

Head 33 — CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

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

Estimate 2018–19 **\$2,979.1m**

Establishment ceiling 2018–19 (notional annual mid-point salary value) representing an estimated 1 844 non-directorate posts as at 31 March 2018 rising by 87 posts to 1 931 posts as at 31 March 2019..... **\$1,067.7m**

In addition, there will be an estimated 62 directorate posts as at 31 March 2018 rising by four posts to 66 posts as at 31 March 2019.

Commitment balance..... **\$1.1m**

Controlling Officer's Report

Programmes

Programme (1) Tourism and Recreational Development	This programme contributes to Policy Area 5: Travel and Tourism (Secretary for Commerce and Economic Development).
Programme (2) Port and Marine Facilities	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).
Programme (3) Provision of Land and Infrastructure	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).
Programme (4) Slope Safety and Geotechnical Standards	This programme contributes to Policy Area 24: Water Supply, Drainage and Slope Safety (Secretary for Development).
Programme (5) Greening and Technical Services	This programme contributes to Policy Area 22: Buildings, Lands, Planning, Heritage Conservation, Greening and Landscape (Secretary for Development).
Programme (6) Supervision of Mining, Quarrying and Explosives	This programme contributes to Policy Area 24: Water Supply, Drainage and Slope Safety (Secretary for Development).
Programme (7) Management of Construction and Demolition Materials	This programme contributes to Policy Area 23: Environmental Protection, Conservation, Power and Sustainable Development (Secretary for the Environment).
Programme (8) Advice on Development Proposals	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

	2016–17 (Actual)	2017–18 (Original)	2017–18 (Revised)	2018–19 (Estimate)
Financial provision (\$m)	48.9	49.4	49.8 (+0.8%)	51.2 (+2.8%)
				(or +3.6% on 2017–18 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, as well as to provide engineering input to the development plans of the Ocean Park and Hong Kong Disneyland Resort, and the development of Kai Tak Tourism Node.

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Brief Description

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

4 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 with the planning and design of a public landing facility and related marine works in the Lei Yue Mun area to facilitate visitors' access by sea.

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

Indicators

	2016 (Actual)	2017 (Actual)	2018 (Estimate)
commitment balance of projects under planning, design and construction (\$m) ^α	1,695.0	1,696.2	1,751.6
expenditure on works under construction (\$m)	11.6	0	0

^α Revised scope and description of the previous indicator “value of projects under planning and design” as from 2018. In addition to projects under planning and design, committed value of projects under construction is included in the indicator to present a full picture of ongoing projects. For comparison, the figures for 2016 and 2017 have been adjusted accordingly.

Matters Requiring Special Attention in 2018–19

6 During 2018–19, the Department will continue:

- the monitoring, co-ordination and liaison work on the development plans of the Ocean Park and Hong Kong Disneyland Resort, and the development of Kai Tak Tourism Node; and
- the planning and detailed design for the proposed public landing facility and related marine works in Lei Yue Mun.

Programme (2): Port and Marine Facilities

	2016–17 (Actual)	2017–18 (Original)	2017–18 (Revised)	2018–19 (Estimate)
Financial provision (\$m)	270.7	244.7	232.8 (–4.9%)	236.7 (+1.7%)
				(or –3.3% on 2017–18 Original)

Aim

7 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

8 In 2017, the Department continued the planning, design and construction of various projects for improving port and marine facilities. The Department completed the improvement works to Sai Kung Public Pier and carried out the residual dredging works at the Kwai Tsing Container Basin and its approach channel.

9 The Department maintained 127 kilometres of seawalls, 317 piers including public piers as well as franchised and licensed ferry piers, all fairways, anchorage areas and major tidal river channels.

10 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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11 The key performance measures relating to port and marine facilities are:

Targets

	Target	2016 (Actual)	2017 (Actual)	2018 (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

◇ Revised description of the previous target “responding to enquiries on information about marine structures and facilities within seven days” as from 2018.

Indicators

	2016 (Actual)	2017 (Actual)	2018 (Estimate)
expenditure on maintenance works and maintenance dredging (\$m).....	125.9	91.4	109.0
submissions processed and advice provided.....	2 076	2 050	2 050
length of seawalls maintained (km)τ.....	127	127	—
piers maintainedτ.....	317	317	—
commitment balance of marine facilities and port projects under planning, design and construction (\$m)Ω.....	287.5	216.4	126.0
expenditure on marine facilities and port construction works (\$m).....	134.2	92.8	30.0

τ Indicator to be removed as from 2018 as the information on seawalls and piers maintained is available under Brief Description of this Programme.

Ω Revised scope and description of the previous indicator “value of marine facilities and port projects under planning and design” as from 2018. In addition to projects under planning and design, committed value of projects under construction is included in the indicator to present a full picture of ongoing projects. For comparison, the figures for 2016 and 2017 have been adjusted accordingly.

Matters Requiring Special Attention in 2018–19

12 During 2018–19, the Department will continue to upgrade the marine facilities.

Programme (3): Provision of Land and Infrastructure

	2016–17 (Actual)	2017–18 (Original)	2017–18 (Revised)	2018–19 (Estimate)
Financial provision (\$m)	521.7	592.1	606.3 (+2.4%)	668.2 (+10.2%)

(or +12.9% on
2017–18 Original)

Aim

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

Brief Description

14 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.

15 In 2017, the Department continued the land formation and engineering infrastructure works of Wan Chai Development Phase II to facilitate the construction of Central – Wan Chai Bypass and Shatin to Central Link projects.

16 To capitalise on the strategic location of Lok Ma Chau Loop at the boundary district to meet future development needs, the Department completed the detailed design for the advance works so as to pave way for the development of Lok Ma Chau Loop.

17 The Department commenced the reclamation and advance works for the Tung Chung New Town Extension. The Department substantially completed the works for housing development sites adjacent to Lung Ping Road at Tai Wo Ping, and continued the site formation and infrastructure works for development of Anderson Road Quarry site in phases. To address housing, social, economic and environmental needs, the Department continued the design for various infrastructure projects covering the phased development of ex-Cha Kwo Ling Kaolin Mine Site, the advance works and first stage works of the Kwu Tung North and Fanling North New Development Areas (NDAs). The Department substantially completed the preliminary feasibility study on developing the New Territories North. The Department continued the planning and engineering studies on the future land use at ex-Lamma Quarry Area at Sok Kwu Wan, Yuen Long South, Tuen Mun Areas 40 and 46 and the adjoining areas and the re-planning of Tseung Kwan O Area 137 as well as the planning and preliminary design for phase 2 development at Yung Shue Wan. The Department also continued the preliminary land use study for Lam Tei Quarry and the adjoining areas, the feasibility studies on proposed multi-storey buildings for brownfield operations, the detailed design of Hung Shui Kiu NDA advance works phases 1 and 2, stage 1 works, and the feasibility study on environmentally friendly transport services in Hung Shui Kiu NDA and adjacent area, the engineering feasibility studies on private housing sites in Ma On Shan, the detailed design of the site formation works for police facilities in Kong Nga Po and the detailed design of the Tung Chung New Town Extension. The Department completed the detailed design for the site formation and infrastructure works for development at Kam Tin South, Yuen Long – advance works.

18 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.

19 To provide a new boundary control point (BCP) at Liantang/Heung Yuen Wai for commissioning by 2018, the Department completed the site formation and continued the associated infrastructure works for the BCP. The Department also continued the planning, engineering and architectural study for topside development on the Hong Kong Boundary Crossing Facilities Island of the Hong Kong-Zhuhai-Macao Bridge.

20 The Department has largely completed the technical studies for nearshore reclamations at Siu Ho Wan, Lung Kwu Tan and Ma Liu Shui.

21 The Department also continued the pilot study on underground space development in selected strategic urban areas including seeking stakeholders' views on suitable conceptual schemes. The Department continued the technical study on underground quarrying-cum-cavern development.

22 The Department completed the study on land requirements for the construction industry.

23 The Department continued the construction of the new cycle track between Tuen Mun and Sheung Shui and the investigation and design for the Tuen Mun to Tsuen Wan section of the comprehensive cycle track network in the New Territories.

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

25 The Department promulgated the Sustainable Lantau Blueprint which sets out the conservation and development framework for Lantau and took forward the projects and initiatives concerned. For local improvement works, the Department completed the construction of phase 1 improvement works at Mui Wo and continued the construction of phase 2 stage 1 improvement works at Mui Wo and Tai O as well as the improvement and expansion of mountain bike trail network in south Lantau.

26 The Department substantially completed the site formation and infrastructure works for the development at Anderson Road for population intake of On Tat Estate and On Tai Estate in phases. To address housing needs, the Department commenced the investigation and design for public housing development sites at Tseung Kwan O; and continued the design for the development of public housing sites at Ka Wai Man Road, the construction of phase 1 demolition and ground decontamination works for the development at North West Kowloon Reclamation Site 1, and infrastructure works for the development at Queen's Hill in Fanling and that at the Lin Cheung Road site, Sham Shui Po. The Department completed the detailed design of infrastructure works for public housing development in Area 54, Tung Chung, and proceeded with the construction works. The Department has completed the preliminary development review of public housing sites at Tuen Mun Central. The Department continued the engineering feasibility studies on potential public housing and development sites in Ma On Shan, Tseung Kwan O and Yuen Long, and the investigation stage of site formation and infrastructure works for the Initial Sites at Kam Tin South and at San Hing Road of Tuen Mun for housing development. The Department continued the investigation stage of site formation and infrastructure works on potential public housing and development sites at Pok Fu Lam South, and continued investigation and detailed design for the development of potential public housing and development sites at Pik Wan Road in Yau Tong, Chung Nga Road West in Tai Po, Long Bin, Tan Kwai Tsuen in Yuen Long, and Tuen Mun Central. The Department also continued the construction of site formation works at Area 9 in Tai Po and infrastructural works at Chung Nga Road.

27 The Department commenced the site formation and associated infrastructural works for development of columbarium at Sandy Ridge Cemetery, and continued the design of the site formation and associated infrastructural works for development of crematorium and related facilities at Sandy Ridge Cemetery.

28 The Department continued the feasibility study on proposed multi-storey heavy goods vehicles car park cum modern logistics building in Kwai Chung, and the feasibility study on proposed multi-storey complex for container storage and cargo handling in Tsing Yi.

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

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

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

Indicators

	2016 (Actual)	2017 (Actual)	2018 (Estimate)
area of land formed (hectares).....	10.8	8.3	3.7
road constructed/widened for development (m)	4 177	9 820	22 200
commitment balance of land formation and infrastructure projects under planning, design and construction (\$m)μ	176,841.9	196,007.3	188,390.1
expenditure on construction for land formation and infrastructure (\$m).....	7,744.4	10,281.8	13,682.7
no. of land formation and infrastructure projects under planning, design and construction	190	196	187

μ Revised description of the previous indicator “value of land formation and infrastructure projects under planning, design and construction” as from 2018.

Matters Requiring Special Attention in 2018–19

32 During 2018–19, 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 technical study on potential sites for relocation of wholesale markets and other industrial uses in North West Tsing Yi;
- commence the construction of Government Flying Service’s Kai Tak Division;
- commence the detailed design of Yuen Long South development – stage 1 works;
- commence the construction of the advance works and the detailed design of main works package 1 for Lok Ma Chau Loop development;
- commence the construction of the advance works for the site formation and infrastructure works for development at Kam Tin South, Yuen Long;
- complete the feasibility studies on proposed multi-storey buildings for brownfield operations;
- commence the review for the ground decontamination works at the site of ex-Kennedy Town incineration plant/abattoir and adjoining area;
- commence the planning and engineering study for nearshore reclamation at Sunny Bay;
- continue the preparatory work on the strategic studies for artificial islands in the central waters;
- continue the preparatory work on the planning and engineering study for nearshore reclamation at Lung Kwu Tan and Ma Liu Shui, and will also consider the future planning of the adjoining site vacated after relocation of the Sha Tin sewage treatment works into caverns;
- commence the construction of the advance works for the Tuen Mun to Tsuen Wan section of the comprehensive cycle track network in the New Territories;
- commence the construction of a footbridge system across Hip Wo Street at the junction with Mut Wah Street for Kwun Tong Town Centre redevelopment;
- complete the detailed feasibility study for the Environmentally Friendly Linkage System for Kowloon East;
- complete the construction of associated infrastructure works for the BCP at Liantang/Heung Yuen Wai;
- complete the construction of phase 2 stage 1 improvement works at Mui Wo;
- complete the engineering feasibility studies for potential public housing sites at Ma On Shan and Yuen Long;
- complete substantially the construction works of Infrastructure Works for WKCD, phase 1 – first construction package;

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- commence the investigation and design for construction of subway in support of columbarium development at Shek Mun and for road improvement works for columbarium development at Wo Hop Shek Cemetery;
- commence the construction of Cross Bay Link at Tseung Kwan O; and
- commence the construction of the widening of Tai Po Road (Sha Tin Section).

Programme (4): Slope Safety and Geotechnical Standards

	2016–17 (Actual)	2017–18 (Original)	2017–18 (Revised)	2018–19 (Estimate)
Financial provision (\$m)	370.6	377.6	378.9 (+0.3%)	389.1 (+2.7%)
				(or +3.0% on 2017–18 Original)

Aim

33 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

34 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.

35 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 155 man-made slopes upgraded under the LPMitP in 2017, 75 affect buildings, 48 affect major roads and public facilities, and 32 affect squatter structures. In 2017, 49 hillside catchments mitigated under the LPMitP primarily affect buildings and important transport corridors, among which four also affect squatter structures.

36 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.

37 The Department continued to promote slope maintenance as well as public awareness and response towards slope safety. Warning signs to remind the public of keeping clear from the sites of natural terrain hazard mitigation works were put in use. The Department continued to advise private slope owners on slope maintenance and improvement. In addition, 20 guidance documents were produced on slope safety and other geotechnical topics, including reports on lessons learnt from landslides.

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

Target

	Target	2016 (Actual)	2017 (Actual)	2018 (Plan)
providing information about a slope within five days of an application (%).....	100	100	100	100

Indicators

	2016 (Actual)	2017 (Actual)	2018 (Estimate)
new slope features registered	460	329	450
slope features upgraded and landscapedη	165	155	152
natural hillside catchments with mitigation measures implemented	49	49	33
safety screening studies of private man-made slopes completed.....	102	103	100
expenditure for landslip prevention and mitigation (\$m)	1,300.0	990.0	1,030.0
geotechnical submissions checked.....	21 549	20 547	21 000
active construction sites auditedα.....	3 284	3 297	3 300

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	2016 (Actual)	2017 (Actual)	2018 (Estimate)
guidance documents produced	21	20	21

- η From 2018 onwards, to improve clarity, the previous indicator “detailed stability studies completed on government man-made slopes” is subsumed under this indicator as conducting detailed stability studies is an initial stage of slope upgrading/landscaping.
- ə Revised description of the previous indicator “active construction sites inspected” as from 2018.

Matters Requiring Special Attention in 2018–19

39 During 2018–19, 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

	2016–17 (Actual)	2017–18 (Original)	2017–18 (Revised)	2018–19 (Estimate)
Financial provision (\$m)	134.9	136.6	138.8 (+1.6%)	149.5 (+7.7%)
				(or +9.4% on 2017–18 Original)

Aim

40 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

41 The Department continued to implement the recommended greening measures in 2017.

42 The Department operates contracts for ground investigation and laboratory testing. In 2017, the Public Works Laboratories (PWLs) continued to serve public works projects by undertaking some 761 000 tests on construction materials. The Department continued technical development on the use of sustainable construction materials (e.g. Ground Granulated Blastfurnace Slag) in civil engineering and geotechnical works in Hong Kong. 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 9 000 users in 2017.

43 Through the Marine Fill Committee, the Department continued to manage the supply and demand of 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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44 The key performance measures relating to greening and technical services are:

Targets

	Target	2016 (Actual)	2017 (Actual)	2018 (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

	2016 (Actual)	2017 (Actual)	2018 (Estimate)
no. of greening master plans under planning, design and implementation Δ	15	8	8
expenditure on greening works implemented under greening master plans (\$m)	64.1	74.4	26.3
expenditure on term contracts for ground investigation and laboratory soil and rock testing (\$m) \S	87.2	102.6	100.0
material tests conducted in the PWLs and in contract laboratories managed by the PWLs (thousand).....	746	761	730
geotechnical advisory cases handled in land-use planning and engineering feasibility studies \boxtimes	1 950	2 103	2 100
geotechnical advisory cases handled in detailed engineering studies and design ϵ	787	771	780
value of marine fill management investigations and studies (\$m) λ	5.4	8.2	2.7
marine fill management reports and major papers issued θ	9	9	9

Δ From 2018 onwards, this new indicator replaces the previous indicators “no. of greening master plans under planning” and “cumulative total of greening master plans formulated” to give a full picture of the number of ongoing greening master plans under various stages.

\S From 2018 onwards, to improve clarity, the previous indicators “trial pit excavated”, “length of drilling carried out in soil”, “length of drilling carried out in rock”, and “triaxial tests on soil specimens” under “ground investigation and laboratory soil and rock testing term contracts” are consolidated under this new indicator.

\boxtimes Revised description of the previous indicator “advisory cases handled in respect of land-use planning and engineering feasibility studies” as from 2018.

ϵ Revised description of the previous indicator “geotechnical engineering advisory cases handled” as from 2018.

λ Revised description of the previous indicator “value of fill management investigations and studies” as from 2018.

θ Revised description of the previous indicator “fill management reports and major papers issued” as from 2018.

Matters Requiring Special Attention in 2018–19

45 During 2018–19, the Department will continue to:

- implement the recommended landscape works in greening master plans, and
- provide reliable and efficient construction material testing and ground investigation services to public works projects.

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

	2016–17 (Actual)	2017–18 (Original)	2017–18 (Revised)	2018–19 (Estimate)
Financial provision (\$m)	78.4	75.9	78.9 (+4.0%)	76.2 (–3.4%)
				(or +0.4% on 2017–18 Original)

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Aim

46 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

47 The Department made satisfactory progress in respect of supervision of quarrying in 2017. The Department continued to supervise the rehabilitation contracts for Lam Tei Quarry and Anderson Road 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 quarry sites 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 the existing quarries.

48 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.

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

Targets

	Target	2016 (Actual)	2017 (Actual)	2018 (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 (%) ψ	95	100	97	95
issuing a Mine Blasting Certificate within one day of an applicant passing an examination (%)	100	100	100	100

ψ From 2018 onwards, to improve clarity, the previous targets “issuing a Licence to Store Explosives where pre-licensing requirements have been satisfied within two/three days of an application” and “issuing a Licence to Use Explosives where pre-licensing requirements have been satisfied within two/three days of an application” are consolidated under this new target.

Indicators

	2016 (Actual)	2017 (Actual)	2018 (Estimate)
Sand Removal Permits issued	892	1 135	1 100
Quarrying Φ			
quarrying and rock crushing contracts supervised	2	2	1
revenue from royalty and rental payments (\$m)	110.0	113.6	118.8
aggregates processed by contract quarries (million tonnes)	1.4	0.9	1.1
safety inspections of quarries conducted	24	19	12
Explosives and Blasting Φ			
inspections of pre-licensed sites, magazines, manufacturing plants and stores conducted.....	435	451	360
licences and permits granted β	6 430	6 825	5 900
licences and permits renewed β	157	160	150
inspections of blasting sites conducted	626	701	578
no. of blasting activities	1 149	1 259	805
tonnes of explosives consumed.....	685	697	900
no. of deliveries of explosives.....	456	723	718
tonnes of explosives delivered from government explosives depots.....	28	44	23

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	2016 (Actual)	2017 (Actual)	2018 (Estimate)
warnings issued	0	1	1

- Φ The indicators under this Programme have been re-grouped with headings added to improve clarity.
 β These include all licences and permits except Sand Removal Permits.

Matters Requiring Special Attention in 2018–19

50 During 2018–19, the Department will continue to work together with the Security Bureau and other departments in taking forward amendments to subsidiary legislation under the Dangerous Goods Ordinance in respect of the use of explosives. As the Rehabilitation of Anderson Road Quarry contract was completed in 2017, the only quarry site in operation in 2018–19 will be the Lam Tei Quarry. The Department will also continue with the feasibility studies of potential new quarry sites.

51 The main blasting projects in 2018–19 will be the Rehabilitation of Lam Tei Quarry contract – Extended Works and the Tseung Kwan O – Lam Tin Tunnel – Main Tunnel and Associated Works contract. These projects will largely determine the demand for explosives and number of blasting related activities.

Programme (7): Management of Construction and Demolition Materials

	2016–17 (Actual)	2017–18 (Original)	2017–18 (Revised)	2018–19 (Estimate)
Financial provision (\$m)	1,175.3	1,332.1	1,073.2 (–19.4%)	1,369.9 (+27.6%)
				(or +2.8% on 2017–18 Original)

Aim

52 The aim is to ensure good management and beneficial re-use of inert construction and demolition materials (also known as public fill).

Brief Description

53 In 2017, 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 re-use 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.

54 The Department continued to maintain adequate outlets at strategic locations for construction and demolition materials, including the fill banks and the temporary 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 at Tseung Kwan O Area 137 for use by works projects.

55 The Department continued to deliver surplus public fill for beneficial re-use in the Mainland and to liaise with the Mainland authority to ensure smooth operation.

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

Targets

	Target	2016 (Actual)	2017 (Actual)	2018 (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

	2016 (Actual)	2017 (Actual)	2018 (Estimate)
public fill received at public fill reception facilities (million tonnes).....	15.0	13.3 [^]	13.7
public fill delivered to the Mainland for beneficial re-use (million tonnes).....	13.6	13.5 [^]	13.0

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	2016 (Actual)	2017 (Actual)	2018 (Estimate)
public fill supplied to local projects for beneficial re-use (million tonnes).....	0.2	0.3 [^]	8.4
public fill stockpiled at public fill reception facilities as at year end (million tonnes).....	18.8	18.3 [^]	10.6
recycling inert hard construction and demolition materials (million tonnes).....	0.02	0.04	0.10
submissions processed on behalf of the Public Fill Committee	140	142	140
no. of assignment of public fill outlets through trip ticket system	350	356	350

[^] Provisional actual subject to adjustment.

Matters Requiring Special Attention in 2018–19

57 During 2018–19, the Department will co-ordinate the supply of public fill to the reclamation works of the Three-Runway System project and the Tung Chung New Town Extension project for beneficial re-use.

Programme (8): Advice on Development Proposals

	2016–17 (Actual)	2017–18 (Original)	2017–18 (Revised)	2018–19 (Estimate)
Financial provision (\$m)	36.2	37.1	37.1 (—)	38.3 (+3.2%)
				(or +3.2% on 2017–18 Original)

Aim

58 The aim is to advise on development proposals.

Brief Description

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

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

Indicators

	2016 (Actual)	2017 (Actual)	2018 (Estimate)
town plans and planning briefs on which advice and comments are given	146	126	126
public and private development proposals and planning applications examined	2 892	2 861	2 932
town plans, planning briefs, public and private development proposals and planning applications dealt with per post	72.3	71.1	72.8

Matters Requiring Special Attention in 2018–19

61 During 2018–19, 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. Measures will also be taken to ensure that due regard is 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.

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ANALYSIS OF FINANCIAL PROVISION

Programme	2016–17 (Actual) (\$m)	2017–18 (Original) (\$m)	2017–18 (Revised) (\$m)	2018–19 (Estimate) (\$m)
(1) Tourism and Recreational Development	48.9	49.4	49.8	51.2
(2) Port and Marine Facilities	270.7	244.7	232.8	236.7
(3) Provision of Land and Infrastructure	521.7	592.1	606.3	668.2
(4) Slope Safety and Geotechnical Standards	370.6	377.6	378.9	389.1
(5) Greening and Technical Services	134.9	136.6	138.8	149.5
(6) Supervision of Mining, Quarrying and Explosives	78.4	75.9	78.9	76.2
(7) Management of Construction and Demolition Materials	1,175.3	1,332.1	1,073.2	1,369.9
(8) Advice on Development Proposals	36.2	37.1	37.1	38.3
	2,636.7	2,845.5	2,595.8 (–8.8%)	2,979.1 (+14.8%)
				(or +4.7% on 2017–18 Original)

Analysis of Financial and Staffing Provision

Programme (1)

Provision for 2018–19 is \$1.4 million (2.8%) higher than the revised estimate for 2017–18. This is mainly due to the increased provision for filling of vacancies and salary increments, partly offset by reduced cash flow requirement for other operating expenses.

Programme (2)

Provision for 2018–19 is \$3.9 million (1.7%) higher than the revised estimate for 2017–18. This is mainly due to the increased provision for filling of vacancies and salary increments, partly offset by reduced cash flow requirement for contract maintenance expenses.

Programme (3)

Provision for 2018–19 is \$61.9 million (10.2%) higher than the revised estimate for 2017–18. This is mainly due to the increased provision for filling of vacancies, salary increments and the net increase of 66 posts, partly offset by reduced cash flow requirement for other operating expenses and minor plant and equipment.

Programme (4)

Provision for 2018–19 is \$10.2 million (2.7%) higher than the revised estimate for 2017–18. This is mainly due to the increased provision for filling of vacancies and salary increments, partly offset by the reduced cash flow requirement for other operating expenses.

Programme (5)

Provision for 2018–19 is \$10.7 million (7.7%) higher than the revised estimate for 2017–18. This is mainly due to the increased provision for filling of vacancies, salary increments and the net increase of 25 posts, partly offset by the reduced cash flow requirement for other operating expenses.

Programme (6)

Provision for 2018–19 is \$2.7 million (3.4%) lower than the revised estimate for 2017–18. This is mainly due to the reduced cash flow requirement for operating expenses and minor plant and equipment, partly offset by the increased provision for filling of vacancies and salary increments.

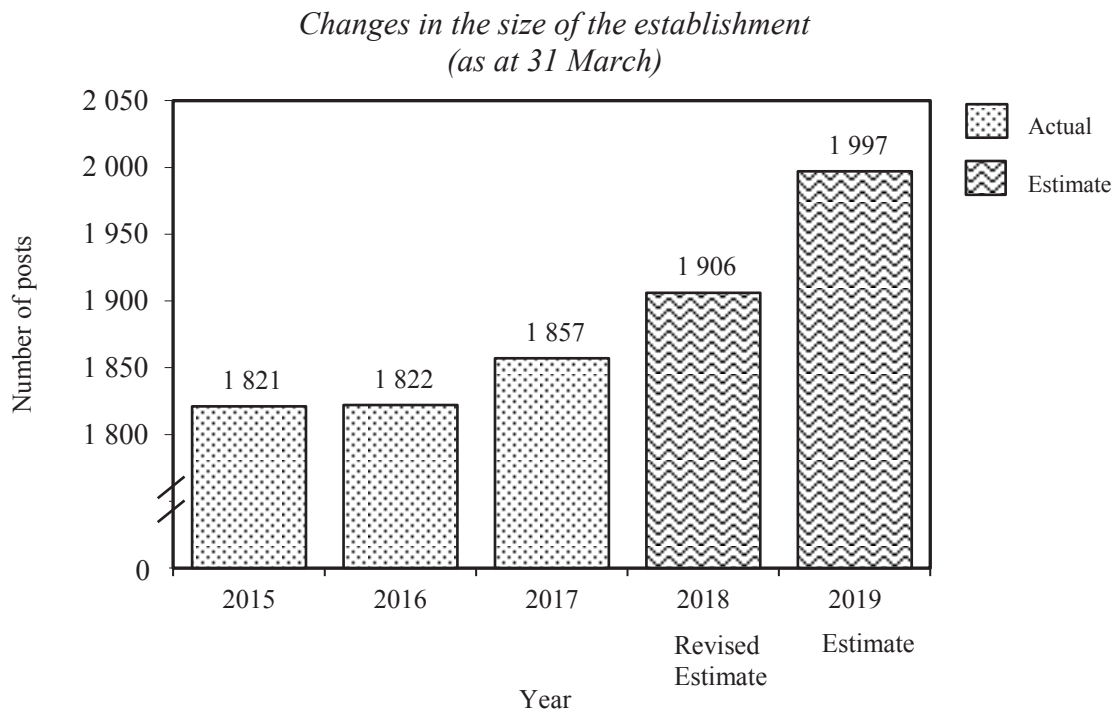
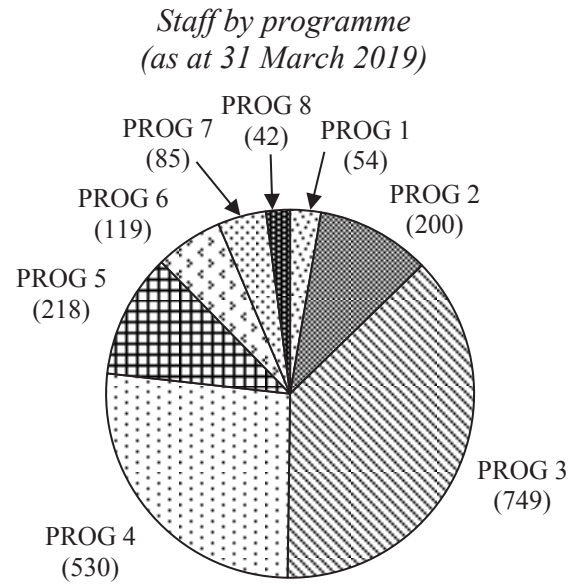
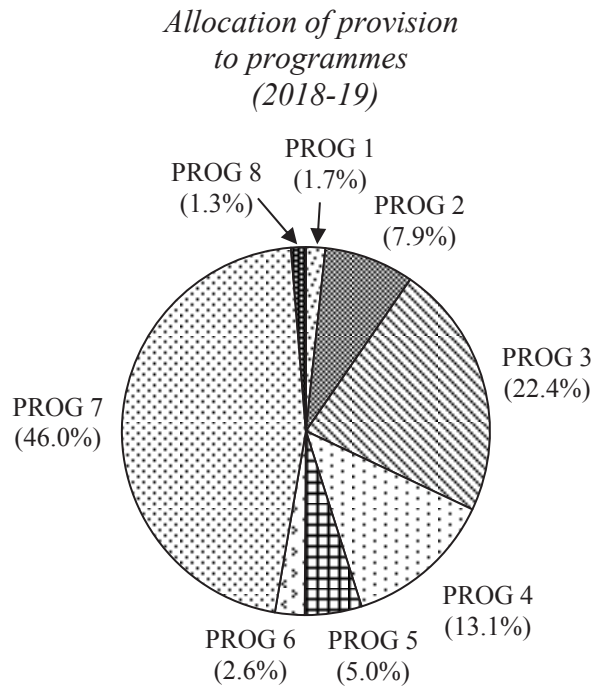
Programme (7)

Provision for 2018–19 is \$296.7 million (27.6%) higher than the revised estimate for 2017–18. This is mainly due to the increased provision for handling surplus public fill.

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Programme (8)

Provision for 2018–19 is \$1.2 million (3.2%) higher than the revised estimate for 2017–18. This is mainly due to the increased provision for filling of vacancies and salary increments.



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Sub-head (Code)	Actual expenditure 2016-17	Approved estimate 2017-18	Revised estimate 2017-18	Estimate 2018-19	
	\$'000	\$'000	\$'000	\$'000	
Operating Account					
Recurrent					
000	Operational expenses	2,630,622	2,840,492	2,590,936	2,979,034
	Total, Recurrent.....	2,630,622	2,840,492	2,590,936	2,979,034
Non-Recurrent					
700	General non-recurrent	43	150	25	100
	Total, Non-Recurrent.....	43	150	25	100
	Total, Operating Account	2,630,665	2,840,642	2,590,961	2,979,134
Capital Account					
Plant, Equipment and Works					
	Minor plant, vehicles and equipment (block vote).....	5,997	4,837	4,837	—
	Total, Plant, Equipment and Works.....	5,997	4,837	4,837	—
	Total, Capital Account.....	5,997	4,837	4,837	—
	Total Expenditure	2,636,662	2,845,479	2,595,798	2,979,134

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Details of Expenditure by Subhead

The estimate of the amount required in 2018–19 for the salaries and expenses of the Civil Engineering and Development Department is \$2,979,134,000. This represents an increase of \$383,336,000 over the revised estimate for 2017–18 and \$342,472,000 over the actual expenditure in 2016–17.

Operating Account

Recurrent

2 Provision of \$2,979,034,000 under *Subhead 000 Operational expenses* is for the salaries, allowances and other operating expenses of the Civil Engineering and Development Department. The increase of \$388,098,000 (15%) over the revised estimate for 2017–18 is mainly due to the increased provision for the net increase of 91 posts and handling surplus public fill.

3 The establishment as at 31 March 2018 will be 1 906 posts including 11 supernumerary posts. It is expected that there will be a net increase of 91 posts in 2018–19. Subject to certain conditions, the controlling officer may under delegated power create or delete non-directorate posts during 2018–19, but the notional annual mid-point salary value of all such posts must not exceed \$1,067,670,000.

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

	2016–17 (Actual) (\$'000)	2017–18 (Original) (\$'000)	2017–18 (Revised) (\$'000)	2018–19 (Estimate) (\$'000)
Personal Emoluments				
- Salaries.....	1,164,915	1,251,924	1,223,392	1,341,461
- Allowances.....	16,188	18,161	19,677	19,515
- Job-related allowances.....	874	931	966	929
Personnel Related Expenses				
- Mandatory Provident Fund contribution.....	3,475	4,970	3,681	5,419
- Civil Service Provident Fund contribution.....	44,298	57,452	53,501	71,174
Departmental Expenses				
- Contract maintenance	1,258,970	1,384,960	1,106,546	1,400,126
- General departmental expenses	141,902	122,094	183,173	140,410
	2,630,622	2,840,492	2,590,936	2,979,034

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Commitments

Sub-head (Code)	Item (Code)	Ambit	Approved commitment	Accumulated expenditure to 31.3.2017	Revised estimated expenditure for 2017–18	Balance
			\$'000	\$'000	\$'000	\$'000
<i>Operating Account</i>						
700		<i>General non-recurrent</i>				
	528	Provision of warning signs in squatter areas	5,000	3,879	25	1,096
		Total	<u>5,000</u>	<u>3,879</u>	<u>25</u>	<u>1,096</u>