

## Head 33 — CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

**Controlling officer:** the Director of Civil Engineering and Development will account for expenditure under this Head.

**Estimate 2022–23** ..... **\$2,845.3m**

**Establishment ceiling 2022–23** (notional annual mid-point salary value) representing an estimated 2 026 non-directorate posts as at 31 March 2022 reducing by three posts to 2 023 posts as at 31 March 2023 ..... **\$1,262.1m**

In addition, there will be an estimated 68 directorate posts as at 31 March 2022 and as at 31 March 2023.

**Commitment balance**..... **\$620.5m**

### Controlling Officer's Report

#### Programmes

<b>Programme (1) Tourism and Recreational Development</b>	This programme contributes to Policy Area 5: Travel and Tourism (Secretary for Commerce and Economic Development).
<b>Programme (2) Port and Marine Facilities</b>	This programme contributes to Policy Area 3: Air and Sea Communications and Logistics Development (Secretary for Transport and Housing) and Policy Area 21: Land and Waterborne Transport (Secretary for Transport and Housing).
<b>Programme (3) Provision of Land and Infrastructure</b>	This programme contributes to Policy Area 18: Recreation, Culture, Amenities and Entertainment Licensing (Secretary for Home Affairs), Policy Area 21: Land and Waterborne Transport (Secretary for Transport and Housing) and Policy Area 22: Buildings, Lands, Planning, Heritage Conservation, Greening and Landscape (Secretary for Development).
<b>Programme (4) Slope Safety and Geotechnical Standards</b>	This programme contributes to Policy Area 24: Water Supply, Drainage and Slope Safety (Secretary for Development).
<b>Programme (5) Greening and Technical Services</b>	This programme contributes to Policy Area 22: Buildings, Lands, Planning, Heritage Conservation, Greening and Landscape (Secretary for Development).
<b>Programme (6) Supervision of Mining, Quarrying and Explosives</b>	This programme contributes to Policy Area 24: Water Supply, Drainage and Slope Safety (Secretary for Development).
<b>Programme (7) Management of Construction and Demolition Materials</b>	This programme contributes to Policy Area 23: Environmental Protection, Conservation, Power and Sustainable Development (Secretary for the Environment).
<b>Programme (8) Advice on Development Proposals</b>	This programme contributes to Policy Area 22: Buildings, Lands, Planning, Heritage Conservation, Greening and Landscape (Secretary for Development).

#### Detail

##### Programme (1): Tourism and Recreational Development

	2020–21 (Actual)	2021–22 (Original)	2021–22 (Revised)	2022–23 (Estimate)
Financial provision (\$m)	57.0	58.4	58.8 (+0.7%)	58.1 (–1.2%)
				(or –0.5% on 2021–22 Original)

#### Aim

2 The aim is to plan, design and implement the supporting engineering works for the tourism and recreational developments in Lei Yue Mun, Deep Water Bay and Tai Shue Wan, as well as to provide engineering input to the development plans of the Ocean Park and Hong Kong Disneyland Resort (HKDL).

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### Brief Description

3 To strengthen the position of Hong Kong as a premier destination for visitors, the Department continued to provide engineering advice to Tourism Commission on the development plans of the Ocean Park and HKDL, as well as to co-ordinate and liaise with these two theme parks and relevant parties.

4 To provide better connection between the Ocean Park and other areas through water bodies and water transport, the Department started planning for the construction of piers at Deep Water Bay and Tai Shue Wan and examining the feasibility of providing temporary landing facilities prior to the completion of the pier projects.

5 To capitalise on the strength of the Lei Yue Mun area, being one of the most popular tourist attractions in Hong Kong for its seaside ambience and excellent seafood, and to enhance its attractiveness, the Department continued the construction of a public landing facility and related marine works in Lei Yue Mun to facilitate visitors' access by sea.

6 The key performance measures relating to tourism and recreational development are:

### Indicators

	2020 (Actual)	2021 (Actual)	2022 (Estimate)
commitment balance of projects under planning, design and construction (\$m).....	1,803.1	212.5#	212.5#
expenditure on works under construction (\$m) .....	0	38.3	42.4

# The drop in commitment balance of projects under planning, design and construction as compared with 2020 is due to the deletion of a commitment for infrastructure works in relation to the site adjacent to HKDL at Penny's Bay upon expiry in September 2020 of HKDL's option to purchase the site for resort expansion.

### Matters Requiring Special Attention in 2022–23

7 During 2022–23, the Department will:

- monitor and co-ordinate with Tourism Commission the development plans of the Ocean Park and HKDL;
- continue the planning and design for piers at Deep Water Bay and Tai Shue Wan and commission the provision of temporary landing facilities as appropriate; and
- continue the construction of the public landing facility and related marine works in Lei Yue Mun.

### Programme (2): Port and Marine Facilities

	2020–21 (Actual)	2021–22 (Original)	2021–22 (Revised)	2022–23 (Estimate)
Financial provision (\$m)	266.1	291.3	287.4 (–1.3%)	271.8 (–5.4%)
				(or –6.7% on 2021–22 Original)

### Aim

8 The aim is to implement the port development programme; design, construct and maintain public marine facilities, including seawalls, mooring areas and piers; maintain adequate water depth in navigation channels in the harbour; and provide advice and services to other departments on matters relating to marine works.

### Brief Description

9 In 2021, the Department continued the planning, design and construction of various projects for improving port and marine facilities.

10 The Department maintained 133 kilometres of seawalls, 323 piers including public piers as well as franchised and licensed ferry piers, all fairways, anchorage areas and major tidal river channels.

11 The Department continued to vet submissions for private marine facilities and to provide advice and services to other departments on matters relating to marine works.

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12 The key performance measures relating to port and marine facilities are:

### Targets

	Target	2020 (Actual)	2021 (Actual)	2022 (Plan)
inspecting each pier (urban: twice a year; rural: once a year) (%).....	100	100	100	100
responding to enquiries on information about marine facilities within seven days (%).....	100	100	100	100

### Indicators

	2020 (Actual)	2021 (Actual)	2022 (Estimate)
expenditure on maintenance works and maintenance dredging (\$m) .....	111.5	102.2	93.6
submissions processed and advice provided .....	2 050	2 050	2 050
commitment balance of marine facilities and port projects under planning, design and construction (\$m) .....	240.3	352.0	381.5
expenditure on marine facilities and port construction works (\$m).....	33.2	41.1	91.6

### Matters Requiring Special Attention in 2022–23

13 During 2022–23, the Department will continue to upgrade the marine facilities including breakwaters of typhoon shelters and piers, etc.

### Programme (3): Provision of Land and Infrastructure

	2020–21 (Actual)	2021–22 (Original)	2021–22 (Revised)	2022–23 (Estimate)
Financial provision (\$m)	851.5	903.9	910.3 (+0.7%)	923.2 (+1.4%)
				(or +2.1% on 2021–22 Original)

### Aim

14 The aim is to provide land and supporting infrastructure for development.

### Brief Description

15 The Department is responsible for planning, co-ordinating, programming and implementing provision of land and supporting infrastructure to accommodate various types of development for the public and private sectors to meet the needs of the community.

16 In 2021, the Department commenced the construction of the first phase of site formation and infrastructure works for the Tung Chung New Town Extension (TCNTE) and the boardwalk underneath the Island Eastern Corridor. The Department continued the reclamation works for the TCNTE; the site formation and infrastructure works for development of Anderson Road Quarry site; the construction of the advance works for the Initial Sites of Kam Tin South; the construction of heliport of the Government Flying Service Kai Tak Division to tie in with the TCNTE implementation; the infrastructure works of Wan Chai Development Phase II project; the construction of footbridge across Hip Wo Street near the junction of Hip Wo Street/Mut Wah Street in Kwun Tong; the construction of footbridge at the junction of Sham Mong Road and Hing Wah Street West in Sham Shui Po; and the site formation and infrastructure works for development sites at Kong Nga Po. The Department commenced the construction of footbridge at the junction of Sham Mong Road and Yen Chow Street West in Sham Shui Po and the main works package 1 of the Lok Ma Chau Loop development. The Department completed the construction of advance works of the Lok Ma Chau Loop development.

17 For the Kwu Tung North/Fanling North New Development Area (NDA), the Department continued the construction of the first phase development and the detailed design of the remaining phase development.

18 For Hung Shui Kiu/Ha Tsuen (HSK/HT) NDA, the Department continued the construction of the first phase development and the detailed design of the second phase development.

**19** The Department continued the detailed design of various projects including the development of ex-Cha Kwo Ling Kaolin Mine Site (Phase 2), the site formation and infrastructure works for Yuen Long South first phase development, and the remaining phase of the site formation and infrastructure works for the TCNTE. The site formation and infrastructure works for the redevelopment of Cha Kwo Ling Village, Kowloon East has proceeded to its investigation and detailed design stage. The Department commenced the investigation for the first phase development of New Territories North (NTN) – San Tin/Lok Ma Chau Development Node (covering relevant development proposals in the Northern Metropolis Development Strategy).

**20** The Department completed the engineering feasibility studies for redevelopment of the sites at Diamond Hill upon relocation of service reservoirs and three urban squatter areas at Cha Kwo Ling, Ngau Chi Wan and Chuk Yuen United Village; and the feasibility study of the first phase development of NTN – San Tin/Lok Ma Chau Development Node. The Department continued the studies on re-planning of Tseung Kwan O Area 137 and the planning for phase 2 development at Yung Shue Wan. The Department also continued the urban and green design study for the future town centre and the district commercial node in HSK/HT NDA; the feasibility study on river revitalisation and flood attenuation facilities for HSK/HT NDA; the feasibility studies on environmentally friendly transport services and fostering a pedestrian and bicycle-friendly environment in HSK/HT NDA and Yuen Long South development; the feasibility study on preliminary technical review on potential sites in Yuen Long Areas 13 and 14 for housing development; and the technical study on potential sites for relocation of wholesale markets in North West Tsing Yi. The Department continued the technical study on partial development of Fanling Golf Course site. The Department commenced the urban and green design study for the riverside promenade area along the revitalised Tin Shui Wai River Channel; the land use review study for Ngau Tam Mei area, the engineering feasibility study on the site in Tin Shui Wai Area 14 for private or public housing and government facilities developments; and planning and engineering study for the remaining phase development of NTN – NTN New Town and Man Kam To (covering relevant development proposals in the Northern Metropolis Development Strategy).

**21** The Department continued to co-ordinate the overall implementation of Kai Tak Development whilst pressing ahead with the staged design and construction of engineering infrastructure. The Department also continued to work with other bureaux/departments to take forward the implementation of various initiatives under the multi-modal Environmentally Friendly Linkage System for Kowloon East.

**22** The Department also continued the pilot study on underground space development in selected strategic urban areas and the pilot planning and engineering feasibility study on development of selected strategic cavern areas, and completed the technical study on underground quarrying-cum-cavern development in Hong Kong. The Department commenced the investigation and design for relocating the Public Works Central Laboratory in Kowloon Bay to caverns.

**23** The Department completed and opened the new cycle track section along Tsuen Wan waterfront between Tsuen Wan Riviera Park and Bayview Garden, and continued the construction of the Sam Mun Tsai cycle track extension. The Department continued the investigation and design of the remaining cycle track sections between Tsuen Wan and Tuen Mun.

**24** The Department continued the construction of site formation and infrastructure works for public housing development in Tuen Mun Area 54.

**25** The Department continued to take forward various initiatives in Lantau including major development projects, local improvement works, conservation and recreation initiatives, smart green and resilient initiatives, and public engagement, education and promotion activities.

**26** The Department commenced the study on the artificial islands in the Central Waters which mainly comprised a detailed planning and engineering study for the artificial islands of about 1 000 hectares around Kau Yi Chau, and a feasibility study on the priority road and rail links connecting the artificial islands. The Department also commenced the engineering study on Road P1 (Tai Ho – Sunny Bay Section), and the investigation of conservation and sustainable leisure and recreation initiatives in South Lantau.

**27** For local improvement works in Lantau, the Department continued the design of phase 2 stage 2 and phase 3 improvement works at Tai O. The Department also continued the design of phase 2 stage 2 improvement works at Mui Wo, and the design of the remaining phase of the expansion of mountain bike trail networks in South Lantau. The Department commenced the improvement works of hiking facilities in Ngong Ping and Lantau Peak. The Department also commenced the trail improvement works between Po Chue Tam and Fu Shan at Tai O.

**28** The Department continued the feasibility studies, investigation and design for public housing development sites at Cheung Man Road in Chai Wan, Ka Wai Man Road in Kennedy Town (Phase 2), Kam Tin South (Phase 2), Chung Nga Road West in Tai Po, Area 48 and Queen's Hill Extension in Fanling, Tan Kwai Tsuen in Yuen Long, San Hing Road and Hong Po Road in Tuen Mun and the 12 brownfield sites in Yuen Long, Tuen Mun and North District. The Department commenced the investigation and detailed design for site formation and infrastructure works for public housing development near Tin Tsz Road and remaining phases of public housing development at Wang Chau. The Department commenced the construction of site formation and infrastructure works for public housing developments at Kam Tin South (Phase 1), Tseung Kwan O, Tuen Mun Central and Long Bin in Yuen Long. The Department continued the construction of site formation and infrastructure works for public housing development including Pok Fu Lam South, Pik Wan Road in Yau Tong and Wang Chau. The Department substantially completed the construction of site formation and infrastructure works for public housing development at Area 9 and Chung Nga Road in Tai Po, Yan Wing Street in Yau Tong and Area 54 in Tung Chung.

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29 The Department continued the investigation and design of road improvement at Wo Hop Shek Cemetery for columbarium development, the construction of subway in support of columbarium development at Shek Mun, and the construction of the site formation and associated infrastructural works for development of columbarium at Sandy Ridge Cemetery. The Department completed the design of the site formation and infrastructural works for development of columbarium at Sham Shui Kok Drive in Lantau Island.

30 The Department continued the construction of the first phase of the site formation and infrastructure works for the establishment of an agricultural park in Kwu Tung South and continued with the detailed design of the second phase of the development works.

31 The Department commenced the investigation and design of the improvement to So Kwun Po Interchange in North District and continued the investigation study on Trunk Road T4 in Sha Tin. The Department continued the feasibility studies on proposed multi-storey complex for logistics and port backup uses in Kwai Tsing.

32 The Department continued the construction of the Tseung Kwan O – Lam Tin Tunnel, Cross Bay Link, Tseung Kwan O, Trunk Road T2 and Cha Kwo Ling Tunnel and the widening of Tai Po Road (Sha Tin Section).

33 The Department continued pursuing the staged implementation of public infrastructure works and integrated basement to support the West Kowloon Cultural District (WKCD) development.

34 The key performance measures relating to provision of land and infrastructure are:

### *Indicators*

	2020 (Actual)	2021 (Actual)	2022 (Estimate)
area of land formed (hectares).....	14.4	27.9	85.9
road constructed/widened for development (metres).....	9 290	4 020	18 815
commitment balance of land formation and infrastructure projects under planning, design and construction (\$m).....	229,093.6	280,595.8	275,989.0
expenditure on construction for land formation and infrastructure (\$m).....	13,541.8	16,121.6	15,298.8
no. of land formation and infrastructure projects under planning, design and construction .....	193	215	218

### *Matters Requiring Special Attention in 2022–23*

35 During 2022–23, the Department will:

- continue to ensure that all land and infrastructure required to meet development targets are delivered on time and cost-effectively;
- commence the construction of site formation and infrastructure works for Yuen Long South first phase development;
- commence a planning and engineering study for Lung Kwu Tan reclamation and the re-planning of Tuen Mun West area;
- commence the investigation and detailed design for the expansion of Aberdeen Typhoon Shelter;
- commence the study to explore the development potential of the Ma Tso Lung area as recommended by the Northern Metropolis Development Strategy;
- commence the feasibility study to examine the expansion of HSK/HT NDA to cover Lau Fau Shan and Tsim Bei Tsui and the development potential in areas from Lau Fau Shan to Pak Nai;
- complete the feasibility study on river revitalisation and flood attenuation facilities for HSK/HT NDA;
- complete the feasibility study on fostering a pedestrian and bicycle-friendly environment in HSK/HT NDA and Yuen Long South development;
- commence the phase 2 stage 2 improvement works at Mui Wo;
- commence the phase 2 stage 2 improvement works at Tai O;
- commence the planning and engineering study on Sunny Bay reclamation;
- commence the related study on Ma Liu Shui reclamation;
- complete the formulation of Lantau trails and recreation plan and commence studies and works to take forward trails and recreation proposals by phases;
- complete the improvement works for hiking facilities in Ngong Ping and Lantau Peak;
- complete the trail improvement works between Po Chue Tam and Fu Shan at Tai O;
- commence the construction works for provision of sanitary facilities at Pak Kung Au;

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- commence the construction works for the remaining phase of the expansion of mountain bike trail networks in South Lantau;
- commence the investigation and detailed design for site formation and infrastructure works for public housing development at Tai Tau Leng;
- complete the detailed design for site formation and infrastructure works for public housing development at Ka Wai Man Road in Kennedy Town (Phase 2);
- commence the investigation and detailed design for site formation and infrastructure works for public housing development at San Hing Road, Hong Po Road, Lam Tei North and Nai Wai in Tuen Mun; Ping Shan South, Sha Po, Shap Pat Heung and Tai Kei Leng in Yuen Long; and Tai Hang in Tai Po;
- complete the detailed design for site formation and infrastructure works for public housing development at Tan Kwai Tsuen in Yuen Long; and
- commence the construction of site formation and infrastructural works for development of columbarium at Sham Shui Kok Drive on Lantau Island.

### Programme (4): Slope Safety and Geotechnical Standards

	2020–21 (Actual)	2021–22 (Original)	2021–22 (Revised)	2022–23 (Estimate)
Financial provision (\$m)	432.5	441.7	444.4 (+0.6%)	432.5 (–2.7%)
				(or –2.1% on 2021–22 Original)

### Aim

36 The aim is to exercise geotechnical control on private and public developments, register slopes, implement the Landslip Prevention and Mitigation Programme (LPMitP), provide landslide emergency service, investigate serious landslides, set geotechnical standards, undertake public education and advise private slope owners on slope safety.

### Brief Description

37 The checking of geotechnical aspects of building and infrastructure developments continues to play a key role in reducing landslide risk. The Department has been providing specialised geotechnical input in the planning, investigation, design, construction and geotechnical risk management.

38 The Department continued the LPMitP to upgrade substandard government man-made slopes, mitigate landslide hazard arising from natural hillside catchments, and conduct safety screening for private man-made slopes. Among the 176 man-made slopes upgraded under the LPMitP in 2021, 94 affected buildings, 64 affected major roads and public facilities, and 18 affected squatter structures. In 2021, 36 hillside catchments mitigated under the LPMitP primarily affected buildings and important transport corridors, among which one also affected squatter structures.

39 The Department continued to maintain an automatic raingauge network to support the operation of the Landslip Warning System. It also provided 24-hour landslide emergency service in collaboration with other departments to remove immediate landslide danger and to restore essential services to the community. Serious landslides would continue to be investigated with a view to improving the slope safety system.

40 The Department continued to promote slope maintenance as well as public awareness and response towards slope safety. The Department continued to advise private slope owners on slope maintenance and improvement works. In addition, 18 guidance documents were produced in 2021 on slope safety and other geotechnical topics, including reports on lessons learnt from landslides.

41 The key performance measures relating to slope safety and geotechnical standards are:

### Target

	Target	2020 (Actual)	2021 (Actual)	2022 (Plan)
providing information about a slope within five days of an application (%).....	100	100	100	100

### Indicators

	2020 (Actual)	2021 (Actual)	2022 (Estimate)
new slope features registered .....	429	440	450
slope features upgraded and landscaped .....	166	176	163

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	2020 (Actual)	2021 (Actual)	2022 (Estimate)
natural hillside catchments with mitigation measures implemented .....	35	36	36
safety screening studies of private man-made slopes completed.....	100	100	100
expenditure for landslide prevention and mitigation (\$m) .....	1,112.0	1,165.7	1,100.0
geotechnical submissions checked.....	16 888	16 926	16 800
active construction sites audited.....	1 705	1 398	1 680
guidance documents produced .....	19	18	15

### *Matters Requiring Special Attention in 2022–23*

**42** During 2022–23, the Department will:

- ensure adequate geotechnical input to the planning, design and construction of man-made slopes, tunnels and landslide mitigation measures to natural hillsides, and to blasting works by professionally qualified geotechnical engineers and suitably experienced competent persons;
- continue to audit government and private sector projects involving tunnel/cavern works to ensure that the works are carried out to an adequate standard of geotechnical risk management;
- continue to assist government departments in prioritising slopes for engineer inspection and maintenance action;
- continue to enhance the appearance of slopes in conjunction with slope upgrading and landslide risk mitigation works under the LPMitP;
- continue to implement the LPMitP to deal with the landslide risk arising from substandard man-made slopes and vulnerable natural hillsides;
- continue to enhance geotechnical guidance on the design and quality control of slope upgrading and landslide risk mitigation works; and
- build community resilience and enhance government preparedness for landslide disasters, in view of the increasing risk arising from climate change, increasing population and slope deterioration.

### **Programme (5): Greening and Technical Services**

	2020–21 (Actual)	2021–22 (Original)	2021–22 (Revised)	2022–23 (Estimate)
Financial provision (\$m)	159.5	170.3	173.1 (+1.6%)	169.6 (–2.0%)
				(or –0.4% on 2021–22 Original)

### *Aim*

**43** The aim is to develop greening master plans and implement other landscape measures to improve the environment of Hong Kong, provide ground investigation, construction materials testing, geological surveys and other geotechnical services, and manage Hong Kong's marine fill resources and mud disposal facilities.

### *Brief Description*

**44** The Department commenced the construction for the greening master plans for the Southwest and Northeast New Territories.

**45** The Department operates contracts for ground investigation and laboratory testing. In 2021, the Public Works Laboratories (PWLs) continued to serve public works projects by undertaking some 600 000 tests on construction materials. The Department continued technical development on the application of innovative technologies in performing construction materials tests, such as automated testing systems for steel bars, concrete cubes and fill compaction control tests. The Department continued to provide geotechnical advisory services to government departments on a wide range of projects. The Civil Engineering Library, which contains a large collection of geotechnical data on Hong Kong, served about 5 000 users in 2021.

**46** Through the Marine Fill Committee, the Department continued to co-ordinate the supply and demand of local marine fill resources to meet development needs, oversee the operation of marine disposal facilities for the disposal of contaminated and uncontaminated sediments, and formulate strategies to ensure the provision of adequate marine disposal capacity.

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47 The key performance measures relating to greening and technical services are:

### Targets

	Target	2020 (Actual)	2021 (Actual)	2022 (Plan)
providing assistance at the registration counter of the Civil Engineering Library within ten minutes (%) .....	100	100	100	100
providing information about geology and natural resources within 4.5 days upon request (%).....	100	100	100	100

### Indicators

	2020 (Actual)	2021 (Actual)	2022 (Estimate)
no. of greening master plans under planning, design and implementation .....	8	8	8
expenditure on greening works implemented under greening master plans (\$m) .....	2.5	36.4	53.0
expenditure on term contracts for ground investigation and laboratory soil and rock testing (\$m).....	57.6	69.0	58.5
material tests conducted in the PWLs and in contract laboratories managed by the PWLs (thousand).....	588	600	600
geotechnical advisory cases handled in land-use planning and engineering feasibility studies .....	2 156	2 039	2 000
geotechnical advisory cases handled in detailed engineering studies and design.....	656	636	630
value of marine fill management investigations and studies (\$m) .....	4.2	6.1	4.3
marine fill management reports and major papers issued.....	9	9	9

### Matters Requiring Special Attention in 2022–23

48 During 2022–23, the Department will continue to:

- implement the greening master plans for the Southwest and Northeast New Territories; and
- provide reliable and efficient construction material testing and ground investigation services to public works projects.

### Programme (6): Supervision of Mining, Quarrying and Explosives

	2020–21 (Actual)	2021–22 (Original)	2021–22 (Revised)	2022–23 (Estimate)
Financial provision (\$m)	80.7	85.6	88.7 (+3.6%)	87.5 (–1.4%)
				(or +2.2% on 2021–22 Original)

### Aim

49 The aim is to supervise contracts for quarrying in Hong Kong, enforce the Mining Ordinance (Cap. 285), enforce the Dangerous Goods Ordinance (Cap. 295) in connection with the use of explosives, and safeguard the public from the misuse of explosives.

### Brief Description

50 The Department made satisfactory progress in respect of supervision of quarrying in 2021. The Department continued to supervise the rehabilitation contract for Lam Tei Quarry, issue permits under the Sand Ordinance (Cap. 147) for importation and transportation of sand, and regulate the use of site crushers on both public and private construction sites. Regular inspections of the quarry site were conducted to enforce safety regulations. The Department is also undertaking studies on potential new quarry sites in Hong Kong with a view to developing new quarries to dovetail with the closure of Lam Tei Quarry.

51 The Department also made satisfactory progress in respect of supervision of the use of explosives during the year. To protect the public from the misuse of explosives, the Department continued to maintain strict control over the storage, handling, transportation and use of explosives from manufacture or importation to use on construction sites.



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52 The key performance measures relating to supervision of quarrying and explosives are:

### *Targets*

	Target	2020 (Actual)	2021 (Actual)	2022 (Plan)
issuing a Sand Removal Permit within two days of an application which has satisfied government requirements (%) .....	100	100	100	100
issuing a Licence to Manufacture Explosives within two days of an application, where pre-licensing requirements have been satisfied (%) .....	100	100	100	100
issuing a Permit to Remove Explosives within one day of an application (%) .....	100	100	100	100
issuing a Licence to Store or Use Explosives within two days of an application, where pre-licensing requirements have been satisfied (%) .....	95	100	100	98
issuing a Mine Blasting Certificate within one day of an applicant passing an examination (%) .....	100	100	100	100

### *Indicators*

	2020 (Actual)	2021 (Actual)	2022 (Estimate)
Sand Removal Permits issued .....	2 919	722	1 000
Quarrying			
quarrying and rock crushing contracts supervised .....	1	1	1
revenue from royalty and rental payments (\$m) .....	98.0	99.5	95.0
aggregates processed by contract quarries (million tonnes) .....	1.5	1.5	1.3
safety inspections of quarries conducted .....	12	12	12
Explosives and Blasting			
inspections of pre-licensed sites, magazines, manufacturing plants and stores conducted .....	392	369	410
licences and permits granted <sup>β</sup> .....	7 688	9 813	8 800
licences and permits renewed <sup>β</sup> .....	143	135	150
inspections of blasting sites conducted .....	406	422	380
no. of blasting activities .....	1 099	1 503	1 180
tonnes of explosives consumed .....	709	787	700
no. of deliveries of explosives .....	1 100	1 501	1 100
tonnes of explosives delivered from government explosives depots .....	98	106	100
warnings issued .....	0	0	1

<sup>β</sup> These include all licences and permits except Sand Removal Permits.

### *Matters Requiring Special Attention in 2022–23*

53 During 2022–23, the Department will continue to work with the Security Bureau and other departments in implementing amendments to subsidiary legislation under the Dangerous Goods Ordinance in respect of the use of explosives. The Department will continue to undertake the investigation, design and construction consultancy agreement for the pilot underground quarry site at Lam Tei.

54 The main blasting projects in 2022–23 will be the Rehabilitation of Lam Tei Quarry contract – Extended Works, the Central Kowloon Route – Central Tunnel contract and the Relocation of Shatin Sewage Treatment Works to Caverns – Main Caverns Construction contract. These projects will largely determine the demand for explosives and number of blasting related activities.

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### Programme (7): Management of Construction and Demolition Materials

	2020–21 (Actual)	2021–22 (Original)	2021–22 (Revised)	2022–23 (Estimate)
Financial provision (\$m)	1,186.1	1,004.6	857.9 (–14.6%)	860.4 (+0.3%)
				(or –14.4% on 2021–22 Original)

#### Aim

55 The aim is to ensure good management of construction and demolition materials including beneficial reuse of inert construction and demolition materials (also known as public fill).

#### Brief Description

56 In 2021, the Department, on behalf of the Public Fill Committee, continued to scrutinise submissions from proponents of public works projects with a view to reducing generation and maximising the reuse of public fill. The Department also provided proponents of public works projects with guidelines to formulate construction and demolition materials management plans at the early design stage.

57 The Department continued to maintain adequate outlets at strategic locations for surplus construction and demolition materials, including the fill banks and the construction waste sorting facilities at Tuen Mun Area 38 and Tseung Kwan O Area 137. A short-term barging facility at Mui Wo and a long-term barging point at Chai Wan were being operated. Inert hard construction and demolition materials were also recycled for use by works projects.

58 The Department continued to deliver part of the surplus public fill for beneficial reuse in the Mainland and to liaise with the Mainland authority to ensure smooth operation.

59 The key performance measures relating to management of construction and demolition materials are:

#### Targets

	Target	2020 (Actual)	2021 (Actual)	2022 (Plan)
issuing dumping licences within three days (%).....	100	100	100	100
issuing dumping licences within half day for applications submitted in person (%) .....	100	100	100	100

#### Indicators

	2020 (Actual)	2021 (Actual)	2022 (Estimate)
public fill received at public fill reception facilities (million tonnes).....	12.1	10.0 <sup>^</sup>	12.7
public fill delivered to the Mainland for beneficial reuse (million tonnes) .....	0.9	1.0 <sup>^</sup>	0.3
public fill supplied to local projects for beneficial reuse (million tonnes) .....	13.6	5.6 <sup>^</sup>	10.3
public fill stockpiled at public fill reception facilities as at year end (million tonnes).....	6.9	10.3 <sup>^</sup>	12.4
recycling inert hard construction and demolition materials (million tonnes).....	0.5	0.7	0.3
submissions processed on behalf of the Public Fill Committee .....	138	137	140
no. of assignment of public fill outlets through trip ticket system .....	336	338	340

<sup>^</sup> Provisional actual subject to adjustment.

#### Matters Requiring Special Attention in 2022–23

60 During 2022–23, the Department will continue to supply the surplus public fill to the reclamation works of the Three-Runway System project, the TCNTE project and the Integrated Waste Management Facilities – Phase I project for beneficial reuse.

## Head 33 — CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

### Programme (8): Advice on Development Proposals

	2020–21 (Actual)	2021–22 (Original)	2021–22 (Revised)	2022–23 (Estimate)
Financial provision (\$m)	40.9	42.3	42.3 (—)	<b>42.2</b> (–0.2%)
				(or –0.2% on 2021–22 Original)

#### *Aim*

61 The aim is to advise on development proposals.

#### *Brief Description*

62 The Department continued to advise government departments on the engineering aspects of development proposals, including private development proposals, for the purpose of improving the environment and the infrastructural support to such proposals.

63 The key performance measures relating to advice on development proposals are:

#### *Indicators*

	2020 (Actual)	2021 (Actual)	2022 (Estimate)
town plans and planning briefs on which advice and comments are given .....	117	180	<b>140</b>
public and private development proposals and planning applications examined .....	2 091	2 384	<b>2 249</b>
town plans, planning briefs, public and private development proposals and planning applications dealt with per post .....	52.6	61.0	<b>56.9</b>

#### *Matters Requiring Special Attention in 2022–23*

64 During 2022–23, the Department will continue to provide:

- timely response to requests from the Buildings Department, Lands Department and Planning Department for advice on lease conditions, Town Planning Board applications, master development plans and building plans. Due regard will continue to be given to environmental factors including conserving natural features, reducing impact of engineering works and enhancing quality of the landscape; and
- technical advice and support to the WKCD Authority on the phased implementation of WKCD development.

## Head 33 — CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

### ANALYSIS OF FINANCIAL PROVISION

Programme	2020–21 (Actual) (\$m)	2021–22 (Original) (\$m)	2021–22 (Revised) (\$m)	2022–23 (Estimate) (\$m)
(1) Tourism and Recreational Development.....	57.0	58.4	58.8	58.1
(2) Port and Marine Facilities.....	266.1	291.3	287.4	271.8
(3) Provision of Land and Infrastructure.....	851.5	903.9	910.3	923.2
(4) Slope Safety and Geotechnical Standards.....	432.5	441.7	444.4	432.5
(5) Greening and Technical Services .....	159.5	170.3	173.1	169.6
(6) Supervision of Mining, Quarrying and Explosives.....	80.7	85.6	88.7	87.5
(7) Management of Construction and Demolition Materials.....	1,186.1	1,004.6	857.9	860.4
(8) Advice on Development Proposals.....	40.9	42.3	42.3	42.2
	3,074.3	2,998.1	2,862.9 (–4.5%)	2,845.3 (–0.6%)
				(or –5.1% on 2021–22 Original)

#### Analysis of Financial and Staffing Provision

##### Programme (1)

Provision for 2022–23 is \$0.7 million (1.2%) lower than the revised estimate for 2021–22. This is mainly due to the decreased cash flow requirement for operating expenses, partly offset by the increased provision for filling of vacancies and salary increments.

##### Programme (2)

Provision for 2022–23 is \$15.6 million (5.4%) lower than the revised estimate for 2021–22. This is mainly due to the decreased cash flow requirement for operating and contract maintenance expenses, partly offset by the increased provision for filling of vacancies and salary increments, and the increased cash flow requirement for plant and equipment.

##### Programme (3)

Provision for 2022–23 is \$12.9 million (1.4%) higher than the revised estimate for 2021–22. This is mainly due to the increased provision for filling of vacancies and salary increments, and the increased cash flow requirement for plant and equipment and non-recurrent expenditure, partly offset by the decreased cash flow requirement for other operating expenses and the net decrease of two posts.

##### Programme (4)

Provision for 2022–23 is \$11.9 million (2.7%) lower than the revised estimate for 2021–22. This is mainly due to the decreased cash flow requirement for plant and equipment, other operating expenses and the net decrease of one post, partly offset by the increased provision for filling of vacancies and salary increments.

##### Programme (5)

Provision for 2022–23 is \$3.5 million (2.0%) lower than the revised estimate for 2021–22. This is mainly due to the decreased cash flow requirement for plant and equipment and other operating expenses, partly offset by the increased provision for filling of vacancies and salary increments.

##### Programme (6)

Provision for 2022–23 is \$1.2 million (1.4%) lower than the revised estimate for 2021–22. This is mainly due to the decreased cash flow requirement for operating expenses, partly offset by the increased provision for filling of vacancies and salary increments, and the increased cash flow requirement for plant and equipment.

## **Head 33 — CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT**

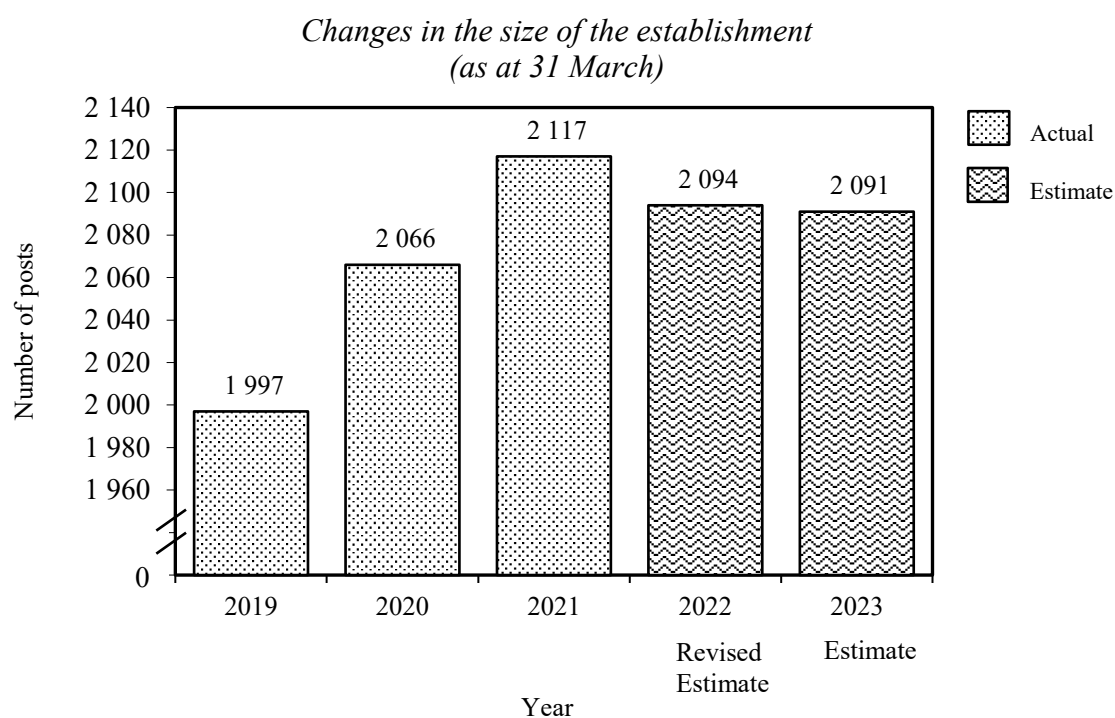
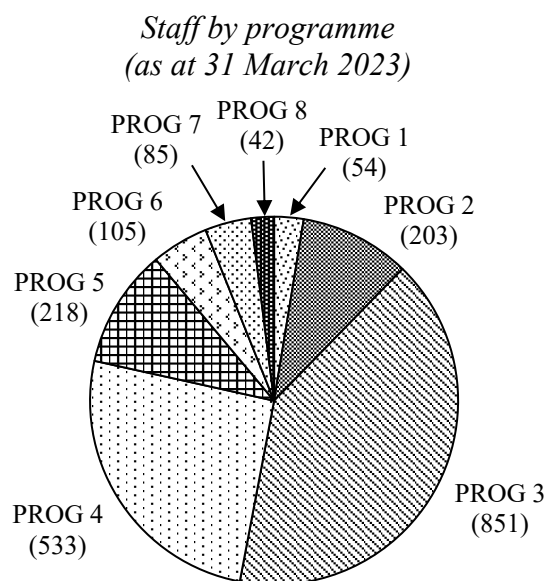
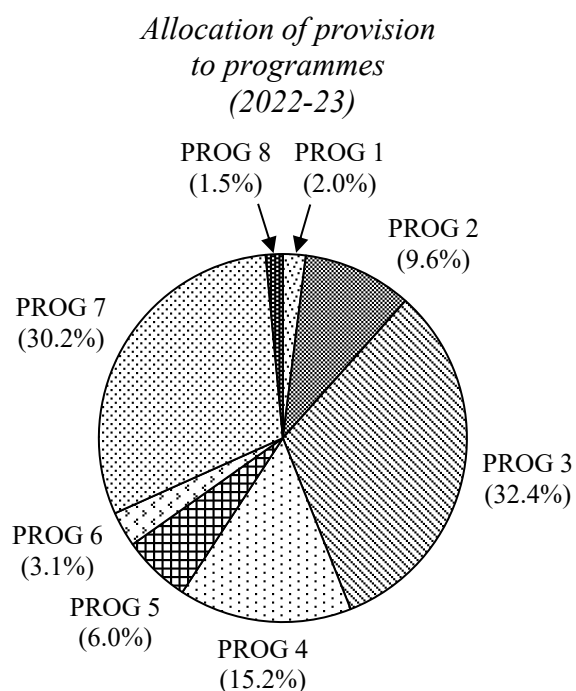
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### **Programme (7)**

Provision for 2022–23 is \$2.5 million (0.3%) higher than the revised estimate for 2021–22. This is mainly due to the increased provision for filling of vacancies, salary increments and handling surplus public fill, partly offset by the decreased cash flow requirement for other operating expenses.

### **Programme (8)**

Provision for 2022–23 is \$0.1 million (0.2%) lower than the revised estimate for 2021–22. This is mainly due to the decreased cash flow requirement for operating expenses, partly offset by the increased provision for filling of vacancies and salary increments.



## Head 33 — CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

Sub-head (Code)		Actual expenditure 2020–21	Approved estimate 2021–22	Revised estimate 2021–22	Estimate 2022–23
		\$'000	\$'000	\$'000	\$'000
<b>Operating Account</b>					
Recurrent					
000	Operational expenses .....	3,068,484	2,972,284	2,841,701	2,794,451
	Total, Recurrent.....	3,068,484	2,972,284	2,841,701	2,794,451
Non-Recurrent					
700	General non-recurrent .....	80	12,000	12,000	33,504
	Total, Non-Recurrent.....	80	12,000	12,000	33,504
	Total, Operating Account .....	3,068,564	2,984,284	2,853,701	2,827,955
<b>Capital Account</b>					
Plant, Equipment and Works					
603	Plant, vehicles and equipment.....	1,727	7,257	3,476	8,849
661	Minor plant, vehicles and equipment (block vote).....	4,039	6,567	5,675	8,467
	Total, Plant, Equipment and Works.....	5,766	13,824	9,151	17,316
	Total, Capital Account.....	5,766	13,824	9,151	17,316
	Total Expenditure .....	3,074,330	2,998,108	2,862,852	2,845,271

## Head 33 — CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

### Details of Expenditure by Subhead

The estimate of the amount required in 2022–23 for the salaries and expenses of the Civil Engineering and Development Department is \$2,845,271,000. This represents a decrease of \$17,581,000 against the revised estimate for 2021–22 and \$229,059,000 against the actual expenditure in 2020–21.

#### *Operating Account*

##### Recurrent

**2** Provision of \$2,794,451,000 under *Subhead 000 Operational expenses* is for the salaries, allowances and other operating expenses of the Civil Engineering and Development Department.

**3** The establishment as at 31 March 2022 will be 2 094 posts including 13 supernumerary posts. It is expected that there will be a net decrease of three posts in 2022–23. Subject to certain conditions, the controlling officer may under delegated power create or delete non-directorate posts during 2022–23, but the notional annual mid-point salary value of all such posts must not exceed \$1,262,108,000.

**4** An analysis of the financial provision under *Subhead 000 Operational expenses* is as follows:

	2020–21 (Actual) (\$'000)	2021–22 (Original) (\$'000)	2021–22 (Revised) (\$'000)	2022–23 (Estimate) (\$'000)
Personal Emoluments				
- Salaries .....	1,467,862	1,536,000	1,493,291	1,529,224
- Allowances .....	22,035	22,807	22,362	24,581
- Job-related allowances.....	560	984	1,184	930
Personnel Related Expenses				
- Mandatory Provident Fund contribution .....	5,535	6,049	5,756	5,317
- Civil Service Provident Fund contribution .....	91,755	111,471	105,437	125,877
Departmental Expenses				
- Contract maintenance .....	1,220,385	1,045,728	897,036	885,211
- General departmental expenses .....	260,352	249,245	316,635	223,311
	3,068,484	2,972,284	2,841,701	2,794,451

#### *Capital Account*

##### Plant, Equipment and Works

**5** Provision of \$8,467,000 under *Subhead 661 Minor plant, vehicles and equipment (block vote)* represents an increase of \$2,792,000 (49.2%) over the revised estimate for 2021–22. This is mainly due to the increased requirement for new and replacement of minor plant and equipment.



## Head 33 — CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

### Commitments

Sub-head (Code)	Item (Code)	Ambit	Approved commitment	Accumulated expenditure to 31.3.2021	Revised estimated expenditure for 2021–22	Balance
			\$'000	\$'000	\$'000	\$'000
<b><i>Operating Account</i></b>						
700		<i>General non-recurrent</i>				
	803	Lantau Conservation Fund .....	500,000	—	12,000	488,000
			<u>500,000</u>	<u>—</u>	<u>12,000</u>	<u>488,000</u>
<b><i>Capital Account</i></b>						
603		<i>Plant, vehicles and equipment</i>				
	802	Replacement of the hydrographic survey vessel “Port Works 5” .....	35,120	2,147	3,476	29,497
	804	Replacement of explosives delivery vessel “EVERSAFE NO.1”^.....	51,500^	—	—	51,500
	805	Replacement of explosives delivery vessel “EVERSAFE NO.2”^.....	51,500^	—	—	51,500
			<u>138,120</u>	<u>2,147</u>	<u>3,476</u>	<u>132,497</u>
	Total .....		<u>638,120</u>	<u>2,147</u>	<u>15,476</u>	<u>620,497</u>

^ This is a new item, funding for which is sought in the context of the Appropriation Bill 2022.