases) for applying for compulsory sale orders under the Land (Compulsory Sale for Redevelopment) Ordinance (Cap. 545) have been in force for more than a

2 The other two classes are –

(a) a lot with units each of which accounts for more than 10% of the undivided shares in the lot; and
(b) a lot with all industrial buildings aged 30 years or above not located within an industrial zone.

decade. With the ageing building stock, we will explore the case for lowering the compulsory sale thresholds to expedite redevelopment of old and dilapidated buildings. We will conduct a policy review in the next 12 to 18 months, during which we will research into practices of other jurisdictions, research into cases of compulsory sales applications concluded over the years and gauge the views of the industry, owners' representatives as well as other stakeholders, with a view to putting forward policy recommendations thereafter. During the process, we will bear in mind the need to strike a balance between expediting urban renewal and protecting the right of owners holding private properties, particularly the interests of minority owners.

Streamlining Development Process

11. Pursuant to the 2017 Policy Address, a steering group was set up under the Planning and Lands Branch (PLB) of DEVB to examine how best to align and rationalise the standards and definitions involved in development approval processes involving departments under PLB's portfolio. With the close liaison with the industry through a dedicated sub-committee established under the Land and Development Advisory Committee, we have rolled out various streamlining measures relating to nine control parameters, such as building height restriction, landscape requirement, design and disposition clause under lease, site coverage restriction as well as gross floor area / plot ratio restriction. These measures minimise double handling between departments, rationalise the definitions and requirements of the control parameters, as well as increase transparency and certainty in the approval processes.

12. This year, we expanded the composition and remit of the Steering Group to include vetting departments other than those under DEVB, with a view to reviewing more comprehensively the development approval processes for both Government and private projects, and rationalising the development-related requirements imposed by different bureaux. Other than expediting administrative procedures, we are also reviewing whether and how the various statutory processes in seeking planning applications, road gazetting, land resumption, etc. can be streamlined or expedited. The major review directions include shortening statutory procedures (e.g. shortening the statutory timeline allowed for completion of the rezoning process), doing away with repetitive procedures (e.g. minimising the need for handling similar objections raised against the same project under different ordinances),

facilitating parallel processing of different procedures (e.g. allowing reclamation to take place while formulating land uses) and rationalising arrangements (e.g. confining rezoning applications to those with control over the land concerned). We plan to consult the LegCo on our specific recommendations in the first half of 2022, and seek to introduce legislative amendments within the same year. Opportunity will be taken to amend the Town Planning Ordinance to respond to public expectation for Government to better protect areas of high ecological value in certain rural areas subject to development pressure.

Extending “Standard Rates” for Land Premium Assessment to Land Exchange Applications in NDAs

13. Launched in March this year, the pilot scheme to provide an option for charging land premium at “standard rates” for redevelopment of industrial buildings (IBs) has been well received by the market. So far, five cases have opted for the “standard rates” approach for premium assessment, out of which four cases have accepted the land premium so assessed. By comparison, in the past three years (2018 to 2020), on average there were just three lease modification cases for IB redevelopment with premium accepted per year. For cases opting for the pilot scheme, the time required for agreement on premium assessment has been shortened significantly.

14. In view of the positive response of the market and the sector, DEVB will extend the “standard rates” approach for premium assessment to in-situ land exchange applications in NDAs under the “Enhanced Conventional New Town Approach”³. The proposed extension is a logical next step of applying “standard rates”, because sites in a NDA have a higher degree of similarities in development context as compared with other land in the New Territories. The “standard rates” approach may also facilitate the conclusion of more land exchange applications in the NDAs in a timely manner to expedite the supply of housing land. The Government is formulating the details of the new scheme, which is targeted to be launched in Q1 2022.

3 Under the “Enhanced Conventional New Town Approach” adopted for NDAs (currently applicable to the Kwu Tung North / Fanling North and Hung Shui Kiu / Ha Tsuen NDAs), the Government would, as a general rule, resume and clear all private land planned for developments, and dispose of the land planned for private developments in the market. Prior to the resumption and clearance of land, the Government may allow in-situ land exchange applications from land owners of sites planned for private developments, subject to their meeting specified criteria and conditions. Specific requirements are imposed on the applications, including those concerning the site area, development timetable, and compensation offered to tenants or occupiers by the applicants.

Other Initiatives

Investing in Capital Works

15. The Government will continue investing in infrastructure to enhance people's living quality, support society's economy and long term development as well as uplift Hong Kong's competitiveness. In response to the economic impact under pandemic, we will also position infrastructure investment as the major counter-cyclic measure in stimulating the economy. In this Legislative session, the approved funding for public works projects has reached a record high of \$230 billion. We expect the Government's annual capital works expenditure will exceed \$100 billion in coming years.

16. In past few years, the Government has proactively implementing strategic measures to enhance cost monitoring and project governance to improve cost-effectiveness. Recently, it is encouraging to see in the Arcadis 2021 International Construction Cost Index that the ranking of Hong Kong's construction cost has dropped from the third to the eighth.

Energizing Kowloon East

17. Since the announcement of the Energizing Kowloon East initiative in 2011, the supply of commercial floor space in Kowloon East has increased by 70% to about 2.9 million square metres at present. Together with an additional provision of about 1 million square metres from projects under construction or approved, the supply will further increase to about 3.9 million square metres in the next few years. Various tasks, including carrying out studies aiming to release development potential of sites occupied by government facilities, undertaking projects to improve connectivity and enhance the environment etc. are in progress to facilitate transformation of Kowloon East into another core business district of Hong Kong.

Construction 2.0

18. DEVB will continue to implement Construction 2.0 and lead the construction industry to make change by advocating "Innovation", "Professionalisation" and "Revitalisation" to uplift productivity as well as widely employ innovation and technology in tackling the challenges such as

manpower demand and construction cost. To further reform the construction industry as well as enhance project performance, we are actively preparing to host an International Construction Leaders Summit next year to collect views of and formulate strategies with various stakeholders.

Construction Innovation and Technology Fund (CITF)

19. The \$1 billion CITF set up in October 2018 has so far approved more than 2 000 applications, benefitted over 780 enterprises for their adoption of MiC, Building Information Modelling (BIM) and other advanced construction technologies, and subsidised about 11 000 training places for practitioners for attending technology-related training.

Wider Adoption of Modular Integrated Construction (MiC)

20. The Government has continued to drive the MiC policy since 2017 Policy Address. A number of pilot projects have been completed since then. During the pandemic, adoption of MiC enabled the speedy completion of a large number of quarantine facilities and the North Lantau Hospital Hong Kong Infection Control Centre facilitating Hong Kong to fight against COVID-19. Currently, there are more than 60 projects adopting MiC, which include projects under public organisations and non-governmental organisations such as Hong Kong Housing Society, Hong Kong Housing Authority, URA, Hospital Authority, Hong Kong Council of Social Service, etc.

Adoption of Innovative Technologies

21. Apart from financial support via the CITF, we specified in new capital works contracts with estimate exceeding \$300 million the requirement to adopt digital works supervision system (DWSS) to strengthen project supervision. So far, over 90 active public works contracts with a total value of \$150 billion have adopted DWSS. The feedback from the industry is positive, and affirms that the system can greatly enhance the productivity, reduce paperwork and reduce the risk of recording errors. Moreover, we are also implementing the integrated capital works platform in phases for continuous monitoring and review of various project performance with a view to enhancing the management of the Capital Works Programme.

Construction Manpower Development

22. Hong Kong Institute of Construction (HKIC), with about 60 000 trainees completed its programme every year, continued to strive to provide clear career advancement pathways and quality training programmes for workers to meet anticipated market demand and raise the skill level of the construction industry. Its Certificate in Construction Programmes and Diploma in Construction Programmes have been accredited under the Qualification Framework by the Hong Kong Council for Accreditation of Academic and Vocational Qualifications. The HKIC also aims to make full use of its existing training facilities to enhance training to meet the needs of the industry, especially in the adoption of technologies including BIM, MiC, etc.

3D Digital Underground Utilities Database

23. We are planning to develop an accurate 3D digital underground utilities database with a view to facilitating the construction industry to plan and conduct the underground works efficiently and reducing road closure time resulting from the excavation works, thereby benefiting the community as a whole. The database is expected to be progressively established in 2023.

Smart Waterworks

24. We adopt innovative technologies proactively for waterworks management and maintenance, which not only improve the operational efficiency but also further foster the “Smart Government” initiative. The related measures include developing “digital twins” of major water treatment works and appropriate water supply networks for real-time monitoring and scenario simulation to enhance operation performance and reliability as well as exploring application of robotics and artificial intelligence for inspection and maintenance of waterworks.

Embrace Opportunities in GBA

25. Through the earlier GBA registration system established by DEVB in collaboration with the Mainland Authorities, a number of architectural and engineering consultant firms on the Hong Kong Special Administrative Region (HKSAR) Government’s approved lists and related registered professionals

have been successfully registered. Qianhai of Shenzhen and Hengqin of Zhuhai have also promulgated similar registration systems, covering contractors on the HKSAR Government's approved lists. DEVB will continue to liaise closely with the Mainland Authorities to facilitate Hong Kong's construction sector in exploring business opportunities for better integrating into the overall development of the country.

CONCLUSION

26. Members are invited to note the contents of this paper and provide comments.

Development Bureau
13 October 2021

**List of Development Bureau's Initiatives
in the Policy Address Supplement**

A list of Development Bureau's achievements and new initiatives stipulated in the Policy Address Supplement is appended below. They are mainly under the Chapters of "Upholding and Improving the 'One Country, Two Systems' Practice", "Together, We Fight the Virus", "Housing and Land Supply", "Unlimited Business Opportunities", "Liveable City" and "Caring Society".

Upholding and Improving the "One Country, Two Systems" Practice

Achievements

- Took forward the new High Court and District Court projects under the oversight of the central steering committee established under the Judiciary. Tendering for the new District Court project at Caroline Hill Road commenced in August 2021 and subject to the LegCo's funding approval, construction to start in mid-2022.
- Completed a review of works supervision system of the Development Bureau and works departments and implemented relevant corruption prevention measures.
- Incorporated integrity management as the listing requirement for over 800 approved public works contractors, materials suppliers and specialist contractors of the Government with effect from March 2021.
- Invested heavily in infrastructure to meet Hong Kong's needs and create jobs. From 2017-18 to 2021-22, the average capital works expenditure per year amounted to more than \$75 billion.

Together, We Fight the Virus

Achievements

- Provided over 3 500 propose-built units for quarantine at Penny's Bay in addition to similar facilities at Lei Yue Mun Park.

- Assisted the HA to establish and expand the Community Treatment Facility (CTF) at the AsiaWorld Expo, and increased the capacity to around 1 900 beds.
- With financial and technical support by the Central Government, completed the North Lantau Hospital Hong Kong Infection Control Centre with 820 beds in just four months in January 2021.

Housing and Land Supply

Achievements

- Revised the public/private split of new housing supply from 60:40 to 70:30 in 2018 and accordingly earmarked more land for public housing.
- Raised domestic plot ratio for public housing sites in selected Density Zones of the Main Urban Areas and New Towns by up to maximum 30% where technically feasible to maximise yield (as against the previous maximum of 20%).
- Established a five-rung housing ladder to meet the needs of families of different means by regularising the GSH and White Form Secondary Market Scheme (WSM); and introducing SH pilot projects. Since January 2018, about 8 400 GSH flats have been put up for sale, while WSM quotas were increased from 2 500 in 2018 to 4 500 in 2020. Under the first SH pilot project, URA sold 493 units in eResidence at Ma Tau Wai Road.
- Took forward three other SH projects with over 3 000 units in total. They are:
 - (1) a URA redevelopment project adjacent to eResidence, providing about 260 units for sale in 2023-24;
 - (2) a private residential site at Anderson Road successfully tendered for development of no less than 1 000 SH units; and
 - (3) redevelopment of Tai Hang Sai Estate jointly undertaken by the HKSHCL and URA to provide about 2 000 SH units. (THB, DEVB)

- Entrusted the URA with a new mission to actively provide more SH or other types of subsidised sale flats (SSFs) in its redevelopment projects.
- Commenced two pilot Civil Servants' Co-operative Building Society Scheme redevelopment projects in Kowloon City in 2020 by URA to provide about 3 000 flats, of which about 1 000 flats will be allocated to SSFs.
- Pressed ahead with the development at Siu Ho Wan Depot site by MTRCL to provide about 20 000 residential units, with around 50% as public housing. The target is to have the first batch of about 6 000 public and private housing units ready for intake from around 2030.
- Updated the territorial development strategy under “Hong Kong 2030+: Towards a Planning Vision and Strategy Transcending 2030”.
- Accepted in full the multi-pronged land supply strategy and eight land supply options worthy of priority study and implementation¹ as recommended by the Task Force on Land Supply (TFLS) to encourage redevelopment of brownfield sites and other agricultural lots through government-led resumption and projects, unlock private land under public-private partnership, and create new land through reclamation in strategic spots.
- Resumed significantly more private land for housing development:
 - In 2019-20 and 2020-21, total 90 hectares of land resumed mainly for New Development Areas (NDAs) and public housing development, far more than 20 hectares in the preceding five years (2014-15 to 2018-19).
 - Planned to resume another 500 hectares in five years' time (2021-22 to 2025-26) and a further 200 hectares beyond 2025-26.

¹ The eight options are: (i) expediting brownfield development; (ii) drawing up details of the Land Sharing Pilot Scheme to unleash development potential of private agricultural land; (iii) developing 32 hectares of land east of Fan Kam Road of the Fanling Golf Course for housing development and commencing relevant detailed technical study; (iv) expediting studies on the some 1 000-hectare Kau Yi Chau artificial islands; (v) expediting studies on near-shore reclamation projects including Lung Kwu Tan, Sunny Bay and Siu Ho Wan; (vi) continuing cavern and underground space development and studies; (vii) pressing ahead with New Development Area projects; and (viii) commencing studies on the River Trade Terminal site and the coastal areas of Tuen Mun.

- Implemented in 2018 the enhanced compensation and re-housing arrangements to smoothen the land resumption and clearance for development projects, including NDAs and public housing development.
- Spared no effort in taking forward the eight priority land supply options recommended by the TFLS, including:
 - undertook studies for 12 brownfield clusters to provide over 30 000 public housing units;
 - launched in May 2020 the three-year Land Sharing Pilot Scheme. Three applications involving potentially 12 250 public housing and 5 600 private housing units are under processing;
 - commenced in September 2019 the study for developing a 32-hectare portion of Fanling Golf Course into public housing;
 - implemented Tung Chung New Town Extension (TCNTE) project in phases. Commenced reclamation of 130 hectares at Tung Chung East in December 2017, with the first land parcel handed over to HKHA in slightly over two years. By now, over 60% of reclamation works were completed with the remaining 40% completed in 2023. The first phase of site formation, roads and infrastructure works commenced in May 2021 for phased completion between 2024 and 2028;
 - commenced the engineering study on Road P1 (Tai Ho – Sunny Bay Section) in Lantau in June 2021 with a view to completing the works in 2030 to tie in with the development needs of Northern Lantau including TCNTE;

- pressed ahead with NDAs and other major development projects including Kai Tak Development (14 land parcels sold/delivered for housing development between January 2018 and July 2021); Kwu Tung North/Fanling North (commenced works in September 2019 and resumed 68 hectares of private land in December 2019); Hung Shui Kiu/Ha Tsuen (commenced works in July 2020 and resumed 12 hectares of private land in October 2020); and Yuen Long South (completed statutory planning procedures in August 2021 and commenced gazettal of the proposed road and sewerage works);
- completed in March 2021 the study for the first phase development of New Territories North (NTN) covering the San Tin/Lok Ma Chau Development Node (ST/LMC DN) and consulted the local community on the initial land use plan. Aimed to commence in October 2021 the investigation study and detailed design for works for the ST/LMC DN as well as planning and engineering (P&E) study for the second phase development of NTN covering Man Kam To Logistics Corridor and NTN New Town;
- commenced consultancy studies related to the artificial islands in the Central Waters in June 2021 for completion in around 3.5 years. Subject to the findings, first phase of reclamation works is expected to commence in 2027;
- conducted a number of discussion forums and related activities on the development of artificial islands in the Central Waters with relevant stakeholders, including professional institutions and their young members;
- aimed to seek the LegCo's funding approval in the first half of 2022 to commence the P&E study related to reclamation at Lung Kwu Tan and re-planning of Tuen Mun West area while making preparations for the funding application for the P&E study for reclamation at Sunny Bay;
- commenced the main construction works in July 2021 to relocate the Sha Tin Sewage Treatment Works to caverns; and

- undertook investigation and design (I&D) study for the re-location of Diamond Hill Fresh Water and Salt Water Service Reservoirs to caverns, and feasibility study on development of selected strategic cavern areas at Lantau, Tsing Yi and other suitable locations. Aimed to commence I&D studies for relocating Public Works Central Laboratory, Yau Tong Group Fresh Water and Salt Water Service Reservoirs, and Tsuen Wan No. 2 Fresh Water Service Reservoir to caverns, and feasibility study on relocating Tuen Mun Water Treatment Works to caverns, starting from end-2021.
- Completed planning procedures for 40 sites outside NDAs for housing development since July 2017. Rezoning of another 22 sites is in progress.
- Relaunched in October 2018 the Re-vitalisation Scheme for Industrial Buildings (IBs). As at end-August 2021, 52 planning applications for increasing the redevelopment plot ratio were approved under the Scheme, providing a total gross floor area of about 1 084 000 square metres.
- Launched in March 2021 a two-year pilot scheme for charging land premium at standard rates for lease modifications for redevelopment of IBs constructed before 1987 to expedite lease modification and encourage IB revitalisation. As at mid-September 2021, four applications have opted for the scheme with land premium agreed.
- Increased commercial gross floor area in Kowloon East since the announcement of the Energizing Kowloon East initiative in 2011 by 70% to about 2.9 million square metres at present, to be further increased to about 3.9 million square metres taking into account projects under construction or approved.
- Pressed ahead with studies on three urban squatter areas (Cha Kwo Ling Village, Ngau Chi Wan Village and Chuk Yuen United Village) with a view to substantial completion in 2021 and commencing works in phases in around 2025 to deliver 8 700 public housing units in phases starting from 2029.

- Completed reviewing suitability of certain private land parcels zoned for high-density housing development but without any specific development plan, and announced that three private land parcels will be resumed to produce around 1 600 public housing flats.
- Launched a \$1 billion funding scheme to support the use of vacant government sites by NGOs. As at end-August 2021, 20 applications have been approved.
- Implemented streamlining measures relating to development control of the Buildings Department, LandsD and Planning Department. Since 2021, the scope of review has been expanded to cover all departments involved in vetting development proposals.
- Set up a dedicated Land Supply Section in LandsD in 2019 to expedite land sale and processing of high yield lease modification and land exchange cases. As at September 2021, 29 cases were processed and 93 cases are being actively pursued by this office.
- Set up a Development Projects Facilitation Office under Development Bureau in December 2020 to monitor and ensure effective processing of development approval applications of larger-scale private residential sites in co-operation with designated co-ordinators in the relevant bureaux and departments. As at August 2021, 23 such projects obtained relevant development approvals through such facilitation.
- Pursued more vigorously the “single site, multiple use” model to facilitate multi-storey Government, Institution or Community (GIC) projects and earmarked \$22 billion for the first batch of projects.
- Reviewed about 40 GIC sites with joint use potential with a view to formulating development proposals within 2021.
- Commenced the study on the overall planning and long-term development of Choi Hung Road Playground and Sports Centre (including the Choi Hung Road Market) site to improve recreational and sports facilities and integrate other uses such as underground vehicle park and social welfare facilities.

- Established the Sustainable Lantau Office in December 2017 to take forward the development projects including the artificial islands in the Central Waters, TCNTE and initiatives regarding conservation, local improvement as well as leisure and recreation in Lantau.
- Established the Lantau Conservation Fund and its Advisory Committee to promote conservation of Lantau. Aimed to announce the results of the first batch of applications for conservation and related projects in October 2021.
- Formulated the “Lantau Conservation and Recreation Masterplan” to improve the existing natural, cultural and recreational resources of Lantau.
- Formulated “the Lantau Trails and Recreation Plan” for improving the trails and associated facilities in Lantau, including constructing a Round-the-Lantau route. For the improvement and expansion works for mountain bike trail network project, detailed design work for Mui Wo to Pui O section is in progress.

New Initiatives

- Pursue development in various parts of the New Territories including the NDAs in the light of the Northern Metropolis Development Strategy announced in the 2021 PA.
- Extend the “standard rates” for premium assessment from redevelopment of IBs to land exchange cases in the NDAs.
- Strive to ensure timely delivery of the housing production target for the next decade as pledged through high-level steer and monitoring of the about 110 projects involved in the latter five-year period.
- Further streamline the development control procedures by taking a critical and root and branch examination of the statutory town planning, environmental impact assessment, land resumption and works-related procedures and vigorously adopt other administrative measures.
- Revive and expedite near-shore reclamation projects at Lung Kwu Tan (including replanning of Tuen Mun West) and Ma Liu Shui by seeking funding for related studies in the first half of 2022.

- Conduct a new round of review of sites zoned “Green Belt” to identify potential developable land. The screening process is expected to complete in mid-2022, to be followed by technical studies.
- Extend the measures of allowing IB redevelopment to exceed permitted plot ratio by no more than 20% and exempting the waiver fees chargeable for wholesale conversion to October 2024.
- Consult the LegCo on legislative amendments for implementing the Land Titles Ordinance (Cap. 585) on newly granted land first to provide greater certainty to the titles of privately owned land, upon extensively engaging and reaching consensus with key stakeholders.

Unlimited Business Opportunities

Achievements

- Disseminated real-time parking vacancy information on about 6 300 hourly parking spaces in Kowloon East, covering about 73% of such parking spaces in the district.
- Completed eight proof of concept trials in Kowloon East and conducted knowledge and experience sharing sessions with relevant government departments and stakeholders.
- Launched the three-dimensional (3D) Pedestrian Network covering the built up areas and 3D digital map covering various districts in December 2020. Made good progress for the launch of the Common Spatial Data Infrastructure portal for government use by end-2021 and for use by the public by end-2022, with at least 320 spatial datasets for free download. Established the Geospatial Lab in May 2021 to engage the public in the use of spatial data, with its physical working space in Kwun Tong opened to the public in July 2021.
- Deployed more than 1 300 smart safety devices in public works contracts to uplift overall construction safety.

- Approved over \$170 billion works-related funding by the Finance Committee (FC) of the LegCo in 2019-20. In 2020-21, the funding approved by the FC reached a record high of \$220 billion.
- Implemented “Construction 2.0” and led the industry to make changes by advocating “Innovation”, “Professionalisation” and “Revitalisation”. Promoted I&T application, including digital works supervision systems, building information modelling (BIM) and established the \$1 billion Construction Innovation and Technology Fund (CITF) in October 2018. So far, CITF subsidised over 780 enterprises for adoption of innovative construction technologies, and about 11 000 training places, with more than \$510 million approved. Required public works projects to adopt BIM technology from January 2018.
- Established the Centre of Excellence for Major Project Leaders to provide high-level training programmes. Collaborated with counterparts in the Mainland, Australia, Singapore and the UK and entered into MoUs with Singapore and the UK.
- Required capital works contracts with estimates exceeding \$300 million to adopt digital works supervision system from April 2020.
- Opened the Modular Integrated Construction (MiC) Display Centre in November 2018.
- Required designated government buildings in capital works projects to adopt MiC from April 2020. Together with the projects of Hong Kong Housing Society, Urban Renewal Authority and private developers, more than 60 projects have adopted MiC.
- Completed the first batch of MiC pilot projects, including InnoCell at HKSTPC and Disciplined Services Quarters at Pak Shing Kok in October 2020 and February 2021 respectively. The adoption of MiC has shortened the construction period by 30% to 50% and reduced construction cost by around 10%.
- Set up a pre-acceptance mechanism for MiC systems and granted a 6% concession of the floor area constructed by MiC for new buildings.

- Obtained \$214 million for developing the Electronic Submission Hub to process plans, documents and applications under the Buildings Ordinance which will be implemented in phases from the first quarter of 2022.
- Commenced trial operation of an automated system for concrete cube testing.
- Offered quality training to trainees of the Hong Kong Institute of Construction since 2018. Accredited its Certificate in Construction Programmes and Diploma in Construction Programmes under the Qualification Framework by the Hong Kong Council for Accreditation of Academic and Vocational Qualifications. About 60 000 participants on average completed its programmes every year.
- Allocated \$200 million in May 2020 to strengthen construction manpower training in trades of keen demand to upskill workers and attract young people. Benefited about 1 400 trainees so far.
- Established a new registration system in collaboration with the Mainland Authorities that enables architectural and engineering related consultant firms on the HKSAR Government's approved lists and related registered professionals to provide professional services in the GBA.
- Waived the registration and renewal fees for registered workers by the Construction Industry Council for three consecutive years since October 2019 to support the construction industry, benefiting a total of about 350 000 workers with \$29 million involved.

New Initiatives

- Reserve the majority of the 88 hectares of land (to be created through the Ma Liu Shui Reclamation and relocation of the Sha Tin Sewage Treatment Works to caverns) for I&T development and commence the related study in the first half of 2022, with construction work of the I&T facilities expected to commence progressively around 2029.

- Invite the MTRCL to study the feasibility of a new East Rail Pak Shek Kok Station at or near the site of the current Sports Centre of The Education University of Hong Kong (EdUHK) and to consider how to re-provision the Sports Centre to a site near EdUHK's Tai Po campus; and explore opportunities for unleashing the development potential of the station site and its adjoining land to provide more housing and public facilities including parking spaces and shops.
- Provide a site of about 4 hectares at Pokfulam for The University of Hong Kong to develop R&D facilities.
- Facilitate expansion of the Chinese University of Hong Kong (CUHK) Medical Centre and development of additional facilities through the use of the land adjacent to the CUHK Medical Centre, and take this opportunity to improve the existing public transport arrangements and parking facilities.
- Continue to invest in infrastructure to revive the economy. We are expecting the annual public expenditure in capital works to reach the level of \$100 billion on average in the next few years, covering land and housing supply, healthcare facilities, education, culture and recreation, water supply, drainage and sewerage aspects which are closely related to people's livelihood.
- Further promote "Construction 2.0" to enhance the capability of construction industry as well as the performance of public works projects, and bring down Hong Kong's construction cost.
- Co-ordinate efforts of works departments for further promoting applied R&D in public works projects. Through the adoption of innovative construction methods, new materials and digital technology, the construction time and cost can be reduced and hence the overall productivity of the construction industry can be uplifted.
- Further promote the adoption of MiC in private residential, public housing, social welfare and hospital projects.

- Provide systematic training to mid-tier managers in the Government through the Project Delivery Capability Programme for enhancing their professional skills and project delivery capability, with a view to ensuring more effective use of public resources.
- Actively drive digitalisation of public works including the adoption of Digital Works Supervision System, BIM, and the development of digital integrated platform.

Liveable City

Achievements

- Commissioned the Heung Yuen Wai Highway in May 2019, improving traffic in the North District and providing access to the new Liantang/Heung Yuen Wai Boundary Control Point opened in August 2020.
- Endorsed 12 land premium waiver applications under the policy of Facilitating Provision of Pedestrian Links by the Private Sector; refined the policy in January 2021 to expedite implementation of pedestrian links for early public enjoyment; construction of the footbridge between Pacific Place and Harcourt Garden to commence in 2021 for completion by end-2024.
- Devised a multi-modal Environmentally Friendly Linkage System for Kowloon East.
- For the 10 piers under the first phase, commenced reconstruction for Pak Kok Pier on Lamma Island in April 2020, and improvement works for Kau Sai Village Pier in Sai Kung and Lai Chi Chong Pier in Tai Po in September 2021, while undertaking the design work of the remaining seven. Commenced the engineering feasibility studies of the second phase covering another 13 public piers progressively from May 2021.

- Implemented water saving measures, including requiring the use of water efficient products registered under the Water Efficiency Labelling Scheme (WELS) in new plumbing works; prepared legislative amendments for implementing the Mandatory WELS; arranged implementation of Automatic Meter Reading in about 170 new buildings, involving some 50 000 smart water meters; and launched a certificate course in leakage detection in underground water pipes.
- Updated in August 2019 the Total Water Management Strategy, which adopts a two-pronged approach of containing fresh water demand growth and building resilience in water supply with diversified water resources.
- Explored measures to deal with the leakage problem at private water mains and conducted the public consultation on a proposal to impose a charge for water loss through the communal service.
- Implemented measures for reducing fresh water consumption to achieve the target of reducing the per capita fresh water consumption by 10% by 2030, using 2016 as the base year.
- Implemented asset management and stepped up leakage control measures for public water mains, with a target to reduce the leakage rate from the current 15% to below 10% on or before 2030.
- Established the dedicated Tree Risk Inspection Squad to strengthen tree audits and site patrol; and hosted the International Urban Forestry Conference in January 2020.
- Rolled out the Registration Scheme for Tree Management Personnel in December 2020.
- Launched the Urban Forestry Support Fund under which the Study Sponsorship Scheme and the Trainee Programme were rolled out in July and August 2020 respectively, and launched the “People • Trees • Harmony” promotion campaign.
- Commenced a three-year study to collect and analyse data from 8 000 tilt sensors to test their effectiveness in identifying trees at risk of collapse in August 2021.

- Revitalised the Central Police Station Compound to become Tai Kwun – Centre for Heritage and Arts, which received the Award of Excellence in the United Nations Educational, Scientific and Cultural Organization (UNESCO) Asia-Pacific Awards for Cultural Heritage Conservation.
- Completed 12 projects under the Revitalising Historic Buildings Through Partnership Scheme, attracting over seven million visitors as at August 2021 and receiving five UNESCO Asia-Pacific Awards for Cultural Heritage Conservation. Took forward Batch VI of the Scheme, with 72 applications received in respect of five historic buildings.
- Pressed ahead with the Conserving Central initiative with the restoration of the Former French Mission Building substantially completed in end-2020 and the first phase opening of the revitalised Central Market Building in August 2021.
- Organised “Heritage Vogue • Hollywood Road” street carnival in July 2017 and November 2018, attracting over 56 000 and 76 000 visitors respectively.
- Established the Centre of Excellence for Major Project Leaders in July 2019 and delivered the first Major Projects Leadership Programme in August 2019.
- Signed Memorandum of Understanding with the Infrastructure and Projects Authority of the United Kingdom Government and the Ministry of Finance of the Singapore Government in March 2018 and July 2019 respectively to foster partnership for enhancing cost effectiveness and productivity of the construction industry and uplifting project governance and performance.
- Launched “Operation Building Bright 2.0” in 2018 with two funding injections totalling \$6 billion to assist owner-occupiers of 5 000 buildings to conduct inspection and repair works. Selected around 2 100 buildings to participate in the scheme as at August 2021. Approved around \$143 million for around 430 buildings.
- Extended the permitted uses of the buffer floor in IBs to cover telecommunications exchange centre and computer/data processing centre in 2019. If there is a buffer floor in an IB, the lowest three floors can be changed to non-industrial uses.

- Launched in July 2020 the Building Maintenance Grant Scheme for Needy Owners. Over 3 000 cases were approved as at August 2021.
- Launched the \$2.5 billion Lift Modernisation Subsidy Scheme in 2019 and subsequently injected an additional \$2 billion to increase the number of lifts to be subsidised to about 8 000. Commenced arrangement for modernisation works of about 2 000 lifts as at end-August 2021.
- Launched the \$1 billion Building Drainage System Repair Subsidy Scheme in May 2021. Commenced drainage investigation or repair works for some 100 aged domestic buildings as at August 2021.
- Deployed new technologies on a pilot basis to regulate signboards. Information of the first batch of lawful signboards will be made available for public inspection on the GeoInfo Map, and the Defective Signboards Diagnostic System will be put into pilot use.
- Implemented the Action Plan for Enhancing Drinking Water Safety in September 2017. Progress of various measures:
 - revised the Hong Kong Drinking Water Standards in April 2021, and expanded the scope of the Enhanced Water Quality Monitoring Programme in May 2021 to cover residual chlorine and *Escherichia coli*;
 - implemented a surveillance programme for General Acceptance products in October 2017;
 - implemented new commissioning requirements for new plumbing works since 2017 to ensure the quality of drinking water;
 - launched the Quality Water Supply Scheme for Buildings – Fresh Water (Management System) in November 2017 to encourage property owners and management agents to implement Water Safety Plan (WSP) for their buildings. Received applications from about 2 600 residential buildings, covering some 774 000 households as at end-August 2021;

- set up the Drinking Water Safety Unit in November 2018 to oversee the performance of the Water Supplies Department (WSD) in respect of drinking water safety;
 - set up the Drinking Water Safety Advisory Committee in January 2018; and
 - launched the \$440 million Water Safety Plan Subsidy Scheme in July 2020 to subsidise private buildings to implement WSP. Received about 240 applications, covering about 580 eligible buildings as at end-August 2021.
- Completed the review of the Waterworks Ordinance (Cap. 102) and conducted a public consultation, with a view to introducing the amendment bill to the LegCo by end-2022.
 - Launched in December 2020 the Water Suspension Notification System, which will automatically notify the management office of the estates concerned the water suspension arrangement by WSD. Currently, it covers about 70% of the registered consumers.
 - Earmarked \$6.5 billion to connect the harbourfront promenade and optimise the open space. In the past four years, opened six km of promenade for public use. The goal is to extend the promenade from the current 24 km to 34 km by 2028 and provide open space amounting to about 35 hectares on both sides of Victoria Harbour. Between October 2020 and September 2021, opened 11 harbourfront sites.
 - Completed and fully opened the 60 km long cycle track network in the New Territories from Tuen Mun to Ma On Shan for public use in September 2020.
 - Completed and fully opened the 2.3 km long waterfront cycle track section between Tsuen Wan Riviera Park and Bayview Garden for public use in July 2021.
 - Fostered a “bicycle-friendly” environment in new towns and NDAs and completed the first phase of improvement to cycle tracks and parking facilities at about 100 sites in new towns in mid-2018.

- Implemented progressively a GreenWay of 13 km in total length for shared use by pedestrians and cyclists in the Kai Tak Development Area, and launched in February 2021 a study on its design and implementation.
- Continued to carry out investigation study for the revitalisation and improvement works of the Tai Wai Nullah and Fo Tan Nullah as well as detailed design for the revitalisation and improvement works for the Yuen Long Town Centre Nullah.
- Enhanced the connectivity, improved the environment and released development potential to expedite the transformation of Kowloon East into the second core business district. Completed more than 20 traffic and pedestrian environment improvement schemes, and provided or enhanced over eight hectares of open spaces and public spaces in Kowloon East since July 2017.
- Carried out detailed design for a new footbridge across Kwun Tong Road near MTR Kowloon Bay Station Exit A and another footbridge across Wai Yip Street near Siu Yip Street. Continued the investigation and design for the extension and face-lifting of the pedestrian subway network connecting to MTR Ngau Tau Kok Station.
- Continued the construction of the footbridge near Exit B of MTR Kowloon Bay Station. Commenced investigation and design of a proposed elevated walkway with travellators along Sheung Yee Road.
- Continued improvement works at Hoi Bun Road Park and its adjacent area, with works at Hoi Bun Road Park completed in June 2021. Continued improvement works at Lam Wah Street Playground and its adjacent area, with the pedestrian walkway between Wang Chiu Road and Wang Kwun Road substantially completed in June 2021.
- Continued to implement the District Open Space, Sports Centre cum Public Vehicle Park project at Sze Mei Street, San Po Kong including reprovisioning of the Kai Tak East Sports Centre and provision of 300 underground parking spaces.

- Completed detailed design and selection of play equipment for Kai Tak Runway Park. Commenced works on the zipline and play tower in May 2021.
- Commenced “Revitalization of Tsui Ping River” project in July 2020 for completion in 2024.
- Established the Invigorating Island South Office in February 2021 and started consulting stakeholders and co-ordinating with relevant bureaux and departments to take forward the initiative. A Conceptual Master Plan covering the Wong Chuk Hang, Aberdeen and Ap Lei Chau areas was promulgated in August 2021.
- Launched a design competition in September 2021 to collect innovative design ideas for creating a Green Link in Wong Chuk Hang.
- Continued to plan face-lifting of public spaces in the abovementioned areas, together with improvement of the walking environment and connectivity. Related minor works projects have commenced progressively from mid-2021 onwards.

New Initiatives

- Apply a new comprehensive pedestrian planning framework in planning and design of NDAs where appropriate.
- Take forward mitigation and adaptation measures for tackling climate change with a rough estimate of \$240 billion in the next 15 to 20 years.
- Organise arboricultural courses for personnel registered under the Registration Scheme for Tree Management Personnel to continue their professional development and meet the renewal requirements.
- Launch a webpage to promote public appreciation and knowledge on landscape design features of local green spaces.
- Step up urban renewal by devising the implementation details of new planning tools proposed in Urban Renewal Authority (URA)’s District Study for Yau Ma Tei and Mong Kok such as transfer of plot ratio for early implementation in the two districts and where appropriate, to other districts.

- Invite the URA to commence district planning studies in Tsuen Wan Town Centre and Sham Shui Po with a view to formulating urban renewal plans to guide urban restructuring and promote redevelopment.
- Review the compulsory sale application threshold for old and dilapidated buildings with a view to expediting urban renewal.
- Consult the public on legislative amendments to empower the Fire Services Department and the Buildings Department to carry out re-safety improvement works for owners of old composite and domestic buildings who have failed to comply with the requirement of the relevant ordinance, and to recover the related fees from owners afterwards.
- Examine the scope for improving the Protection of the Harbour Ordinance (Cap. 531) to facilitate particularly the carrying out of works for improving connectivity or enhancing harbourfront areas for public enjoyment.
- Progressively open three new promenades, namely the Pierside Precinct (Phase 2), Water Sports and Recreation Precinct (Phase 2) and Revitalised Typhoon Shelter Precinct, from end-2021 to mid-2022, in order to realise the vision to extend the promenade along the Victoria Harbour to 34 km in 2028. In addition, the first promenade section at the Kai Tak former runway implemented as Public Open Space in Private Development is expected to be completed in 2022.
- Actively implement at more harbourfront sites the open management approach successfully adopted in the “Harbourfront Shared Space” in Western District and Wan Chai. To help members of the public better understand this new management mode, we will step up our promotion and publicity efforts.
- Adopt water-friendly “harbour steps”, i.e. a fence-free stepped down water edges design at the Water Sports and Recreation Precinct (Phase 2) as well as the Revitalised Typhoon Shelter Precinct to bring people closer to the water and facilitate the organisation of water sports activities at the Water Sports and Recreation Precinct.

- Conduct a comprehensive pedestrian environment improvement review on the betterment of walkability and connectivity in Kowloon East and the San Po Kong Business Area to complement the ongoing transformation of Kowloon East into a well-connected and pedestrian-friendly core business district.
- Carry out a study riding on the theme of “The Spirit of Creation” to review the industrial culture in Kowloon East and the San Po Kong Business Area for branding and promoting the characteristics of the district, as well as inheriting its industrial culture quality and creative spirit by urban design interventions in the process of Kowloon East’s transformation into a core business district.
- Promulgate Invigorating Island South Conceptual Master Plan 2.0 covering the Wong Chuk Hang, Aberdeen and Ap Lei Chau areas in 2022, after engaging stakeholders and incorporating their comments. Take forward various quick-win measures on enhancing connectivity as well as improving leisure facilities on the waterfront in tandem to bringing early improvements.
- Commence a study within 2021 to formulate comprehensive proposals for pedestrian environment and traffic improvements to bring vibrancy to the abovementioned areas.
- Commence construction works on a “Green Link” in Wong Chuk Hang in 2022 to link up MTR Wong Chuk Hang Station and Aberdeen Country Park through a series of attractive sitting-out areas and pedestrian facilities.
- Formulate proposals for the revitalisation of Staunton Creek Nullah into a river with environmental and landscape upgrading, integrating with adjoining public spaces to create a more pleasant walking environment.
- Study the technical feasibility of redevelopment and consolidation of the existing recreation ground, sports ground, sports centre and swimming pool facilities in Wong Chuk Hang, incorporating public vehicle park and other facilities to promote “single site, multiple use”.
- Formulate preliminary proposals for a planned open space site adjoining Ap Lei Chau Park to provide more leisure facilities for public enjoyment and create a more vibrant waterfront.

- Commence an investigation and design study on the expansion of Aberdeen Typhoon Shelter in 2022 to provide more vessel berthing area.
- Develop an accurate 3D digital underground utilities database with a view to facilitating the construction industry to plan and conduct the underground works efficiently and reducing road closure time resulting from the excavation works, thereby benefiting the community as a whole. The database is expected to be progressively established in 2023.
- Adopt innovative technologies proactively for waterworks management and maintenance. Measures include developing “digital twins” of major water treatment works and appropriate water supply networks for real-time monitoring and scenario simulation to enhance operation performance and reliability and exploring application of robotics, artificial intelligence, etc. for inspection and maintenance of waterworks.
- Develop electronic platforms to facilitate processing of service requests from the public and water supply applications from the trade, and adopt more innovative technologies such as artificial intelligence and smart data analytics in further improving customer service.

Caring Society

Achievements

- Pressed ahead with the initiative of providing additional gross floor area for welfare purposes in public housing projects to be completed from 2026-27 onwards. A broad-brush review on the feasibility of implementing this new initiative in individual projects has been completed. The initiative will be taken forward in most of the projects.
- Imposed since 2018-19 the requirement for provision of babycare rooms and lactation rooms in the conditions of sale of all commercial land sale sites.