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Replies to initial written questions raised by Finance Committee Members in examining the Estimates of Expenditure 2018-19

Director of Bureau : Secretary for Development

Session No. : 17

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CONTROLLING OFFICER'S REPLY

DEVB(W)001

(Question Serial No.1587)

Head: (159) Government Secretariat: Development Bureau
(Works Branch)

Subhead (No. & title): Not specified

Programme: (5) Intra-Governmental Services

Controlling Officer: Permanent Secretary for Development (Works) (C K HON)

Director of Bureau: Secretary for Development

Question:

Will the Administration inform this Committee of the staff establishment, expenditure on emoluments and operational expenses under this Programme for 2018-19? As regards the steering of the planning and engineering studies on reclamation at Sunny Bay, Ma Liu Shui and Lung Kwu Tan mentioned in Matters Requiring Special Attention in 2018-19, what are the staff establishment and expenditure on emoluments for 2018-19?

Asked by: Hon CHAN Chi-chuen (Member Question No. (LegCo use): 11)

Reply:

In 2018-19, the provision for operational expenses under Programme (5) Intra-Governmental Services is \$302 million, comprising personal emoluments (\$159 million), personnel related expenses (\$6 million), departmental expenses (\$135 million) and other charges (\$2 million). The estimated establishment for 31 March 2019 under that programme is 176.

Officers responsible for steering the planning and engineering studies on reclamation at Sunny Bay, Ma Liu Shui and Lung Kwu Tan perform their work as part of their overall duties. There is no separate breakdown showing the staff establishment or expenditure on emoluments.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)002

(Question Serial No. 0573)

Head: (159) Government Secretariat: Development Bureau
(Works Branch)

Subhead (No. & title): Not specified

Programme: (1) Water Supply

Controlling Officer: Permanent Secretary for Development (Works) (C K HON)

Director of Bureau: Secretary for Development

Question:

It is mentioned in Matters Requiring Special Attention under Programme (1) that the Works Branch will set up a dedicated team for overseeing the performance of the Water Supplies Department on water safety aspect as well as the related consultancy studies with a view to establishing a suitable water safety regime in Hong Kong. In this connection, please inform this Committee of:

- (1) the estimated expenditure and manpower arrangements for the dedicated team; and
- (2) the specific measures to be taken in its work, their timetables and performance targets.

Asked by: Hon CHAN Chun-ying (Member Question No. (LegCo use): 13)

Reply:

- (1) The proposed dedicated team will be led by a Principal Government Engineer (PGE), the post of which is yet to be created. Subject to approval of the Finance Committee of the Legislative Council, we plan to create the proposed PGE post in 2018-19. The PGE will be supported by five non-directorate civil servants and contract staff of professional and general grades. The estimated annual expenditure for remunerating the dedicated team is about \$8.5 million including the proposed PGE post. Subject to further development of the regulatory regime stated in paragraph (2) below, we will review the final set-up of the dedicated team in due course.
- (2) The Government attaches great importance to ensuring drinking water safety. The dedicated team will monitor the performance of the Water Supplies Department (WSD) over drinking water safety in an independent manner. The dedicated team will carry out its own regular audits and surprise checks, and arrange additional external audits through engaging independent auditing firms, as and when necessary, on WSD's quality system for supplying potable water. The team will also conduct a detailed study on a suitable drinking water safety

regulatory regime for Hong Kong. It is expected that the detailed study will take 18 months to complete.

The Government set up the Drinking Water Safety Advisory Committee (the Committee) in January 2018 with members comprising academics and experts of related fields to give impartial advice to the Development Bureau on various drinking water safety issues. In addition to providing secretariat support to the operation of the Committee, the dedicated team will seek advice from the Committee, among other issues, on the formulation of the drinking water safety regulatory regime.

From time to time, the dedicated team will also liaise with WSD, experts of different sectors and relevant government bureaux and departments on various drinking water safety issues.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)003

(Question Serial No. 0574)

Head: (159) Government Secretariat: Development Bureau
(Works Branch)

Subhead (No. & title): (000) Operational Expenses

Programme: (3) Greening, Landscape and Tree Management

Controlling Officer: Permanent Secretary for Development (Works) (C K HON)

Director of Bureau: Secretary for Development

Question:

It is mentioned in Matters Requiring Special Attention under Programme (3) that the Works Branch will continue to oversee the effective implementation of the tree risk management arrangements within the Government and the development of a database of problematic trees. In this connection, please inform this Committee of:

- (1) the estimated timetable for the development of the database; and
- (2) the estimated expenditure and manpower resources involved.

Asked by: Hon CHAN Chun-ying (Member Question No. (LegCo use): 14)

Reply:

- 1) The Tree Register database was set up in 2010 and has been in operation since then. It provides information to the public on important trees that require regular monitoring. We will continue to update the database, and improve its format to highlight the descriptions of tree problems, which will be completed by 2019.
- 2) Reviewing tree risk management arrangements within the Government and maintaining the Tree Register database are part of the normal duties of the staff of the Greening, Landscape and Tree Management Section. These tasks will continue to be undertaken by existing staff and no additional expenditure will be incurred in 2018-19.

- End -

CONTROLLING OFFICER'S REPLY**DEVB(W)004****(Question Serial No. 0575)**

Head: (159) Government Secretariat: Development Bureau
(Works Branch)

Subhead (No. & title): (000) Operational expenses

Programme: (4) Energizing Kowloon East

Controlling Officer: Permanent Secretary for Development (Works) (C K HON)

Director of Bureau: Secretary for Development

Question:

It is mentioned in Matters Requiring Special Attention under Programme (4) that the Works Branch will continue to carry out the smart city consultancy and proof-of-concept trials, and facilitate different sectors to use Kowloon East as a test bed to explore the feasibility of developing a smart city. In this connection, please inform this Committee of:

- (1) the timetables for the consultancy and trials;
- (2) the measures to facilitate different sectors to use Kowloon East as a test bed; and
- (3) the estimated expenditure and manpower resources involved.

Asked by: Hon CHAN Chun-ying (Member Question No. (LegCo use): 15)

Reply:

- (1) & (3) The Energizing Kowloon East Office (EKEO) commissioned a consultancy study to explore smart city development in Kowloon East (KE) in February 2016. The Stage 1 public engagement (PE) exercise was completed in January 2017 and the Stage 2 PE exercise is scheduled for the third quarter of 2018. The study is targeted for completion by end 2018 at a cost of approximately \$7.8 million. Among other recommendations, the study has proposed eight proof of concept (PoC) trials for implementation in Kowloon East. Existing manpower resources are deployed to manage the study and the PoC trials. The timetables and expenditures of the PoC trials are as follows:

	PoC Trial	Timetable	Expenditure (\$ million)
Completed			
1	Smart Crowd Management System	Completed in May 2017	0.35 (Actual)
2	Persona and Preference-based Way-finding for Pedestrians	Completed in first quarter of 2018	1.26 (Actual)

	PoC Trial	Timetable	Expenditure (\$ million)
Ongoing			
3	Energy Efficiency Data System	Commenced in September 2017 for completion in second quarter of 2019	1.63 (Estimate)
4	Kerbside Loading and Unloading Bay Monitoring System	Commenced in January 2018 for completion in second quarter of 2019	1.50 (Estimate)
PoC Trials under Preparation			
5	Multi-purpose Lamp Post	Target to commence in second quarter of 2018	Subject to finalisation of tender specifications
6	Smart Waste Bin System	Target to commence in second quarter of 2018	
7	Real-time Road Works Information	Target to commence in third quarter of 2018	
8	Illegal Parking Monitoring System	Target to commence in third quarter of 2018	

More details can be found in the https://www.ekeo.gov.hk/en/smart_city/index.html webpage.

- (2) To create a knowledge-driven platform for co-creating a smart KE, EKEO encourages universities and research institutes to develop innovative smart city solutions and has provided policy support for smart city-related research projects using KE as a test bed in their funding applications. Five such research projects have already secured research funding from various sources and are ongoing. EKEO also facilitates CLP Power's smart energy community project which involves the installation of energy-saving devices for several developments in the Kai Tak Development Area.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)005

(Question Serial No. 2539)

Head: (159) Government Secretariat: Development Bureau
(Works Branch)

Subhead (No. & title): Not specified

Programme: (3) Greening, Landscape and Tree Management

Controlling Officer: Permanent Secretary for Development (Works) (C K HON)

Director of Bureau: Secretary for Development

Question:

It is mentioned in Matters Requiring Special Attention in 2018-19 under Programme (3) Greening, Landscape and Tree Management that the Government will, among other things, undertake further research and study the life-cycle planning and management of street trees as part of our urban forestry assets. Please inform this Committee of the following:

1. What are the amount and manpower involved in the study?
2. What are the details of the study? Will streets across the territory be divided into certain zones, which will then form the basis to determine the species of trees and flowers to be planted? If no, what are the reasons?
3. The Architectural Services Department will provide advice on the building and landscape issues in major government projects. Will the Government consolidate the planning for trees in various districts to highlight their distinctive characteristics? If yes, how will the work of the various departments be co-ordinated? If no, what are the reasons?

Asked by: Hon CHAN Chun-ying (Member Question No. (LegCo use): 48)

Reply:

1. The Greening, Landscape and Tree Management Section (GLTMS) will commission a consultancy to conduct the further study, the estimated cost of which is \$1.3 million. As consultancy management is part of the GLTMS's normal duties, no additional staff resources are required.

2. The further study will build on the street tree selection guide currently being finalised, which has categorised the streetscapes of Hong Kong into different street types according to road hierarchy, size, location of planting zones and the street environment (such as kerbside activities and interface conditions), and will provide a reference for selecting trees and complementary plant mixes suitable for different types of streets. The study will test the

practicability of planting selected species in corresponding street types with a view to developing a series of district and street-specific landscape plans.

3. The Architectural Services Department is the works agent for public facilities (such as parks, hospitals, government offices, etc.) and the maintenance agent for government properties. Landscape and greening considerations are integrated into the design and development of those facilities, having regard to site contexts, connectivity to the neighbourhood, functional requirements etc. As for tree planting in various districts, the Civil Engineering and Development Department draws up Greening Master Plans to define the overall landscape framework for various districts, with proposed themes and plant species for departments' consideration when carrying out planting work.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)006

(Question Serial No. 1961)

Head: (159) Government Secretariat: Development Bureau
(Works Branch)

Subhead (No. & title): (000) Operational Expenses

Programme: (3) Greening, Landscape and Tree Management

Controlling Officer: Permanent Secretary for Development (Works) (C K HON)

Director of Bureau: Secretary for Development

Question:

Regarding local tree management, will the Government inform this Committee of the following in the past 3 years:

1. the numbers of trees managed by the tree management departments of the Government;
2. the current numbers of tree management personnel and those with qualifications in arboriculture in government departments;
3. the numbers of completed and outstanding cases under Form 1 and Form 2;
4. the number of tree management complaints received per year;
5. the number of tree collapse reports received and the resulting number of casualties per year;
6. the number of trees removed per year and the reasons;
7. the number of trees planted per year;
8. the current number of professional arboriculture training courses in Hong Kong; and
9. whether the Government will allocate more resources to train local arboriculture professionals?

Asked by: Hon CHAN Hak-kan (Member Question No. (LegCo use): 51)

Reply:

1&2. Trees on government land and at government facilities are managed by various tree management departments through dedicated in-house teams or outsourced contracts or both. The number of trees under the care of the nine core tree management departments and the number of their tree management personnel with professional qualifications are set out below –

Core tree management department	Number of trees (Note 1)			Number of tree Management staff (Note 2)		
	2015-16	2016-17	2017-18 (As at 31 Dec 2017)	2015-16	2016-17	2017-18 (As at 31 Dec 2017)
Agriculture, Fisheries and Conservation Department (AFCD)	39 000 (Note 3)	38 000 (Note 3)	38 000 (Note 3)	87(87)	87(87)	87(87)
Architectural Services Department (ArchSD)	200 000 ^(Note 4)			5(5)	5(5)	6(6)
Civil Engineering and Development Department (CEDD)	300	300	9 400	5(5)	5(5)	8(5)
Drainage Services Department (DSD)	24 500	24 700	20 200	17(17)	17(17)	17(17)
Highways Department (HyD)	635 000	633 000	592 000	62(47)	58(49)	30(26)
Housing Department (HD)	102 000	100 800	101 700	46(42)	41(35)	41(35)
Lands Department (LandsD)	N/A (Note 5)			15(10)	15(15)	9(9)
Leisure and Cultural Services Department (LCSD)	514 000	635 000	628 000	221(168)	217(217)	282(282)
Water Supplies Department (WSD)	157 100	155 000	155 000	22(21)	21(21)	21(17)

Note 1:

Rounded to the nearest 100.

Note 2:

The figures within brackets indicate the number of tree management staff with professional qualifications in arboriculture including the Certified Arborist qualification awarded by the International Society of Arboriculture of the USA.

Note 3:

AFCD manages all trees in country parks. The figure includes only the number of trees in frequently used areas and facilities.

Note 4:

These are trees on slopes managed by ArchSD. The department replaces trees removed due to ageing and/or disease with new ones on a one-to-one basis. Therefore, the number of trees that it manages varies only slightly, if at all, from one year to the next, and hovers around 200 000.

Note 5:

LandsD is responsible for non-routine maintenance of trees on unallocated and unleased government land that are not maintained by any designated government departments. Due to their large numbers, trees on such land cannot be counted. LandsD will follow up referrals and complaints when they arise.

3. Tree management departments undertake tree risk assessments and adopt all the required mitigation measures during their annual Tree Risk Assessment and Management (TRAM) exercise. The number of tree group inspections (Form 1) and that of individual tree risk assessments (Form 2) completed by those departments during their TRAM exercise in each of the past three years are set out as below –

Annual TRAM exercise	Number of completed tree group inspections (Form 1)	Numbers of individual tree risk assessments (Form 2)
2015	30 179	7 476
2016	29 843	8 668
2017	30 776	8 787

4. A breakdown of the number of tree management enquiries and complaints received by the core tree management departments in each of the past three years is as follows –

Core tree management department	Number of tree management enquiries and complaints in the past three years		
	2015-16	2016-17	2017-18 (as at 31 Dec 2017)
AFCD	91	130	124
ArchSD	56	45	34
CEDD	47	110	162
DSD	74	108	90
HyD	2 678	7 153	5 678
HD	438	685	968
LandsD	10 719	13 580	12 238
LCSD	3 221	6 932	7 193
WSD	122	172	202

5. The number of tree failure reports and the number of casualties cases due to tree failure incidents in each of the past three years is set out below –

The number of tree failure reports and the number of casualties cases	2015	2016	2017
Individual tree failures	169	171	342
Tree failures after Tropical Cyclone Warning Signal No.8 or above	309	3 914	8 742
Total number of casualties in tree failure incidents ^(Note1)	11	9	7

Note 1:

There has been no fatal tree failure in the past three years. The figures are tree failure incidents causing minor injuries.

6. Trees are removed because of the following reasons: construction works, health or structural issues, vegetation maintenance and inclement weather. The number of trees removed in each of the past three financial years is set out below –

Financial year	Number of Trees Removed
2015-16	32 537
2016-17	32 211
2017-18 (as at 31 Dec 2017)	32 901

7. The number of trees planted per year in the past three years is shown below –

Year	Trees Planted
2015	447 255
2016	455 269
2017	461 754

8. Local arboriculture courses offered by major institutes are set out below –

Institution	Programme /Course
Vocation Training Council Technological and Higher Education Institute of Hong Kong (THEi)	Bachelor of Arts (Honours) in Horticulture and Landscape Management
The University of Hong Kong School of Professional and Continuing Education (HKU SPACE)	Advanced Diploma in Tree Management and Conservation
Hong Kong Baptist University College of International Education (CIE)	Associate Degree in Tree Management
Vocational Training Council Hong Kong Institute of Vocational Education (IVE)	Professional Certificate in Arboriculture and Tree Work Supervision
	Higher Diploma in Conservation and Tree Management

	Certificate in Basic Arboriculture and Tree Work Practices
The Open University of Hong Kong Li Ka Shing Institute of Professional and Continuing Education(LiPACE)	Certificate in Professional Tree Management
The Chinese University of Hong Kong School of Continuing and Professional Studies (CUSCS)	Diploma Programme in Arboriculture
The Employees Retraining Board (ERB) The Hong Kong Confederation of Trade Unions	Certificate in Arboricultural Management

9. The Government will continue to provide resources to support the local landscape industry through liaison on education and human resources planning, subsidies for relevant undergraduate programmes through the Study Subsidy Scheme for Designated Professions/Sectors, and organisation of continuing professional development seminars and training. The Greening, Landscape and Tree Management Section under the Development Bureau will continue to identify relevant professional courses for staff training to build up the Government's tree management capability.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)007

(Question Serial No. 2651)

Head: (159) Government Secretariat: Development Bureau
(Works Branch)

Subhead (No. & title): Not specified

Programme: (2) Heritage Conservation

Controlling Officer: Permanent Secretary for Development (Works) (C K HON)

Director of Bureau: Secretary for Development

Question:

Will the Administration inform this Committee of the following:

- 1) How many graded historic buildings are currently abandoned?

- 2) How many of them are owned by the Government? Please set out the following information in tabular form:
 - a) name of the building;
 - b) address;
 - c) grade;
 - d) vacancy period; and
 - e) annual expenditure on the property.

- 3) Does the Government have any intention to restore and reuse the abandoned historic buildings? If yes, what are the details of its plans? If no, what are the reasons?

Asked by: Hon CHAN Tanya (Member Question No. (LegCo use): 42)

Reply:

Graded historic buildings, be they government-owned or privately owned, are not abandoned, though some of them may not have any immediate use.

By 1 March 2018, the Antiquities Advisory Board (AAB) had confirmed the grading of 1 398 buildings. Among them, 1 066 buildings were accorded Grade 1, Grade 2 and Grade 3 status. The grading system is administrative in nature to provide an objective

basis for determining the heritage value and, hence, the preservation need of historic buildings in Hong Kong. The system does not affect the ownership, usage and owners' management and development rights regarding the buildings that have been graded.

A total of 256 buildings with grading status are owned by the Government. Some of them are used by government bureaux/departments while others have been let out to non-governmental organisations or commercial entities. The list of graded historic buildings can be accessed via the AAB website at www.aab.gov.hk.

In general, government-owned graded historic buildings which are not used by government bureaux/departments and which have limited commercial viability may be considered for inclusion in the Revitalising Historic Buildings Through Partnership Scheme (the Revitalisation Scheme). Under the Revitalisation Scheme, non-profit-making organisations (NPOs) are invited to submit proposals to re-use these government-owned graded historic buildings. The selected NPOs will have to provide services or run businesses in those buildings as social enterprises on a self-financing and self-sustainable basis. So far, five batches of 19 government-owned graded historic buildings have been included in the Revitalisation Scheme.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)008

(Question Serial No.2595)

Head: (159) Government Secretariat: Development Bureau
(Works Branch)

Subhead (No. & title): Not specified

Programme: (1) Water Supply

Controlling Officer: Permanent Secretary for Development (Works) (C K HON)

Director of Bureau: Secretary for Development

Question:

In 2018-19, the Works Branch will continue to oversee a reliable and safe supply of potable water. Will the Development Bureau consider increasing funding to carry out further, more accurate drinking water sampling tests after the lead in drinking water incidents in 2017?

Asked by: Hon CHOW Ho-ding, Holden (Member Question No. (LegCo use): 25)

Reply:

The Government has all along been attaching great importance to drinking water safety. Following the lead-in-drinking-water incident in 2015, there has been growing concern in the community on drinking water safety. Against this background, the Development Bureau, in collaboration with the Water Supplies Department (WSD), launched the Action Plan for Enhancing Drinking Water Safety in Hong Kong (Action Plan) in September 2017 to further safeguard drinking water quality through a multi-pronged approach. One of the core components of the Action Plan is the enhancement of WSD's water quality monitoring programme (Enhanced Programme) by taking additional water samples at consumers' taps for testing of six metals which could be present in the plumbing system. In three to five years' time, with the collection of sufficient local water quality data through the Enhanced Programme, we will review if the current standards set for these metal parameters which have been based on the corresponding guideline values/provisional guideline values adopted by the World Health Organization (WHO) should be revised, in particular whether there is room for us to adopt a standard that is higher than that of WHO. Sufficient funding for the water sampling and testing work under the Enhanced Programme has already been allocated to WSD in this regard.

As regards the other non-metal parameters in WHO Guidelines for Drinking-water Quality, WSD has commissioned a consultancy to carry out a review, which is targeted to be completed in end-2018. Subject to the outcome of the review, WSD will consider the need to include more parameters to be monitored under the Enhanced Programme. WSD will assess the resources required and seek additional resources through the established mechanism where necessary.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)009

(Question Serial No. 2596)

Head: (159) Government Secretariat: Development Bureau
(Works Branch)

Subhead (No. & title): Not specified

Programme: (3) Greening, Landscape and Tree Management

Controlling Officer: Permanent Secretary for Development (Works) (C K HON)

Director of Bureau: Secretary for Development

Question:

In 2018-19, the Works Branch will continue to build up the tree management capacity of the tree management departments through training and studies. Will the Development Bureau consider funding studies on relevant professional courses so as to train more tree doctors and build up tree management capacity?

Asked by: Hon CHOW Ho-ding, Holden (Member Question No. (LegCo use): 26)

Reply:

To build up the tree management capacity of tree management departments, the Greening, Landscape and Tree Management Section (GLTMS) of the Development Bureau has been arranging a variety of tree asset management training programmes for tree management staff at managerial, supervisory and frontline levels to enhance their professional knowledge. Through these professional training programmes (including an advanced diploma course in tree management and conservation, a certificate course in professional tree inspection leading to a qualification conferred by LANTRA Awards in the United Kingdom and a certificate course in identification of common trees), tree management staff can acquire the latest knowledge and skills essential to tree asset management. GLTMS will continue to identify relevant professional courses for staff training in its bid to build up the Government's tree management capability.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)010

(Question Serial No. 2869)

Head: (159) Government Secretariat: Development Bureau
(Works Branch)

Subhead (No. & title): Not specified

Programme: Not specified

Controlling Officer: Permanent Secretary for Development (Works) (C K HON)

Director of Bureau: Secretary for Development

Question:

It is proposed in the Budget Speech “to set up a \$1 billion Construction Innovation and Technology Fund to boost the capacities of enterprises and practitioners in the construction industry to adopt new technology, and support the industry to harness innovative technology.” Its main purpose is to enable eligible contractors, registered sub-contractors and consultants to acquire the software and hardware as well as to nurture the expertise required. It will also support students and practitioners of the construction industry to receive training on innovative construction technologies. In this connection, please provide the following information:

1. Of the \$1 billion Fund, how much will be used to “support students and practitioners of the construction industry to receive training on innovative construction technologies”?
2. What are the estimated numbers of training places available for students and practitioners of the construction industry respectively?
3. What are the specific content and formats of the training? What will be the specific arrangements in the coming year?

Will the Administration consider using the Fund, apart from providing support for the engineering companies, to subsidise practitioners of the construction industry to receive on-the-job or after-work training, so as to upgrade the levels of the existing construction workers?

Asked by: Hon HO Kai-ming (Member Question No. (LegCo use): 67)

Reply:

The primary objectives of the Construction Innovation and Technology Fund are to encourage a wider adoption of innovative construction methods and new technologies, and to prepare practitioners and students of construction-related disciplines to embrace new

technologies, with a view to promoting productivity, raising built quality, improving site safety and enhancing environmental performance. The use of advanced technologies will also help enhance the professional image of the construction industry and attract new blood.

Regarding manpower development, the Fund will support industry practitioners (ranging from skilled workers to professionals) and tertiary students of relevant disciplines so that they can receive training at avant-garde construction institutions, attend conferences and take part in technology visits. We are consulting industry stakeholders, professional institutions and academia on the formulation of implementation details. We will take into account factors such as resource implications, relevance to construction innovation, training efficacy and prudent use of public money when drawing up the parameters (e.g. nature and duration of training courses, training places) of the Fund.

- End -

CONTROLLING OFFICER'S REPLY**DEVB(W)011****(Question Serial No. 2870)**

Head: (159) Government Secretariat: Development Bureau
(Works Branch)

Subhead (No. & title): Not specified

Programme: (4) Energizing Kowloon East

Controlling Officer: Permanent Secretary for Development (Works) (C K HON)

Director of Bureau: Secretary for Development

Question:

Regarding Energizing Kowloon East, please inform this Committee of the following:

1. Please list the names of the projects that the Energizing Kowloon East Office (EKEO) is currently studying or has studied in the past 5 years.
2. Further to the above question, have the recommendations of the studies been implemented and what is the progress?
3. Which projects will the EKEO further study in the coming year and what is the expenditure involved? and
4. Will the Administration consider increasing the manpower of the EKEO for the early implementation of related work and the recommendations of the studies?

Asked by: Hon HO Kai-ming (Member Question No. (LegCo use):68)

Reply:

1 & 2 The projects that EKEO is currently studying or have studied in the past 5 years, and their respective progress are provided in the table below:

Item No.	Nature of Project	Project Title	Works Progress/ Implementation of Recommendations
Enhancing Connectivity			
1	Consultancy Study	Kowloon Bay Business Area Pedestrian Environment Improvement – Feasibility Study (KBBA Study)	<ul style="list-style-type: none"> - Short-term improvements – 45% completed - Refurbishment/provision of sitting-out areas along Green Spine and Green Link (SoA) – 45% completed - Three proposed footbridges in KBBA – design in progress - Remaining proposals – planning in progress

Item No.	Nature of Project	Project Title	Works Progress/ Implementation of Recommendations
2	Consultancy Study	Pedestrian Environment Improvement Scheme for Transformation of Kwun Tong Business Area – Feasibility Study (KTBA Study)	<ul style="list-style-type: none"> - Short-term improvements – 53% completed - Revitalisation of selected back alleys – completed in 2017 - Provision of two proposed subways and facelifting of existing subways and sitting-out areas near MTR Ngau Tau Kok Station – investigation in progress
3	Consultancy Study	Traffic Impact Assessment for Proposed Traffic Modification Works in KTBA	Recommendations were taken forward under KTBA Study.
4	Consultancy Study	San Po Kong Business Area Pedestrian Environment and Traffic Improvement – Feasibility Study	Study in progress
Improving the Environment			
5	Consultancy Study	Study on Industrial Culture of Kowloon East and its Potential for Public Art/Urban Design	Study recommendations will continue to be taken forward in various open space projects.
6	Design Study by Drainage Services Department	Revitalisation of Tsui Ping River – Design and Construction	Detailed design in progress
7	Minor Works	Improvement to Tsun Yip Street Playground (Phase 1)	Works completed in 2014
8	Public Works Project (PWP)	Converting Tsun Yip Street Playground as Kwun Tong Industrial Culture Park	Construction works to complete within 2018
9	Public Works Project	Reprovisioning of Shing Yip Street Rest Garden as Tsui Ping River Garden	Construction works to complete within 2018
10	Public Works Project	Reprovisioning of Tsun Yip Street Playground facilities to Hong Ning Road Park and Ngau Tau Kok Fresh Water Service Reservoir	Construction works to complete in 2021
11	Public Works Project	Improvement of Hoi Bun Road Park and Adjacent Area	Subject to funding approval, construction works expected to complete in 2021.
12	Public Works Project	Improvement to Lam Wah Street Playground and Associated Open Space and Public Spaces	Detailed design in progress
Releasing Development Potential			
13	Consultancy Study	Planning and Engineering Studies for Kai Tak Fantasy (KTF) (Phase 1)	Consultancy services for organising the KTF International Ideas Competition completed in 2014.

Item No.	Nature of Project	Project Title	Works Progress/ Implementation of Recommendations
14	Consultancy Study	Planning and Engineering Study for the Development at Kowloon Bay Action Area (KBAA) of Kowloon East – Feasibility Study	Study in progress
15	Consultancy Study	Planning and Urban Design Review for Developments at Kai Tak Runway Tip (KTRT) – Feasibility Study	Study in progress
16	Consultancy Study	Provision of Consultancy Services on Business Viability Study for Development of Tourism Node at Kai Tak	Development parameters for the Tourism Node site were proposed in the Study.
17	Consultancy Study	Planning and Engineering Study for the Development at Kwun Tong Action Area (KTAA) - Feasibility Study	Study in progress
18	Design Study by Architectural Services Department (ArchSD)	Traffic Impact Assessment for reprovisioning of Vehicle Examination Centres (VECs) in Tsing Yi	Study completed in 2014. Recommendations taken forward under the VEC PWP project.
19	Design Study by ArchSD	Quantitative Risk Assessment for the proposed new VEC site at Tsing Yi	Study completed in 2015. Recommendations taken forward under the VEC PWP project.
20	Design Study by Electrical and Mechanical Services Department	Provision of Technical Consultancy Services (Vehicle Examination System) for the Reprovisioning of VECs at Tsing Yi	Study completed in 2015. Recommendations taken forward under the VEC PWP project.
21	Design Study by ArchSD	Study on Re-provisioning of the Existing Car Parking Facilities at the Proposed VEC and its related operational arrangement	Study completed in 2016. Recommendations taken forward under the VEC PWP project.
22	Design Study by ArchSD	Supplementary Traffic Study for the proposed new VEC	Study completed in 2017. Recommendations taken forward under the VEC PWP project.
23	Public Works Project	Reprovisioning of Transport Department's VECs at Tsing Yi	Design and construction works commenced in March 2018.
Smart City Development in Kowloon East			
24	Consultancy Study	Developing Kowloon East into a Smart City District – Feasibility Study	Study is in progress
25	Proof of Concept Trial	Smart Crowd Management System	Trial completed in May 2017

Item No.	Nature of Project	Project Title	Works Progress/ Implementation of Recommendations
26	Proof of Concept Trial	Persona and Preference- based Way-finding for Pedestrians	Trial completed in March 2018
27	Proof of Concept Trial	Energy Efficiency Data System	Trial commenced in September 2017
28	Proof of Concept Trial	Kerbside Loading and Unloading Bay Monitoring System	Trial commenced in January 2018

3. EKEO will further study the following projects in 2018-19:

Item No.	Project Title	Estimated Expenditure in 2018-19
Enhancing Connectivity		
1	Proposed footbridge near MTR Kowloon Bay Station Exit A	To be assessed as the project is at preliminary planning stage.
Releasing Development Potential		
2	Consultancy Services on Technical Study for the Ngau Tau Kok Divisional Police Station Site at Siu Yip Street	\$2.2 million
3	Provision of District Open Space, Sports Centre cum Public Vehicle Park at Sze Mei Street, San Po Kong	To be assessed as the project is at preliminary planning stage.
Smart City		
4	Proof of Concept Trial on Multi-purpose Lamp Post	To be determined, subject to finalisation of tender specifications.
5	Proof of Concept Trial on Smart Waste Bin System	
6	Proof of Concept Trial on Real-time Road Works Information System	
7	Proof of Concept Trial on Illegal Parking Monitoring System	
8	Consultancy Services on the Roadmap and Privacy Impact Assessment for Illegal Parking Monitoring System	

4. The number of staff in EKEO is currently 25 and will increase to 29 in 2018-19.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)012

(Question Serial No. 2871)

Head: (159) Government Secretariat: Development Bureau
(Works Branch)

Subhead (No. & title): Not specified

Programme: (5) Intra-Governmental Services

Controlling Officer: Permanent Secretary for Development (Works) (C K HON)

Director of Bureau: Secretary for Development

Question:

Regarding the “steering of the detailed feasibility study for the Environmentally Friendly Linkage System (EFLS) for Kowloon East” under this Programme, will the Administration inform this Committee:

1. of the current progress of the EFLS for Kowloon East;
2. of the latest information on the anticipated construction mode, the construction costs and the commissioning date of the EFLS; and
3. whether the next stage of study for the EFLS will be conducted in the coming year? If yes, what are the expenditure involved and the relevant details?

Asked by: Hon HO Kai-ming (Member Question No. (LegCo use): 69)

Reply:

We have completed an interim public consultation under the first stage of a detailed feasibility study (DFS) for the EFLS for Kowloon East (KE). The DFS indicates general support for adopting an elevated green transport mode for the EFLS. We are now proceeding with the second stage of the DFS, which is to develop a viable EFLS scheme, including the determination of its network coverage, alignment, station locations etc, and the conduct of associated technical assessments to ascertain its feasibility. The study is targeted for completion in 2018. The way forward, the implementation programme for the EFLS project and construction cost estimates will be prepared upon completion of the DFS. Officers responsible for steering the second stage of the DFS perform their work as part of their overall duties. There is no separate breakdown showing the staff establishment involved or the expenditure on emoluments.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)013

(Question Serial No. 2809)

Head: (159) Government Secretariat: Development Bureau
(Works Branch)

Subhead (No. & title): Not specified

Programme: (2) Heritage Conservation

Controlling Officer: Permanent Secretary for Development (Works) (C K HON)

Director of Bureau: Secretary for Development

Question:

The Government launched the Revitalising Historic Buildings Through Partnership Scheme in 2008 in response to the public demand for built heritage conservation. Currently, the scheme has launched Batch V with an aim to revitalise historic buildings for adaptive re-use. The Secretary for Development declared Hung Lau as a proposed monument in March last year. Although the status will be valid for only 1 year, it is better than doing nothing and the owner is also applying for funding under the Financial Assistance for Maintenance Scheme for Historic Buildings (FAS). Hung Lau is a privately-owned building and was only declared as a proposed monument. However, according to the law, only buildings which have been confirmed as monuments are protected from being demolished or redeveloped by their owners at will. In this case, the owner will have the right to decide whether to preserve, demolish or redevelop the building after the one-year period. In this connection, will the Government inform this Committee of the following:

1. What was the amount of grant approved for each successful application under the FAS in the past 3 years?
2. What was the percentage of the amount granted against the total maintenance cost in each case?
3. What is the outcome of the application from Hung Lau's owner under the FAS?
4. Given the current lack of management and planning for Hung Lau, does the Government have plans to officially declare it as a monument in future? If yes, please provide the timetable. If no, will the Government on the other hand actively explore the feasibility of turning the historic building into a tourist attraction so as to enhance the site and turn it into a tourist attraction?

Reply:

1 and 2:

Applications under the Financial Assistance for Maintenance Scheme (FAS) are approved in two stages: first-stage approval for applicants to engage consultants to prepare conservation proposals for their historic buildings and full approval for actual maintenance works to proceed. In the past three financial years, 37 applications have been approved, comprising 29 first-stage approvals and eight full approvals. The total amount of grants for the eight fully approved applications was \$10.7 million. The financial assistance could cover the maintenance cost in full, subject to the prevailing grant ceiling at the time (currently at \$2 million) or the amount approved for each application, whichever is the less. Of the eight fully approved applications, four entailed the applicants having to cover part of the maintenance cost. Details are set out below:

<u>Name of Historic Building</u>	<u>Brief Scope of Maintenance Works</u>	<u>Approved (\$)</u>	<u>Amount</u>
<u>Approved Applications in 2015-16</u>			
1) Ling Wan Monastery, Pat Heung, Yuen Long	Repair of water leakage at skylights and roof; repair of wooden doors and other maintenance works	1,000,000	
2) Tin Hau Temple, Sha Kong Tsuen, Yuen Long	Façade preservation and repair for the Entrance Hall, Main Hall and Side Halls; repair of roof and main ridge of Entrance Hall and other maintenance works	905,000	
<u>Approved Applications in 2016-17</u>			
3) St. Stephen's Chapel, St. Stephen's College, Stanley *	Repair of roof water leakage and repaint affected area and concrete repair	1,000,000	
4) Tin Hau Temple, Lam Tsuen, Tai Po, Phase II *	Repair the roof and ridges at Side Halls; walls restoration at Side Halls and other maintenance works	1,000,000	
<u>Approved Applications in 2017-18</u>			
5) Law Ancestral Hall	Repair of roof at entrance hall, timber cockloft, brick walls, altar and other maintenance works	2,000,000	
6) Kwan Tai Temple, Tai O *	Repair of roof and timber members and other maintenance works	1,995,450	
7) Tin Hau Temple, Tai O *	Repair of roof water leakage and repaint affected area and concrete repair	1,051,835	
8) St. Andrew's Church Compound, Tsim Sha Tsui	Repair of cracks and wall plaster, repainting of internal and external walls and other maintenance works	1,761,740	

* The applicant had to cover the part of the maintenance cost exceeding the grant ceiling or approved amount.

The following 29 applications are pending full approval of their conservation proposals.

- | | | |
|-----|---|---|
| 9) | Hau Mei Fung Ancestral Hall, Sheung Shui | Repair and redecorate the roof at Entrance Hall and Main Hall; repair of timber doors and other maintenance works |
| 10) | No. 139 Ping Yeung, Ta Kwun Ling | Repair of pitch roof and timber structure; repair timber cockloft and stair; repair external wall |
| 11) | Lim House, Shap Pat Heung, Yuen Long, Phase II | Rectify water leakage at 1/F flat roof and replace damaged timber structure and flooring; repair timber doors and windows and other maintenance works |
| 12) | Tsang Tai Uk (Northwest Watch Tower), Shatin | Repair of pitch roof; repair of timber floors and stairs and other maintenance works |
| 13) | Tin Hau Temple, Fung Chi Tsuen, Yuen Long, Phase II | Repair of internal walls plaster, timber doors, plaque and couplets; repair external brick walls and other maintenance works |
| 14) | No. 7 Tai O Market Street, Tai O, Lantau | Repair of roof, internal and external walls, windows, doors and other maintenance works |
| 15) | Tao Fong Shan Christian Centre (Thelle House), Shatin | Repair of roof and other maintenance works |
| 16) | First Church of Christ Scientist, Central, Phase II | Repair of cracks, wall plaster; repainting of external walls, timber doors and windows and other maintenance works |
| 17) | Hip Tin Temple, Sha Tau Kok | Repair of roof, statue and altar; repair and repaint all internal and external walls and other maintenance works |
| 18) | No. 8 San Lau Street, Sha Tau Kok, Phase II | Repair of concrete, windows, doors, timber stairs and other maintenance works |
| 19) | Tung Lin Kok Yuen, Happy Valley | Repair of roof, timber windows, wall plaster, concrete repair and other maintenance works |
| 20) | Ng Ancestral Hall, Fung Wong Wu, Ta Kwu Ling | Repair of roof, wall plaster and decoration and other maintenance works |
| 21) | Hong Kong Sheng Kung Hui Holy Trinity Cathedral, Kowloon City, Phase II | Repair of roof and other maintenance works |
| 22) | No. 1 & 3 Playing Field Road, Prince Edward | Repair of spalled concrete, cracks, roof leakage and other maintenance works |
| 23) | Tao Fong Shan Christian Centre (Thelle House), Shatin, Phase II | Repair and repaint of internal and external walls and other maintenance works |
| 24) | No. 1 & 3 Playing Field Road, Prince Edward, Phase II | Repair of windows, repaint external walls and other maintenance works |
| 25) | High Rock Christian Camp, Sha Tin | Repair of roof leakage, external walls, spalled concrete and other maintenance works |
| 26) | Tung Lin Kok Yuen, Happy Valley, Phase II | Repair of timber windows and water leakage |
| 27) | Tung Lin Kok Yuen, Happy Valley, Phase III | Repair of external wall plaster and brickworks |
| 28) | Old Victoria Barracks, Montgomery Block, Kennedy Road, Central | Repair of cracks, water seepage, staircases and other maintenance works |
| 29) | Kowloon Cricket Club, Tsim Sha Tsui | Repair of cracks and rectify the water leakage at LG/F |

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|-----|---|--|
| 30) | Old Village School, No. 1 Tung Tau Tsuen, Ha Tsuen, Yuen Long | Repair of roof, timber floors, spalled concrete, windows and doors and other maintenance works |
| 31) | St. Joseph's Chapel, Yim Tin Tsai, Sai Kung | Repair of cracks and spalled concrete, repaint internal and external walls and other maintenance works |
| 32) | Lutheran Yan Kwong Church (Church Building), Sha Tin | Repair of roof, waterproofing works to walls and floor, repaint external walls and other maintenance works |
| 33) | Lutheran Yan Kwong Church (Primary School), Sha Tin | Repair of roof, waterproofing works to walls and floor, repaint external walls and other maintenance works |
| 34) | Lutheran Yan Kwong Church (Kindergarten), Sha Tin | Repair of roof, windows and doors, waterproofing works to walls and floor and other maintenance works |
| 35) | Old Pathological Institute (Hong Kong Museum of Medical Science), Main Building, Sheung Wan | Repair of damped and cracked wall plaster works, damaged floor tiles and other maintenance works |
| 36) | Old Pathological Institute (Hong Kong Museum of Medical Science), Ancillary Block, Sheung Wan | Repair of damped and cracked wall plaster works, blocked pipes and other maintenance works |
| 37) | Yuen Kwan Tai Temple, Mong Tseng Wai, Yuen Long, Phase II | Repair roof of Entrance Hall and Left Side Annex and other maintenance works |

3 and 4:

As regards Hung Lau, a privately owned Grade 1 historic building, the Commissioner for Heritage's Office (CHO) under the Development Bureau and the Antiquities and Monuments Office (AMO) under the Leisure and Cultural Services Department have been actively exploring preservation-cum-development options with its owner's representatives in the past few months. A consensus has since been reached: Hung Lau will be preserved and will not be demolished. The owner applied for financial assistance for restoring Hung Lau under the FAS in September 2017. As a condition for any FAS grant, the owner should not demolish Hung Lau or transfer its ownership within ten years from the completion of the maintenance works required. The application is being processed.

Furthermore, the owner has undertaken to obtain the consent of relevant government departments for any development proposal involving the redevelopment of any existing structure besides Hung Lau and/or construction of any new building. If such a proposal is consistent with the prevailing heritage conservation policy and the preservation-cum-development approach, CHO will render policy support and assistance to the owner from a heritage conservation perspective. This will include supporting the owner's planning application and/or rezoning application to the Town Planning Board and other necessary applications to government departments in compliance with statutory requirements such as those pertaining to buildings and fire services.

At the meeting of the Antiquities Advisory Board (AAB) on 7 December 2017, members discussed the heritage information that had been reviewed by AMO and the recommendation of the independent Historic Buildings Assessment Panel. The AAB upheld Hung Lau's Grade 1 status. There is no plan to declare it as a monument.

- End -

CONTROLLING OFFICER'S REPLY**DEVB(W)014****(Question Serial No. 1079)**

Head: (159) Government Secretariat: Development Bureau
(Works Branch)

Subhead (No. & title): Not specified

Programme: (3) Greening, Landscape and Tree Management

Controlling Officer: Permanent Secretary for Development (Works) (C K HON)

Director of Bureau: Secretary for Development

Question:

As regards professional arboricultural management training for the promotion of positive capacity building for the arboriculture industry, please advise this Committee:

1. of the number of management personnel with professional qualifications in each of the Government's arboricultural management departments and the number of trees under the management of each of these departments;
2. whether there are local channels through which young people can receive training and become a qualified professional in arboricultural management after graduation and enter the trade; if yes, what are the details?
3. of the annual number of graduates locally trained with professional qualifications in tree management in the next 3 years.

Asked by: Hon KWOK Wai-keung (Member Question No. (LegCo use): 46)

Reply:

1. Trees on government land and at government facilities are managed by various tree management departments through dedicated in-house teams or outsourced contracts or both. The number of trees under the care of the nine core tree management departments and the number of their tree management personnel with professional qualifications are set out below –

Core tree management departments	Number of trees (Note 1)	Number of tree personnel with professional qualifications
Agriculture, Fisheries and Conservation Department	38 000 (Note 2)	87

Architectural Services Department	200 000	6
Civil Engineering and Development Department	9 400	5
Drainage Services Department	20 200	17
Highways Department	592 000	26
Housing Department	101 700	35
Lands Department	N/A (Note 3)	9
Leisure and Cultural Services Department	628 000	282
Water Supplies Department	155 000	17

Note 1: Rounded to the nearest 100.

Note 2: The Agriculture, Fisheries and Conservation Department manages all trees in country parks. The figure includes only trees in frequently used areas and facilities.

Note 3: The Lands Department (LandsD) is responsible for non-routine maintenance of trees on unallocated and unleased government land that are not maintained by any designated government departments. Due to their large numbers, trees on such land cannot be counted. LandsD will follow up referrals and complaints when they arise.

2. There are many local channels through which young people can receive training and become a qualified professional in arboricultural management after graduation. Major local institutions providing tree management training are listed below –

Institution	Programme / Course
Vocation Training Council Technological and Higher Education Institute of Hong Kong (THEi)	Bachelor of Arts (Honours) in Horticulture and Landscape Management
The University of Hong Kong School of Professional and Continuing Education (HKU SPACE)	Advanced Diploma in Tree Management and Conservation
Hong Kong Baptist University College of International Education (CIE)	Associate Degree in Tree Management
Vocational Training Council Hong Kong Institute of Vocational	Professional Certificate in Arboriculture and Tree Work Supervision

Education (IVE)	Higher Diploma in Conservation and Tree Management
	Certificate in Basic Arboriculture and Tree Work Practices
The Open University of Hong Kong Li Ka Shing Institute of Professional and Continuing Education(LiPACE)	Certificate in Professional Tree Management
The Chinese University of Hong Kong School of Continuing and Professional Studies (CUSCS)	Diploma Programme in Arboriculture
The Employees Retraining Board (ERB) The Hong Kong Confederation of Trade Unions	Certificate in Arboricultural Management

3. Approximately 300 students will graduate with local qualifications in tree management annually in the next three years.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)015

(Question Serial No. 1080)

Head: (159) Government Secretariat: Development Bureau
(Works Branch)

Subhead (No. & title): Not specified

Programme: (3) Greening, Landscape and Tree Management

Controlling Officer: Permanent Secretary for Development (Works) (C K HON)

Director of Bureau: Secretary for Development

Question:

It is mentioned in the Budget that the Tree management Office carries out tree management work. In this connection, please inform this Committee of the following:

1. Please list by year the numbers of trees collapsed across the territory in the past 3 years.
2. Please list by year the numbers of trees inspected by the tree management departments of the Government per year in the past 3 years.
3. Please list by year the numbers of new cases of sick trees and recovered trees in the past 3 years.

Asked by: Hon KWOK Wai-keung (Member Question No. (LegCo use): 43)

Reply:

Given the large number of trees across the territory, the Government adopts an “integrated approach” to tree management, under which individual departments are responsible for managing the trees on the premises or land under their purview, with the Tree Management Office (TMO) of the Development Bureau providing overall co-ordination. Tree management departments are required to provide tree failure reports to TMO should any tree failure incidents concerning them occur.

1. A breakdown of the number of tree failure reports in each of the past three years is as follows —

Number of Tree Failure	2015	2016	2017
No. of individual tree failures	169	171	342

No. of tree failures after tropical cyclone warning signal no. 8 or above	309	3 914	8 742
Total	478	4 085	9 084

2. A breakdown of the number of trees inspected during the annual Tree Risk Assessment and Management (TRAM) exercise in each of the past three years is as follows —

Year	Number of Trees Inspected in Tree Group Inspections
2015	766 956
2016	882 477
2017	945 359

3. Each tree management department conducts a TRAM exercise annually, and implements mitigation measures to maintain the health and structural stability of the trees under its management. Those measures include pruning, removing dead branches and managing pests and disease. According to the tree management departments, the number of trees requiring mitigation measures in each of the past three years are listed below —

Year	Number of Trees with Mitigation Measures Completed	Number of Trees Removed
2015	22 051	4 256
2016	16 174	5 650
2017	11 201	5 817

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)016

(Question Serial No. 1162)

Head: (159) Government Secretariat: Development Bureau
(Works Branch)

Subhead (No. & title): Not specified

Programme: (3) Greening, Landscape and Tree Management

Controlling Officer: Permanent Secretary for Development (Works) (C K HON)

Director of Bureau: Secretary for Development

Question:

The Greening, Landscape and Tree Management Section (GLTMS) was established under the Works Branch of the Development Bureau (DEVB) in March 2010. The GLTMS promulgated a Handbook on Tree Management (the Handbook) in April 2016 to provide guidelines and standards of tree management. The Handbook is expected to be incorporated into the Home Affairs Department's Code of Practice under section 44 of the Building Management Ordinance (Cap. 344) by mid-2018. Will the Bureau inform this Committee of:

- (a) the expenditure and staff deployment for promoting proper management of trees on one's properties;
- (b) any publicity activities related to tree management organised in the past 3 years, such as talks and seminars; if yes, of the number of participants and their effectiveness; and
- (c) any requests for assistance received from owners' corporations or owners regarding tree management in the past 3 years; the types of requests, the handling procedures and the outcomes; as well as the respective work of the DEVB and the Home Affairs Bureau in handling the requests?

Asked by: Hon LAU Kwok-fan (Member Question No. (LegCo use): 1)

Reply:

- (a) Promoting proper tree management is an integral part of the normal duties of the Greening, Landscape and Tree Management Section (GLTMS). There is no separate breakdown on the resources devoted to this activity.
- (b) GLTMS is committed to promoting urban forestry management and proper tree care through a series of public education and community engagement activities. The

number of such activities and that of participants in each of the past three years are as follows —

Year	Number of Activities	Number of Participants
2015	4	860
2016	8	649
2017	5	516

The activities have been effective in raising awareness of the importance of proper tree management. Feedback from participants has been positive.

- (c) In the past three years, GLTMS received 209 requests from owners' corporations (OCs) and private property owners for assistance in tree management. It provided replies by email or phone, and satisfactorily addressed all the requests. The type and number of requests in each of the past three years are set out below —

Year	Requests on Tree Management			
	Tree Removal	Tree Risk Assessment	Seminar	General Tree Maintenance
2015	12	9	15	24
2016	14	16	17	30
2017	21	17	7	27

GLTMS handles all requests from OCs or private property owners regarding tree management while the Home Affairs Department (HAD), being the executive arm of the Home Affairs Bureau, seeks to facilitate, encourage and assist owners to form suitable organisations (e.g. OCs) and provide necessary support to assist them in discharging their building management responsibilities. On receipt of a request for assistance in tree management, HAD will advise the owner or OC to contact GLTMS for assistance.

- End -

CONTROLLING OFFICER'S REPLY**DEVB(W)017****(Question Serial No. 1221)**

Head: (159) Government Secretariat: Development Bureau
(Works Branch)

Subhead (No. & title): Not specified

Programme: (5) Intra-Governmental Services

Controlling Officer: Permanent Secretary for Development (Works) (C K HON)

Director of Bureau: Secretary for Development

Question:

It is mentioned in Matters Requiring Special Attention in the coming year that the Works Branch will “continue to draw up cost control measures and cost reduction initiatives.” How many public works projects have been examined by the Project Cost Management Office (PCMO) since its establishment in June 2016? Please set out the project titles of the top 15 projects that have achieved the most cost savings after examination by the PCMO, and their original and revised estimated expenditures.

Asked by: Hon LAU Kwok-fan (Member Question No. (LegCo use): 61)

Reply:

The Project Cost Management Office (PCMO) rigorously scrutinises the cost estimates of major projects at the planning and design stage. Since its establishment in June 2016, PCMO has reviewed the cost estimates of about 130 projects, including those concerning site formation, government offices, staff quarters, hospitals, schools, parks, roadworks, waterworks, drainage works etc. The reviews have led to savings of 10% in project costs, or about \$27 billion.

The following 15 projects (with a total original cost estimate of \$145 billion), which have commenced or will have their funding applications submitted soon, have achieved significant cost reductions of over \$12 billion (representing 45% of the total cost savings of \$27 billion) after vetting and design optimisation by PCMO.

1. Braemar Hill Pedestrian Link
2. Central Kowloon Route
3. Cross Bay Link, Tseung Kwan O
4. Expansion of Sha Tau Kok sewage treatment works - phase 1
5. Inland Revenue Tower in Kai Tak Development Area
6. Joint-user Government Office Building in Cheung Sha Wan
7. Junior Police Officers Married Quarters at Fan Garden, Fanling
8. Kai Tak Development - Stage 4 and Stage 5 infrastructure works at former

runway and south apron
9. Kai Tak Sports Park
10. Rank and File Quarters for Fire Services Department at Area 106, Pak Shing Kok, Tseung Kwan O
11. Reprovisioning of Fu Shan Public Mortuary
12. Shek Wu Hui effluent polishing plant – main works stage 1
13. Site formation and infrastructure works for development at Wang Chau, Yuen Long
14. Station Square at Kai Tak
15. Tung Chung New Town Extension

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)018

(Question Serial No. 2533)

Head: (159) Government Secretariat: Development Bureau
(Works Branch)

Subhead (No. & title): Not specified

Programme: (5) Intra-Governmental Services

Controlling Officer: Permanent Secretary for Development (Works) (C K HON)

Director of Bureau: Secretary for Development

Question:

It is mentioned in the 2018-19 Controlling Officer's Report that the Government will continue to steer the detailed feasibility study (DFS) for the Environmentally Friendly Linkage System (EFLS) for Kowloon East.

Many Kai Tak residents and the cruise terminal operator have expressed their concerns to me that road development in the Kai Tak Development (KTD) seriously lags behind, which affects accessibility to the facilities in the KTD. With the sale of large amount of land in the KTD by the Government, traffic volume is expected to increase significantly in the KTD.

While the DFS for the EFLS for Kowloon East was originally anticipated to be substantially completed in the third quarter of 2017, the current status is that only the first phase of work is completed and the interim public consultation is in progress. Please inform this Committee of the following:

1. What is the current progress and when is the entire DFS scheduled for completion?
2. Will the scheduled commissioning date in 2023 be delayed? If yes, what are the details? If no, what are the reasons?
3. Also, will the Government consider expediting the completion of roads in the area and bringing in other modes of transport, such as green buses or minibuses, as temporary traffic measures before the commissioning of the EFLS for Kowloon East? If yes, what are the details? If no, what are the reasons?

Asked by: Hon LEUNG Mei-fun, Priscilla (Member Question No. (LegCo use): 34)

Reply:

1. We have completed an interim public consultation under the first stage of the DFS for the EFLS for Kowloon East (KE). We are now proceeding with the second stage, which is to develop a viable EFLS scheme, including the determination of its network coverage,

alignment, station locations etc, and the conduct of associated technical assessments to ascertain its feasibility. The study is targeted for completion in 2018.

2. As diverse views had been received regarding the most suitable mode of green transport (GT) for the EFLS and its alignment, additional time was taken to carry out the DFS in two stages, with the first stage assessing the various GT modes on an equal basis to identify the most suitable one. In the interim public consultation completed in mid-2017, general support for adopting an elevated GT mode was received. The way forward and the implementation programme for the EFLS project will be formulated upon completion of the DFS.

3. The infrastructure projects (including road works) supporting the KTD are being implemented in stages according to their priority and readiness so as to tie in with the development pace of the area.

On public transport services, the KTD is currently served by a total of eight franchised bus routes and two green minibus (GMB) routes. A number of en-route bus and GMB routes along Prince Edward Road East are also available to KTD residents who wish to reach different destinations in the area. To tie in with the development pace of the area and the public transport needs of the KTD, the Transport Department (TD) has proposed in its Bus Route Planning Programme 2017-2018 the introduction of three new franchised bus routes to strengthen the public transport links between the KTD and other districts. The three bus routes, expected to be in operation in the second quarter of 2018, will run between:

- (i) Kowloon City (Shing Tak Street) and Sai Wan Ho (Grand Promenade) (via the KTD);
- (ii) Kai Tak (Muk Ning Street) and Tai Kok Tsui (Island Harbourview); and
- (iii) the Kai Tak Cruise Terminal and Kowloon Tong (Festival Walk).

On railway services, the Shatin to Central Link (SCL) is under construction. The Tai Wai to Hung Hom section (including the Kai Tak and Sung Wong Toi stations) is expected to be completed and commissioned in mid-2019.

TD will continue to closely monitor the development progress of the KTD, and adjust or strengthen different public transport services to meet public demand for transport services in the area.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)019

(Question Serial No. 2534)

Head: (159) Government Secretariat: Development Bureau
(Works Branch)

Subhead (No. & title): Not specified

Programme: (4) Energizing Kowloon East

Controlling Officer: Permanent Secretary for Development (Works)

Director of Bureau: Secretary for Development

Question:

It is mentioned in the 2018-19 Controlling Officer's Report that the Government's October 2017 Policy Agenda announced that the Energizing Kowloon East initiative would be extended to the adjoining San Po Kong Business Area. The Administration already submitted its initial ideas to the Wong Tai Sin District Council for discussion at its meeting on 9 January 2018.

Since the kick-start of the development of East Kowloon announced in the 2011-12 Policy Address, many Kowloon City residents have told me that they hope the Government will extend the Energizing Kowloon East initiative to the To Kwa Wan district adjoining the Kai Tak Development (KTD) Area. In doing so, new impetus will be injected to the KTD Area, which drives the future development of To Kwa Wan and creates synergy. In the short term, the Administration can also launch quick-wins in To Kwa Wan through the Energizing Kowloon East Office. For instance, I have proposed to the Bureau that a "boulevard" be created from San Shan Road next to the Cattle Depot revitalised under the Signature Project Scheme to San Ma Tau Street, so that residents can stroll leisurely to the Kowloon City Ferry Pier revitalised under the Central Kowloon Route project. Besides, the community environment will also be enhanced.

Will the Administration inform this Committee whether it will, after extending the Energizing Kowloon East initiative to San Po Kong, consider deploying manpower and other resources to further extend the initiative to To Kwa Wan adjoining the KTD Area? If yes, what are the details? If no, what are the reasons?

Asked by: Hon LEUNG Mei-fun, Priscilla (Member Question No. (LegCo use): 45)

Reply:

The primary role of the Energizing Kowloon East Office (EKEO) is to transform Kowloon East into an additional attractive core business district to sustain Hong Kong's economic development. Hence, EKEO focuses their efforts mainly on the Kwun Tong and Kowloon

Bay Business Areas and the integration with the Kai Tak Development (KTD), capitalising on the new energy injected by KTD which helps revitalise the surrounding districts. The extension of the Energizing Kowloon East initiative to San Po Kong, promulgated in the Policy Agenda in October 2017, also focuses on the business area in San Po Kong. We currently have no plan to extend the initiative to To Kwa Wan which is primarily intended for development as a residential area.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)020

(Question Serial No. 0328)

Head: (159) Government Secretariat: Development Bureau
(Works Branch)

Subhead (No. & title): Note specified

Programme: (5) Intra-Governmental Services

Controlling Officer: Permanent Secretary for Development (Works) (C K HON)

Director of Bureau: Secretary for Development

Question:

The Administration has stated that it will continue to pursue improvement initiatives that aim to raise the standards of the construction industry, including strengthening manpower training as well as promoting innovation and technology application. The Financial Secretary has also proposed to set up a \$1 billion Construction Innovation and Technology Fund to boost the capacities of enterprises and practitioners in the construction industry to adopt new technology, support the industry to harness innovative technology, and support students and practitioners of the construction industry to receive training on innovative construction technologies. Currently, quite a number of small and medium-sized enterprises of the construction industry in Hong Kong are facing problems such as insufficient capital and difficulty in employing technical staff when they try to bring in and invest in innovative technology, which may even affect their chances to undertake government projects. In this connection, please inform this Committee whether the Administration, when formulating the implementation details of the aforementioned Fund, will consider making it a priority to assist small and medium-sized enterprises in overcoming their difficulties as appropriate. If yes, what are the details? If no, what are the reasons?

Asked by: Hon LO Wai-kwok (Member Question No. (LegCo use): 27)

Reply:

The primary objectives of the Construction Innovation and Technology Fund are to encourage a wider adoption of innovative construction methods and new technologies, and to prepare practitioners and students of construction-related disciplines to embrace new technologies, with a view to promoting productivity, raising built quality, improving site safety and enhancing environmental performance. The use of advanced technologies will also help enhance the professional image of the construction industry and attract new blood.

Target participants would be those directly involved in project design and implementation, including levy-paying contractors, subcontractors registered under the Subcontractor

Registration Scheme maintained by the Construction Industry Council, and consultants on the lists and directories maintained by the Government or professional institutions. All SMEs satisfying the aforesaid criteria would be covered. To encourage them to apply to the Fund, we will seek to make the application procedure simple and user-friendly. We are consulting industry stakeholders with a view to formulating suitable implementation arrangements, including eligibility criteria, to meet industry needs.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)021

(Question Serial No. 0409)

Head: (159) Government Secretariat: Development Bureau
(Works Branch)

Subhead (No. & title): Not specified

Programme: (5) Intra-Governmental Services

Controlling Officer: Permanent Secretary for Development (Works) (C K HON)

Director of Bureau: Secretary for Development

Question:

It is understood that the Government will adopt the Building Information Modelling (BIM) technology in the design of major government capital works projects from 2018 onwards, while the Housing Authority piloted the use of BIM in 2006. In this connection, will the Government inform this Committee of the following:

1. How many government capital works projects have adopted BIM technology in the past 2 years, and what are the details?
2. Has the Government evaluated the cost-effectiveness of the works projects that have adopted BIM technology? If yes, please provide the details; and
3. What are the new strategies to be implemented by the Government's Steering Committee on BIM in 2018-19 to encourage government departments and the industry to adopt the technology?

Asked by: Hon LO Wai-kwok (Member Question No. (LegCo use): 15)

Reply:

1. In the past two fiscal years (FY2016-17 and FY2017-18), 40 capital works projects have adopted Building Information Modelling (BIM) technology in their design and/or construction stage. These pilot projects cover government office buildings, civil engineering infrastructure and special-purpose buildings of the following types: pumping station, sewage treatment works, hospital, theatre etc.

2. Overseas experience indicates that BIM technology can enhance productivity, reduce waste and accident rates, and reduce project costs. A case study in the United Kingdom, for example, revealed that adoption of BIM technology could bring about 8% to 18% cost

savings at the design stage and about 8% to 10% at the construction stage. The above-mentioned 40 local pilot projects aim to familiarise the works departments involved with BIM technology and the associated process, and to allow them to experience the benefits of the technology. As most of the projects are still underway, detailed cost effectiveness cannot be evaluated at this stage.

3. Works departments are required to adopt BIM technology in designing and implementing capital works projects costing over \$30M from January 2018 onwards. DEVB has been collaborating with the Construction Industry Council in supporting and promoting the use of BIM technology in the construction industry. In the 2018-19 Budget, the Financial Secretary proposed to set up a \$1 billion Construction Innovation and Technology Fund. The fund will, among other things, provide financial assistance for BIM training, procurement of associated hardware/software and trial adoption of BIM in local projects with a view to expediting the application of BIM technology in the construction industry. The Government plans to seek the approval of the Finance Committee of the Legislative Council in mid-2018.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)022

(Question Serial No. 0414)

Head: (159) Government Secretariat: Development Bureau
(Works Branch)

Subhead (No. & title): Not specified

Programme: (3) Greening, Landscape and Tree Management

Controlling Officer: Permanent Secretary for Development (Works) (CK HON)

Director of Bureau: Secretary for Development

Question:

According to the Indicators in Programme (3), the Government planted 300 000 seasonal flowers in 2016, while only 200 000 seasonal flowers were planted in 2017. In this connection, please provide the following information:

1. What were the manpower and expenditures for the planting of seasonal flowers in the past 3 years?
2. What were the reasons for the reduced number of seasonal flowers planted in 2017?
3. Given the growing popularity among Hong Kong people to view flowers, has the Administration considered planting distinctive flowers in large numbers in various districts for public enjoyment? If yes, what are the details? If no, what are the reasons?

Asked by: Hon LO Wai-kwok (Member Question No. (LegCo use): 24)

Reply:

1. The expenditures on greening work (which includes the value of planting and associated landscape work, such as site preparation, soiling and drainage) and associated work days from 2015 to 2017 are shown in the table below. We do not have a separate breakdown for seasonal flowers.

Calendar Year	Expenditure (\$ million)	Work Days
2015	180.1	46 225
2016	153.2	61 699
2017	232.5	59 691

2. The actual quantities of seasonal flowers planted in 2016 and 2017 were 255 055 and 254 306 respectively, with a difference of 749. The discrepancy between the 2016 and 2017 figures in the Controlling Officer's Report is due to rounding. The actual planting figures for each plant category for 2016 and 2017 are set out in the table below.

Planting by the Government in 2016 and 2017	Actual figures		Figures shown in COR (millions)	
	2016	2017	2016	2017
Trees	455 269	461 754	0.5	0.5
Shrubs	5 201 753	6 201 826	5.2	6.2
Seasonal flowers	255 055	254 306	0.3	0.2
Total	5 912 077	6 917 886	6.0	6.9

3. The Government promotes the principle of "Right Plant, Right Place" and vegetation diversity. Planting design needs to balance and combine different plant types and species including trees, shrubs and herbaceous plants to provide visual enjoyment throughout the year. The combination of different plants with varying flowering periods, foliage interests, textural differences and complementary colours is considered and balanced to achieve species richness and visual enjoyment.

Drawn up after extensive community consultation, the Greening Master Plans of the Civil Engineering and Development Department (CEDD) set out thematic planting frameworks for different districts. For example, trees which turn reddish seasonally (e.g. the sweet gum) are planted in Southern District to augment a panoramic sea view, and Hong Kong orchid trees are planted in Pok Fu Lam to commemorate the discovery of this species there. CEDD is also undertaking a project in Ngong Ping that involves the planting of cherry blossoms along with native spring-flowering trees as feature elements in suitable locations for visual enjoyment during flowering seasons.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)023

(Question Serial No. 1044)

Head: (159) Government Secretariat: Development Bureau
(Works Branch)

Subhead (No. & title): Not specified

Programme: (5) Intra-Governmental Services

Controlling Officer: Permanent Secretary for Development (Works) (C K HON)

Director of Bureau: Secretary for Development

Question:

As stated under this Programme, the New Engineering Contract (NEC) form will be adopted to enhance management efficiency and cost-effectiveness. In this connection, please inform this Committee of :

1. the details of the NEC form;
2. the number and names of public works projects that have adopted the NEC form currently; and
3. the percentage change in the increase of management efficiency and cost-effectiveness with the adoption of the NEC form.

Asked by: Hon LUK Chung-hung (Member Question No. (LegCo use): 58)

Reply:

1. The New Engineering Contract (NEC) is a suite of contracts developed by the Institution of Civil Engineers in the United Kingdom. It encompasses contract provisions to encourage contracting parties to adopt a partnering approach to take forward construction works, thereby avoiding or minimising disputes. This contract form attaches great importance to risk mitigation and management, and embraces a collaborative risk management mechanism, which helps further reduce project risks. Under the NEC form of contracts, contracting parties are required to give early warnings on any risks that could increase project costs and/or cause any delay as soon as the risks arise. The parties should then work together to address such risks in a collaborative manner through attending meetings to determine the appropriate measures to deal with and mitigate the risks. In this way, the NEC form can help improve the performance of construction contracts in terms of cost and time control.

The NEC form includes, among other things, target cost options which are more suitable for relatively large-scale and complex projects. A pain/gain share mechanism is built into such options to deal with any budget overrun/cost saving as

compared with the final target cost, thereby setting a common objective between the contracting parties to enhance project management and tighten cost control. With this mechanism, contractors have the incentive to proactively propose more innovative and cost-effective construction proposals so as to lower the cost and/or complete the works earlier.

2. By the end of February 2018, 71 capital works projects had adopted the NEC form as listed below:

Completed NEC Capital Works Contracts:

	Department (Note)	Contract Title
1	ArchSD	Design and Construction of Tin Shui Wai Hospital
2	CEDD	Landslip Prevention and Mitigation (LPMit) Programme, 2010, Package I - LPMit Works in the New Territories
3	DSD	Improvement of Fuk Man Road Nullah in Sai Kung
4	DSD	Provision of Electrical and Mechanical Facilities for Tin Liu Ha Sewage Pumping Station and Tong Min Tsuen Sewage Pumping Station
5	DSD	Lam Tsuen Valley Sewerage - Village Sewerage, Stage 2, Phase 1
6	DSD	Photovoltaic System at the Siu Ho Wan Sewage Treatment Works
7	DSD	Upgrading of High Voltage Switchgears and Motor Starters in Cheung Sha Wan Sewage Pumping Station
8	DSD	Sewerage at Yuen Long Kau Hui and Shap Pat Heung
9	DSD	Pak Hok Lam Trunk Sewer and Sha Tau Kok Village Sewerage
10	DSD	Improvement Works of Rotating Biological Contactors (RBC) in Ma Wan Sewage Treatment Works
11	DSD	Happy Valley Underground Stormwater Storage Scheme
12	HyD	Retrofitting of Noise Barriers on Fanling Highway (MTR Fanling Station to Wo Hing Road)
13	HyD	Retrofitting of Noise Barriers on Tai Po Tai Wo Road near Po Nga Court
14	WSD	Improvement of Fresh Water Supply to Cheung Chau

Ongoing NEC Capital Works Contracts:

	Department (Note)	Contract Title
1	ArchSD	Construction of a 30-Classroom Secondary School at Site 1A-2, Kai Tak Development
2	CEDD	Improvement Works at Mui Wo, Phase 1
3	CEDD	Landslip Prevention and Mitigation (LPMit) 2014, Package K, Landslip Prevention and Mitigation Works in Hong Kong Island, New Territories and Outlying Islands
4	CEDD	Provision of Universal Access Facilities for Highway Structures - Package 1 Contract 2
5	CEDD	Provision of Universal Access Facilities for Highway Structures - Package 2 Contract 2
6	CEDD	Site Formation and Infrastructural Works near Tong Hang Road and Tsz Tin Road in Area 54, Tuen Mun
7	CEDD	Landslip Prevention and Mitigation (LPMit) Programme, 2013, Package A - LPMit Works
8	CEDD	Signature Project Scheme in Sha Tin - Decking of Tai Wai Nullah in Sha Tin and Revitalisation of Shing Mun River Promenade near Sha Tin Town Centre
9	CEDD	Development of Kwu Tung North and Fanling North New Development Areas - Advance Works and First Stage Works - Stage 2 Ground Investigation Works
10	CEDD	Cycle Tracks from Tuen Mun to Sheung Shui - Remaining Works
11	CEDD	Provision of Universal Access Facilities for Highway Structures - Package 1 Contract 3
12	CEDD	Tseung Kwan O - Lam Tin Tunnel - Road P2 and Associated Works
13	CEDD	Improvement Works at Mui Wo, Phase 2 Stage 1
14	CEDD	Improvement Works at Tai O - Phase 2 Stage 1
15	CEDD	West Kowloon Reclamation - Mainworks (Remainder) - Footbridge at Junction of Sham Mong Road and Tonkin Street West in Sham Shui Po
16	CEDD	Road and Infrastructure Works for Development at Lin Cheung Road, Sham Shui Po
17	CEDD	Demolition and Ground Decontamination Works for Development at North West Kowloon Reclamation Site 1, Sham Shui Po - Phase 1
18	CEDD	Tseung Kwan O - Lam Tin Tunnel - Northern Footbridge
19	CEDD	Widening of the Footbridge Connecting Pak Wo Road to MTR Fanling Station and its Associated Works
20	CEDD	Kai Tak Development - Stage 3B Infrastructure at Former North Apron Area
21	CEDD	Queen's Hill Development - Road and Drainage Works
22	CEDD	Queen's Hill Development - Sewage Pumping Station Works
23	CEDD	Signature Project Scheme Sai Kung District - Reconstruction of the Sharp Island Pier

	Department (Note)	Contract Title
24	CEDD	Development of Anderson Road Quarry Site - Pedestrian Connectivity Facilities Works Phase 1
25	CEDD	Infrastructural Works for Public Housing Development at Chung Nga Road and Area 9, Tai Po
26	CEDD	Infrastructure Works for Public Housing Development at Area 54, Tung Chung
27	CEDD	Construction of Mountain Bike Training Ground and Expansion of Mountain Bike Trail Networks in Mui Wo and Chi Ma Wan, South Lantau
28	CEDD	Tseung Kwan O - Lam Tin Tunnel - Road P2/D4 and Associated Works
29	CEDD	Landslip Prevention and Mitigation (LPMit) Programme, 2015, Package D, LPMit Works
30	CEDD	Site Formation and Associated Infrastructural Works for Development of Columbarium at Sandy Ridge Cemetery
31	CEDD	Tung Chung New Town Extension - Reclamation and Advance Works
32	CEDD	Tseung Kwan O - Lam Tin Tunnel - Tseung Kwan O Interchange and Associated Works
33	DSD	Provision of Electrical and Mechanical Facilities for Eight Sewage Pumping Stations in the North and Tai Po Districts, New Territories
34	DSD	Provision of Electrical and Mechanical Facilities for Shek Wu Hui Sewage Treatment Works - Further Expansion Phase 1A - Advance Works and Ng Chow South Road Sewage Pumping Station
35	DSD	Construction of an Additional Sewage Rising Main between Tung Chung and Siu Ho Wan and Associated Works
36	DSD	Improvement Works Gasholder No. 3 at Shatin Sewage Treatment Works
37	DSD	Provision of Electrical and Mechanical Facilities for O Tsai Sewage Pumping Station and Enhancement Works of Electrical and Mechanical Facilities for Yung Shue Wan Sewage Treatment Works and Sok Kwu Wan Sewage Treatment Works
38	DSD	Provision of Electrical and Mechanical Equipment for Detritor Nos. 1 and 2 of To Kwa Wan Preliminary Treatment Works
39	DSD	Minor Drainage Improvement Works in Northern Hong Kong Island and North District
40	DSD	Provision of Electrical & Mechanical Equipment for Kau To Sewage Pumping Station
41	DSD	Provision of High Voltage Electrical Equipment for Stage III of Sha Tin Sewage Treatment Works
42	DSD	Modification Works for Food Waste & Sewage Sludge Anaerobic Co-digestion Pilot Trial at Tai Po Sewage Treatment Works
43	DSD	Upgrading of Kwun Tong Preliminary Treatment Works
44	DSD	Upgrading of West Kowloon and Tsuen Wan Sewerage

	Department (Note)	Contract Title
		- Phase 1
45	DSD	Provision of an Additional Combined Heat and Power (CHP) Generating System for Shatin Sewage Treatment Works
46	DSD	Provision of Deodourizing Systems and Covers for Preliminary Treatment Facilities in Tai Po Sewage Treatment Works
47	DSD	Provision of Electrical and Mechanical Equipment for Lok Chui Street, Siu Lam Psychiatric Centre and Fu Tei Ha Tsuen Sewage Pumping Stations
48	DSD	Construction of Dry Weather Flow Interceptor at Cherry Street Box Culvert
49	DSD	Enhancement Works for Kwun Tong Sewage Pumping Station
50	DSD	Rehabilitation of Trunk Sewers in Kowloon, Shatin and Sai Kung
51	HyD	Improvement to Pok Oi Interchange
52	HyD	Retrofitting of Noise Barriers on Tuen Mun Road - Town Centre Section
53	HyD	Provision of Barrier-free Access Facilities for Highway Structures - Phase 3 Contract 8
54	HyD	Lift and Pedestrian Walkway System at Cheung Hang Estate, Tsing Yi
55	WSD	Uprating of Chai Wan Salt Water Supply System - Mainlaying and Upgrading of Siu Sai Wan Salt Water Pumping Station
56	WSD	Improvement of Water Supply to Sheung Shui and Fanling
57	WSD	Mainlaying in Tseung Kwan O

Note:

ArchSD denotes the Architectural Services Department

CEDD denotes the Civil Engineering and Development Department

DSD denotes the Drainage Services Department

HyD denotes the Highways Department

EMSD denotes the Electrical and Mechanical Services Department

WSD denotes the Water Supplies Department

We are also piloting the NEC form in 33 investigation or maintenance contracts and 17 consultancy agreements.

- At present, the majority of the projects under NEC capital works contracts are still in the construction stage. We still need some time to collect data for further analysis and optimisation of the NEC arrangement.

Of the 14 completed NEC capital works projects, most of their accounts are being finalised. Still, a preliminary analysis indicates that none of the projects incurred any cost overrun. For the Happy Valley Underground Stormwater Storage Scheme project, the positive impact brought about by the NEC form has been particularly prominent. Not only was the project fully commissioned well ahead of schedule in

March 2017, there was also an overall saving of about \$90 million, or approximately 8% of the final target cost.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)024

(Question Serial No. 2436)

Head: (159) Government Secretariat: Development Bureau
(Works Branch)

Subhead (No. & title): Not specified

Programme: Not specified

Controlling Officer: Permanent Secretary for Development (Works) (C K HON)

Director of Bureau: Secretary for Development

Question:

It is mentioned in paragraph 114 of the Budget Speech that the Government is “now assisting the industry in establishing large-scale, highly automated steel reinforcing bar prefabrication yards. The Government will also take the lead in piloting Modular Integrated Construction (MiC) in public projects.” In this connection, please provide the following information:

1. What are the details of the establishment of the steel reinforcing bar prefabrication yards and the number of jobs to be created? Will more land be allocated in future to increase the number of yards to cope with the demand?
2. Apart from steel reinforcing bars, will the Administration consider promoting the use of prefabricated components in machinery, electricity and mechanics as well as pipework in Hong Kong, and allocate land to build prefabrication yards to speed up their establishment?
3. As regards piloting MiC in public projects, will prefabrication be conducted in the yards in Hong Kong? Does the Administration provide any land for this purpose?
4. Will the Administration consider setting aside land in new development areas for the yards mentioned above to enhance the employment opportunities of construction workers? If yes, what are the details?
5. How much time will be shortened for housing production with the implementation of the above construction method?
6. What are the respective expenditures for the 2 projects?

Asked by: Hon MAK Mei-kuen, Alice (Member Question No. (LegCo use): 66)

Reply:

Hong Kong's construction industry has been beset with the challenges of high construction cost and a shortage of skilled labour in recent years. To enhance the industry's productivity and cost-effectiveness, the Government is actively promoting the application of advanced technology and innovative construction methods.

The responses to the questions raised are as follows: -

(1) The Government is adopting multi-pronged measures to assist the construction industry in establishing large-scale, highly automated steel reinforcing bar (rebar) prefabrication yards to enhance productivity, built quality, environmental performance and site safety. The measures include encouraging contractors to use rebar products made by the rebar prefabrication yards approved by the Civil Engineering and Development Department (CEDD) and streamlining the regulatory mechanism for public and private sector works to facilitate the operation of rebar prefabrication yards. At present, there are two rebar prefabrication yards on the CEDD-approved list and another two are applying for approval. We do not have information on the number of jobs created by the yards. We will from time to time review the land requirements for developing the rebar prefabrication processing industry in Hong Kong.

(2)–(5) In addition to prefabrication of steel reinforcing bars, the Government is promoting the adoption of Modular Integrated Construction (MiC) in Hong Kong. In an MiC project, building modules are manufactured and assembled in prefabrication workshops and factories. As a result, most of the labour-intensive and time-consuming site operations, such as steel fixing, formwork erection, concreting, building services installations and internal finishing, are completed off-site. The completed modules are then delivered to the building site for efficient installation. Overseas experience suggests that MiC could reduce the time for constructing the superstructure of a 20-storey building by over 50%.

While MiC is a mature construction method widely used in many advanced jurisdictions, it is relatively new in Hong Kong. The Government will take the lead by championing pilot projects to demonstrate the feasibility of this innovative construction method for erecting high-rise buildings in Hong Kong. Currently, the Mainland, Australia and Malaysia are the three major exporters of MiC modules. Before factories are established locally to produce such modules for local use, we have to rely on imports in the short term. As mentioned in the Budget Speech this year, we are conducting studies on relevant local manufacturing facilities. The provision of land for MiC manufacturing facilities will be examined in the studies.

(6) The projects in question are still at a very preliminary stage and we will have a better estimation of the relevant project expenditures at a later stage.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)025

(Question Serial No. 2690)

Head: (159) Government Secretariat: Development Bureau
(Works Branch)

Subhead (No. & title): Not specified

Programme: (1) Water Supply

Controlling Officer: Permanent Secretary for Development (Works) (C K HON)

Director of Bureau: Secretary for Development

Question:

In 2018-19, the Works Branch will “oversee the review of payment approach with Guangdong authorities on future Dongjiang water agreements after 2020.” In this connection, will the Administration inform this Committee of:

1. the progress of the review, the anticipated date of completion, and whether there is a timetable for the work;
2. the format, the number of working meetings, the number of officials involved and their ranks, and the expenditure regarding the work on the review of the Dongjiang water payment approach; and
3. Has the Administration suggested using the “payment on actual supply quantity” approach instead of “package deal lump sum”. If yes, what are the details. If no, what are the reasons?

Asked by: Hon MO Claudia (Member Question No. (LegCo use): 16)

Reply:

1. As the current “package deal lump sum” approach has been adopted in the Dongjiang (DJ) water supply agreements for more than 10 years since its first application in 2006, it is considered an appropriate time to review the approach. We have thus set up a working group with the Guangdong (GD) authorities in August 2017 to take forward the review. The review is expected to be completed before the negotiation for the next supply agreement in 2020.

2. The working group has held meetings since its establishment in August 2017. Each side has three members. The Hong Kong side is led by an Assistant Director of the Water Supplies Department together with two senior professionals. The expenditure of the review is mainly internal staff

resources and the travelling expenses of the government officials to attend meetings.

3. In addition to reviewing the current “package deal lump sum” approach, alternative payment approaches, including “payment on actual supply quantity” and other options of combining fixed lump sum payment and variable sum payment based on actual supply quantity etc. will also be explored. We do not have the details of the alternative approaches at this stage. In any event, we will ensure that Hong Kong’s water supply security will not be adversely affected as a result of the review.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)026

(Question Serial No.2438)

Head: (159) Government Secretariat: Development Bureau
(Works Branch)

Subhead (No. & title):

Programme: Not specified

Controlling Officer: Permanent Secretary for Development (Works) (C K HON)

Director of Bureau: Secretary for Development

Question:

Regarding the \$1 billion Construction Innovation and Technology Fund proposed in the Budget, please inform this Committee of the following:

- (1) What are the implementation details of the Fund, including the commencement date for application, the application criteria, the application procedures, the amount of funding, and the manpower and expenditure involved?
- (2) Whether the Administration has consulted or will it consult the technology sector, the construction sector, the academic sector and other stakeholders on the types of innovative technologies and technical know-how that will receive funding? If yes, what are the details? If no, what are the reasons?
- (3) Will priority be given to local technology companies for them to provide technical know-how and services to applicants?
- (4) It is mentioned in the Budget that the Fund will also support students and practitioners of the construction industry to receive training on innovative construction technologies. What are the details?
- (5) Regarding the training mentioned in (4), whether the Administration has consulted or will it consult the technology sector, the construction sector, the academic sector and other stakeholders on the content of the training courses? If yes, what are the details? If no, what are the reasons?

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 100)

Reply:

The primary objectives of the Construction Innovation and Technology Fund are to encourage a wider adoption of innovative construction methods and new technologies, and to prepare practitioners and students of construction-related disciplines to embrace new technologies, with a view to promoting productivity, raising built quality, improving site

safety and enhancing environmental performance. The use of advanced technologies will also help enhance the professional image of the construction industry and attract new blood.

The information sought is provided as follows:

- (1), (2) & (3) To ensure effective and efficient use of the fund, we will seek to simplify the application and vetting procedures to provide timely support for applications so as to facilitate their adoption of new technologies and associated products, such as Building Information Modelling, Modular Integrated Construction and prefabricated steel bar products from local prefabrication yards. We will also make reference to the latest technologies sourced by the Construction Industry Council's Construction Industry Technology Application Centre.

Target participants would be those directly involved in project design and implementation, including levy-paying contractors, subcontractors registered under the Subcontractor Registration Scheme maintained by the Construction Industry Council, and consultants on the lists and directories maintained by the Government or professional institutions. Local technology companies will be welcome to provide technical solutions for adoption by the construction industry. We are consulting all industry stakeholders with a view to formulating suitable implementation arrangements, including eligibility criteria, to meet industry needs.

- (4) & (5) Regarding manpower development, the Fund will support industry practitioners (ranging from skilled workers to professionals) and tertiary students of relevant disciplines so that they can receive training at avant-garde construction institutions, attend conferences and take part in technology visits. We are consulting industry stakeholders, professional institutions and academia on the formulation of implementation details. We will take into account factors such as resource implications, relevance to construction innovation, training efficacy and prudent use of public money when drawing up the parameters (e.g. nature and duration of training courses, training places) of the Fund.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)027

(Question Serial No. 3209)

Head: (159) Government Secretariat: Development Bureau
(Works Branch)

Subhead (No. & title): Not specified

Programme: (5) Intra-Governmental Services

Controlling Officer: Permanent Secretary for Development (Works) (C K HON)

Director of Bureau: Secretary for Development

Question:

Regarding the Government's adoption of the Building Information Modelling (BIM) technology, please inform this Committee of the following:

- (1) Please list by year the numbers of public works projects that have adopted BIM technology and their percentages against the overall numbers of projects in the past 3 years;
- (2) Last year, the Government said that it would actively seek to apply BIM technology in the design of major government capital works projects from this year onwards, and require consultants and contractors undertaking design or construction to adopt BIM technology. What are the implementation progress and the timetable?
- (3) Is there any provision for BIM adoption included in the outsourced government works contracts? If yes, how many contracts have included this provision so far, and of these contracts, what are the respective numbers and percentages of consultancy and construction contracts?
- (4) Will BIM adoption be required in carrying out all the outsourced government works projects in future? If yes, what are the specific requirements? If no, what are the reasons?
- (5) What are the details of training provided for civil servants in BIM adoption in public works projects in the past 3 years, including the training targets, the numbers of officers trained and the expenditures involved per year?
- (6) Are there any statistics on the prevalence of BIM adoption in the industry? If yes, what are the details?
- (7) In 2014, the Government engaged a consultant to formulate standards and specifications for BIM adoption in the construction works of Hong Kong. What are the details of work in promoting the use of the standards and specifications in the industry in the past few years? Will the Government step up its efforts to promote the development and adoption of BIM technology in the industry (including financial assistance schemes), and conduct publicity and public education activities to raise public awareness of this technology and the

benefits of its adoption in the implementation of works projects? If yes, what are the specific details?

Asked by: Hon MOK Charles Peter (Member Question No. (LegCo use): 102)

Reply:

1. In the past three years, works departments have been conducting pilot trials in public works projects to allow their staff to get familiar with Building Information Modelling (BIM) technology and the associated process, and to experience the benefits of the technology. The number of public works projects involving the trial of BIM technology against the number of public works projects in the same year are as follows -

Financial year	Number of public works projects involving trial of BIM technology	Number of public works projects	Percentage
2015-16	32	268	12%
2016-17	38	293	13%
2017-18	36	274	13%

2, 3 & 4. From January 2018 onwards, works departments are required to adopt BIM technology in designing and implementing capital works projects costing over \$30 million. We anticipate that about 65 consultancies and contracts scheduled for tender invitation in 2018 will involve the use of BIM technology. Among them, about 35% will be consultancies and 65% will be works contracts. Their names and details are shown on the webpage “Forecast of Consultancies and Works Tenders” on the website of Development Bureau (DEVB) and will be updated quarterly. The link to the webpage is as follows -

https://www.devb.gov.hk/en/construction_sector_matters/tender_notices/forecast_of_consultancies_and_tenders/index.html

5. Works departments have been arranging their staff to attend basic BIM awareness training, in-depth appreciation training and hands-on training workshops, as appropriate, to equip them with the BIM knowledge and skills necessary for effectively discharging their duties. Training statistics for the past three years are as follows-

Financial year	Number of staff* attending BIM-related training	Training expenditure (\$ million)
2015-16	730	0.93
2016-17	759	1.30
2017-18	896	2.33

* including civil service and non-civil service contract staff

6. The Government does not have specific statistics on the prevalence of BIM adoption in the industry at this stage. However, we can observe that there is a positive trend towards adopting BIM in the industry, as evidenced by its adoption by developers, consultants and contractors in some major projects and developments, and the increasing

number of BIM-related training courses, conferences and experience sharing activities arranged by the industry in recent years.

7. DEVB has been collaborating with the Construction Industry Council (CIC) in supporting and promoting the use of BIM technology in the construction industry. The CIC launched BIM Standards (Phase One) in 2015. It also established a Committee on BIM in mid-2017 to formulate a BIM adoption roadmap in consultation with relevant stakeholders and develop corresponding BIM technical standards, specifications, guidelines and common practices in phases according to the roadmap. BIM conferences have been held for publicity/educational purposes and will continue to be organised. Furthermore, the CIC established the Construction Innovation and Technology Application Centre (CITAC) in November 2017 to provide the latest information on local and overseas construction technologies with a view to promoting local adoption. BIM technology is one of the major exhibits at the CITAC.

In the 2018-19 Budget, the Financial Secretary proposed to set up a \$1 billion Construction Innovation and Technology Fund. The fund will, among other things, provide financial assistance for BIM training, procurement of associated hardware/software and trial adoption of BIM in local projects with a view to expediting the application of BIM technology in the construction industry. The Government plans to seek the approval of the Finance Committee of the Legislative Council in mid-2018.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)028

(Question Serial No. 0552)

Head: (159) Government Secretariat: Development Bureau
(Works Branch)

Subhead (No. & title): Not specified

Programme: (5) Intra-Governmental Services

Controlling Officer: Permanent Secretary for Development (Works) (C K HON)

Director of Bureau: Secretary for Development

Question:

Please list by year the numbers of public works contracts commenced, the total costs of works and the average costs of works in the past 5 years. Among them, how many contracts required, or in which the contractors specified, the provision of allowances to workers attending the "Safety Training Course for Construction Workers of Specified Trade (silver card course)"? How many contracts required, or in which the contractors specified, the provision of labour relations officers? Also, what were the numbers of labour relations/complaint cases and the people involved? If no, what were the reasons?

Asked by: Hon POON Siu-ping (Member Question No. (LegCo use): 50)

Reply:

Based on our records, the number and total value of public works contracts commenced, the average contract value and information relating to safety training and labour relations officers in each of the past five financial years are as follows:

	2013-14	2014-15	2015-16	2016-17	2017-18
No. of public works contracts commenced	159	141	167	186	199
Total contract value (\$ million)	77,390	28,772	57,338	36,720	57,270
Average contract value (\$ million)	487	204	343	197	288

	2013-14	2014-15	2015-16	2016-17	2017-18
No. of contracts requiring provision of allowances to workers attending "silver card course"	84	52	78	71	43
No. of contracts requiring provision of labour relations officers	99	52	92	87	63

Note 1: Only contracts with a value of more than \$4 million are included.

Note 2: For 2017-18, the figures shown are up to mid-March 2018.

The number of labour relations cases reported in each of the past five financial years and the number of workers involved are as follows:

	2013-14	2014-15	2015-16	2016-17	2017-18
No. of labour relations cases	24	25	17	31	28
No. of workers involved	484	1572	517	707	327

Note 3: Labour relations cases generally concern wage arrears and related complaints.

Note 4: All labour relations cases reported in a financial year include those that happened under contracts that commenced in previous financial years.

Note 5: For 2017-18, the figures shown are up to mid-March 2018.

- End -

CONTROLLING OFFICER'S REPLY**DEVB(W)029****(Question Serial No. 0622)**

Head: (159) Government Secretariat: Development Bureau
(Works Branch)

Subhead (No. & title): Not specified

Programme: (5) Intra-Governmental Services

Controlling Officer: Permanent Secretary for Development (Works) (C K HON)

Director of Bureau: Secretary for Development

Question:

Regarding the public works under the programme Intra-Governmental Services, please inform this Committee of:

- 1) the numbers of works contracts, their contract values, as well as the numbers of safety audits, safety officers and safety supervisors involved in the Pay for Safety Scheme (PFSS) in each of the past 5 years;
- 2) the existing specific measures, the revised contents, the revised timetable and the share of payment under the PFSS after its revision in 2016; and
- 3) the specific details, the measures and the implementation timetable related to “the review of the public works procurement system”; as well as the specific details of the provisions, training, equipment and staff related to occupational safety and the relevant measures in this area.

Asked by: Hon POON Siu-ping (Member Question No. (LegCo use): 51)

Reply:

- 1) The number of active works contracts, their total contract value, and the numbers of safety auditors, safety officers and safety supervisors involved in public works contracts in each of the past five years are summarised in the following table:

Financial Year	Total No. of Active Works Contracts (Total value in \$ billion)	Total No. of Safety Auditors	Total No. of Safety Officers	Total No. of Safety Supervisors
2013-14	296 (245)	318	390	985
2014-15	286 (261)	308	392	960
2015-16	317 (291)	347	451	1 151
2016-17	321 (303)	354	464	1 233
2017-18	338 (276)	376	490	1 252

- 2) In mid-2015, we conducted a review of the Safety Management System, including the Pay for Safety Scheme (PFSS), for public works contracts. The Legislative Council's Panel on Development was informed of the review findings and the proposed enhancements in late 2016 via the information paper LC Paper No. CB(1)291/16-17(01). Subsequently, we promulgated the proposed enhancements in phases starting from mid-2017.

The proposed enhancements to the PFSS mainly include adding a new payment item on prevention of heat stroke and simplifying as well as streamlining the existing payment arrangement without compromising site safety. Details were given in Enclosure 2 to the information paper LC Paper No. CB(1)291/16-17(01). We intend to implement the PFSS-related enhancements by mid-2018. After that, the total amount of safety-related payment items will account for a maximum of 2.9 per cent of the total contract sum.

- 3) The Development Bureau reviews and enhances the procurement system for public works projects continually to respond to changes in market conditions for the sustainable growth of the construction industry. In late 2016, we reviewed and promulgated the listing requirements of the procurement system to facilitate entry and subsequent promotion for new contractors. In 2017, we reviewed the criteria for tender evaluation by including a contractor's contribution to workers' training as an assessment criterion and increasing the marking weighting for safety aspects.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)030

(Question Serial No. 1979)

Head: (159) Government Secretariat: Development Bureau
(Works Branch)

Subhead (No. & title): Not specified

Programme: (4) Energizing Kowloon East

Controlling Officer: Permanent Secretary for Development (Works) (C K HON)

Director of Bureau: Secretary for Development

Question:

It is mentioned in Matters Requiring Special Attention in 2018-19 that the Administration will carry out the smart city consultancy and proof-of-concept trials, and facilitate different sectors to use Kowloon East as a test bed to explore the feasibility of developing a smart city. What are the (i) specific measures; (2) timetables; and (3) expenditures involved?

Asked by: Hon QUAT Elizabeth (Member Question No. (LegCo use): 17)

Reply:

The Energizing Kowloon East Office (EKEO) commissioned a consultancy study to explore smart city development in Kowloon East (KE) in February 2016. The study aims to formulate a framework strategy, set directions and priorities for various smart city proposals in KE. Among other recommendations, the study has proposed eight proof of concept (PoC) trials for implementation in KE. The Stage 1 public engagement (PE) exercise was completed in January 2017 and the Stage 2 PE exercise is scheduled for the third quarter of 2018. The study is targeted for completion by end 2018 at a cost of approximately \$7.8 million.

Besides the study, the following measures have been launched since the announcement of the KE smart city initiative in the 2015 Policy Address:

- a. EKEO continues to implement eight PoC trials. Existing manpower resources are deployed to manage the study and the PoC trials. The timetables and expenditures of the PoC trials are as follows:

	PoC Trial	Timetable	Expenditure (\$ million)
Completed			
1	Smart Crowd Management System	Completed in May 2017	0.35 (Actual)
2	Persona and Preference-based Way-finding for Pedestrians	Completed in first quarter of 2018	1.26 (Actual)
Ongoing			
3	Energy Efficiency Data System	Commenced in September 2017 for completion in second quarter of 2019	1.63 (Estimate)
4	Kerbside Loading and Unloading Bay Monitoring System	Commenced in January 2018 for completion in second quarter of 2019	1.50 (Estimate)
PoC Trials under Preparation			
5	Multi-purpose Lamp Post	Target to commence in second quarter of 2018	To be determined, subject to finalisation of tender specifications
6	Smart Waste Bin System	Target to commence in second quarter of 2018	
7	Real-time Road Works Information	Target to commence in third quarter of 2018	
8	Illegal Parking Monitoring System	Target to commence in third quarter of 2018	

More details can be found in the https://www.ekeo.gov.hk/en/smart_city/index.html webpage.

- b. Since November 2016, requirements for provision of smart water meter system and electric vehicle charging facilities have been stipulated for all new land sale sites in KE, and supply of real-time parking vacancy information is also required at appropriate land sale sites in KE. New government buildings in KE will generally comply with the same requirements.
- c. A mobile app “My Kowloon East” was launched in December 2016 to promote smart city development in KE and to serve as an interactive platform for real-time data sharing. Real-time parking vacancy data of about 55% of the hourly parking spaces in KE are already made available through the mobile app. The mobile app includes other functions such as suggesting personalised walking routes according to users’ needs and preferences.
- d. To create a knowledge-driven platform for co-creating a smart KE, EKEO encourages universities and research institutes to develop innovative smart city solutions and has provided policy support for smart city-related research projects using KE as a test bed in their funding applications. Five such research projects have already secured research funding from various sources and are ongoing. EKEO also facilitates CLP

Power's smart energy community project which involves the installation of energy-saving devices for several developments in the Kai Tak Development Area.

Existing resources are deployed for the implementation of the above measures except the PoC trials.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)031

(Question Serial No. 0056)

Head: (159) Government Secretariat: Development Bureau
(Works Branch)

Subhead (No. & title): Not specified

Programme: (5) Intra-Governmental Services

Controlling Officer: Permanent Secretary for Development (Works) (C K HON)

Director of Bureau: Secretary for Development

Question:

In paragraph 113 of his Budget speech, the Financial Secretary has mentioned the Construction Innovation and Technology Application Centre established by the Construction Industry Council last year. He mentions that this centre will lead the industry to embrace innovation through collecting, exhibiting and experiencing the latest construction technologies and applications. However, under the existing Building Ordinance, limited enhancement can be made under such inflexible and stringent building restrictions set out by the said ordinance. Given that the said Centre has already operated for a year, please provide indicators including the number of construction projects that embraced innovation, the scale of innovation has been adopted in local construction projects, the target of innovation application and the details of works of this centre.

Asked by: Hon SHEK Lai-him, Abraham (Member Question No. (LegCo use): 1)

Reply:

The construction industry needs concerted efforts to enhance its productivity and competitiveness through a wider adoption of innovation and technology. With this in mind, the Construction Industry Council established the Construction Innovation and Technology Application Centre (CITAC), which was officially opened in late November 2017. The aim of the centre is to explore and identify innovative techniques and technologies, both locally and internationally, that are suitable for adoption by the Hong Kong construction industry. In the long run, it intends to establish a global research network to promote interdisciplinary research and application geared towards enhancement of productivity and safety performance.

Although the CITAC has opened for only about three months, we observe that construction projects have already started to embrace technologies displayed at the centre. For example, exoskeletons and zero-gravity arms are under trial by a major local contractor to

better protect its workers in lifting heavy equipment and machinery. We can also see that the construction industry is transforming itself as it enters a “digital built” era. Building Information Modelling (BIM) technology is starting to be adopted widely in projects of different natures, scales and complexities, with about 65 major capital works consultancies and contracts involving the use of BIM scheduled for tender invitation in 2018.

The 2018 work plan of the CITAC includes -

- i. scouting for the latest and emerging construction technologies and techniques to be showcased at its exhibition centre, where 23 exhibits are currently on display;
- ii. identifying and prioritising “quick wins”, as well as formulating roadmaps for the adoption of new technologies on construction sites;
- iii. organising seminars and conferences on various innovative technologies such as BIM, robotics and automation, internet of things, Design for Manufacture and Assembly etc; and
- iv. organising publicity and marketing activities.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)032

(Question Serial No. 0057)

Head: (159) Government Secretariat: Development Bureau
(Works Branch)

Subhead (No. & title): Not specified

Programme: (5) Intra-Governmental Services

Controlling Officer: Permanent Secretary for Development (Works) (C K HON)

Director of Bureau: Secretary for Development

Question:

The Financial Secretary mentioned in paragraph 113 of his Budget speech that the Government will adopt building information modelling (BIM) technology in the design and construction of major government capital works project and the Construction Industry Council will formulate BIM technical standards, help equip the industry and encourage the use of such technology in private works projects. Under this connection, will the Administration inform this Council the timetable and implementation scale of BIM technology in major government capital works project in details for the upcoming five financial years. Please also inform this Council the funding and resources that would be allocated to CIC to formulate the BIM technical standards, the timetable for formulating the BIM technical standards as well as the target of the implementing of BIM technical standards in private works projects in the upcoming five financial years. Will the Government consider providing financial assistance to local industry to adopt the BIM technical standards? If yes, of the details; if no, of the reasons.

Asked by: Hon SHEK Lai-him, Abraham (Member Question No. (LegCo use): 2)

Reply:

Works departments are required to adopt Building Information Modelling (BIM) technology in designing and implementing capital works projects costing over \$30M from January 2018 onwards. We anticipate that about 65 consultancies and contracts scheduled for tender invitation in 2018 will involve the use of BIM technology. Based on the planned infrastructure programme, it is anticipated that the annual capital works expenditure in the coming five financial years will exceed \$80 billion, subject to approval by the Finance Committee (FC) of the Legislative Council. Among them, all capital works projects costing over \$30 million will adopt BIM technology.

To support and promote the use of BIM technology in the construction industry, the Construction Industry Council (CIC) launched BIM Standards (Phase One) in 2015. The CIC also established a Committee on BIM in mid-2017 to formulate a BIM adoption

roadmap in consultation with relevant stakeholders and develop corresponding BIM technical standards, specifications, guidelines and common practices in phases according to the roadmap using their own funding. The Government will work closely with the CIC in the process and provide assistance as necessary.

In the 2018-19 Budget, the Financial Secretary proposed to set up a \$1 billion Construction Innovation and Technology Fund. The fund will, among other things, provide financial assistance for BIM training, procurement of associated hardware/software and trial adoption of BIM in local projects with a view to expediting the application of BIM technology in the construction industry. The Government plans to seek the FC's approval for the fund in mid-2018.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)033

(Question Serial No. 0058)

Head: (159) Government Secretariat: Development Bureau
(Works Branch)

Subhead (No. & title): Not specified

Programme: (5) Intra-Governmental Services

Controlling Officer: Permanent Secretary for Development (Works) (C K HON)

Director of Bureau: Secretary for Development

Question:

The Financial Secretary has mentioned in paragraph 114 of his Budget speech that the Government will take the lead in piloting Modular Integrated Construction (MiC) in public projects and is considering extending the current gross floor area concessions for promoting green and innovation buildings to cover buildings adopting MiC. He has mentioned that the Government is conducting studies on relevant manufacturing facilities to promote the wider use of such a construction method in Hong Kong. When will the aforementioned studies be finalised? Does the Government consult trades and the construction industry while conducting such studies? If yes, of the details and the timetable and scale of adopting MiC in Hong Kong, including private projects. If no, of the reasons.

Asked by: Hon SHEK Lai-him, Abraham (Member Question No. (LegCo use): 3)

Reply:

Hong Kong has been beset with high construction costs and a shortage of skilled labour in recent years. To enhance the productivity and cost-effectiveness of the construction industry, the Government is actively promoting the application of advanced technology and innovative construction methods.

One such method is Modular Integrated Construction (MiC), a mature construction method widely used in many advanced jurisdictions. It applies the concepts of "Design for Manufacturing and Assembling" and "factory assembly followed by on-site installation". With MiC, most of the labour-intensive and time-consuming site operations are completed in off-site prefabrication yards so as to shorten construction time and reduce site manpower demand, thereby uplifting construction productivity.

The Government is taking the lead by implementing pilot projects (e.g. a student residence project of the University of Hong Kong in Wong Chuk Hang) to demonstrate the feasibility of using this innovative construction method for erecting high-rise buildings and to advocate the adoption of MiC in Hong Kong in both public and private projects.

Relevant studies on MiC manufacturing facilities are still in very initial stages under the joint efforts of the Government and the construction industry. We anticipate that preliminary study findings would be available in the second half of 2019. During the studies, relevant trades and industry stakeholders will be engaged.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)034

(Question Serial No. 0059)

Head: (159) Government Secretariat: Development Bureau
(Works Branch)

Subhead (No. & title): Not specified

Programme: (5) Intra-Governmental Services

Controlling Officer: Permanent Secretary for Development (Works) (C K HON)

Director of Bureau: Secretary for Development

Question:

In paragraph 115 of the Budget speech, the Financial Secretary proposes to set up a \$1 billion Construction Innovation and Technology Fund to boost the capacities of enterprises and practitioners in the construction industry to adopt new technology. He mentions that eligible contractors, registered sub-contractors and consultants can apply for financial support from the Fund to acquire the software and hardware as well as to nurture the expertise required for using local and overseas innovation construction technologies. What kind of measures will the Government adopt in order to make sure that it will provide effective and efficient approval so that technology used for applying the said Fund would remain new and up-to-date for the use of local construction industry? In addition, will the Government provide in details the criteria to become eligible contractors, registered sub-contractors and consultants for the application of financial support from the Fund?

The Financial Secretary has also mentioned that the aforementioned Fund will also support students and practitioners of the construction industry to receive training on innovation construction technologies. Will the Administration inform this Council the details of trainings and courses that are accepted for the application of financial support from the Construction Innovation and Technology Fund? What are the requirements for becoming eligible students and practitioners of the construction industry for the relevant application? Is there a limit or specific target for this policy initiative? If yes, of the details.

Asked by: Hon SHEK Lai-him, Abraham (Member Question No. (LegCo use): 4)

Reply:

The primary objectives of the Construction Innovation and Technology Fund are to encourage a wider adoption of innovative construction methods and new technologies, and to prepare practitioners and students of construction-related disciplines to embrace new technologies, with a view to promoting productivity, raising built quality, improving site safety and enhancing environmental performance. The use of advanced technologies will also help enhance the professional image of the construction industry and attract new blood.

To ensure effective and efficient use of the fund, we will seek to simplify the application and vetting procedures to provide timely support for applicants so as to facilitate their adoption of new technologies and associated products, such as Building Information Modelling, Modular Integrated Construction and prefabricated steel bar products from local prefabrication yards. We will also make reference to the latest technologies sourced by the Construction Industry Council's Construction Industry Technology Application Centre.

Target participants would be those directly involved in project design and implementation, including levy-paying contractors, subcontractors registered under the Subcontractor Registration Scheme maintained by the Construction Industry Council, and consultants on the lists and directories maintained by the Government or professional institutions. We are consulting industry stakeholders with a view to formulating suitable implementation arrangements, including eligibility criteria, to meet industry needs.

Regarding manpower development, the Fund will support industry practitioners (ranging from skilled workers to professionals) and tertiary students of relevant disciplines so that they can receive training at avant-garde construction institutions, attend conferences and take part in technology visits. We are consulting industry stakeholders, professional institutions and academia on the formulation of implementation details. We will take into account factors such as resource implications, relevance to construction innovation, training efficacy and prudent use of public money when drawing up the parameters (e.g. nature and duration of training courses, training places) of the Fund.

We plan to submit our detailed proposals to the Legislative Council Panel for Development in mid-2018.

- End -

CONTROLLING OFFICER'S REPLY**DEVB(W)035****(Question Serial No. 0093)**

Head: (159) Government Secretariat: Development Bureau
(Works Branch)

Subhead (No. & title): Not specified

Programme: (5) Intra-Governmental Services

Controlling Officer: Permanent Secretary for Development (Works) (C K HON)

Director of Bureau: Secretary for Development

Question:

With the launch of various infrastructure projects and the increase of housing production in future, there is a severe labour shortage in the construction industry. The Government states that it will monitor the progress of the various initiatives in relation to the manpower resources in the construction industry. In this connection, will the Government inform this Committee of:

- (a) the most recent data about labour shortage in various trades of the construction industry. Please provide a breakdown by trade with the shortfall of workers for each of the trades;
- (b) the numbers of student intakes for the training courses in each trade provided by the Construction Industry Council and the Vocational Training Council in each of the past 3 years; as well as the percentages of student intakes against the places available; and
- (c) any detailed plans to encourage new entrants to join the construction industry; if yes, of the details; if no, of the reasons?

Asked by: Hon SHEK Lai-him, Abraham (Member Question No. (LegCo use): 29)

Reply:

- (a) The Construction Industry Council (CIC) has been closely monitoring the demand and supply of skilled workers. According to the CIC's latest manpower forecast, published in January 2018, the trades with major manpower shortages in 2018 are as follows —

Trades	Labour Shortage
Plasterer	501 – 1 000
Plumber	501 – 1 000
Refrigeration / Air-Conditioning / Ventilation Mechanic	501 – 1 000

Trades	Labour Shortage
Lift and Escalator Mechanic	501 – 1 000
Bar Bender and Fixer	501 – 1 000
Metal Worker	501 – 1 000
Electrical Fitter	≤ 500
Scaffolder	≤ 500
Plant and Equipment Operator (Load Shifting)	≤ 500
General Welder	≤ 500
Fire Service Mechanic	≤ 500
Concretor	≤ 500
Carpenter	≤ 500

- (b) The numbers of students admitted to training courses provided by the CIC and Vocational Training Council (VTC) for the above-listed trades in each of the past three years are set out below —

CIC

Trades	Calendar Year					
	2015		2016		2017	
	Student intake	Percentage of student intake against training places	Student intake	Percentage of student intake against training places	Student intake	Percentage of student intake against training places
Plasterer	329	68%	409	71%	514	76%
Plumber	300	80%	365	95%	446	92%
Refrigeration / Air-Conditioning / Ventilation Mechanic	29	81%	22	69%	44	71%
Lift and Escalator Mechanic	11	42%	51	64%	6	12%
Bar Bender and Fixer	1 125	95%	1 319	96%	1 211	87%
Metal Worker	127	67%	168	77%	158	67%
Electrical Fitter	125	100%	112	93%	116	97%
Scaffolder	114	71%	158	69%	126	66%
Plant and Equipment Operator (Load Shifting)	58	100%	69	100%	120	94%
General Welder	140	100%	200	74%	219	83%
Fire Service Mechanic	-	-	7	12%	16	44%
Concretor	118	64%	199	53%	194	62%
Carpenter	675	65%	831	72%	860	80%

VTC

Trades	Academic Year					
	2015-16		2016-17		2017-18 (Provisional)	
	Student intake	Percentage of student intake against training places	Student intake	Percentage of student intake against training places	Student intake	Percentage of student intake against training places
Plant and Equipment Operator (Load Shifting)*	689	92%	683	91%	636	85%
General Welder *						
Metal Worker *						
Plumber #						
Electrical Fitter #						
Refrigeration / Air-Conditioning / Ventilation Mechanic #	(a) 1 416	(a) 97%	(a) 1 516	(a) 98%	(a) 1 598	(a) 94%
Fire Service Mechanic #	(b) 942	(b) 100%	(b) 1 047	(b) 95%	(b) 1 125	(b) 96%
Lift and Escalator Mechanic #						

Remarks:

- * Including full-time/part-time intake for the Diploma in Vocational Education (Secondary 3) (Mechanical Engineering)
- # Including full-time/part-time intake for the Diploma in Vocational Education (Secondary 3) [Streams: (a) Electrical Engineering and (b) Building Services Engineering]

(c) We are working closely with the CIC and industry stakeholders to attract new blood, primarily through the following measures —

- (i) Establishment of the Hong Kong Institute of Construction (HKIC)

The CIC established the HKIC in 2018 to train high-calibre construction practitioners to meet industry demand. By offering programmes recognised under the Qualification Framework (QF), such as diploma courses (QF Level 3), with a clear career progression path, the HKIC will help encourage youngsters to join the industry.

- (ii) Enhancing Training for Workers

The CIC is strengthening its efforts to enhance collaborative training schemes. To encourage contractors and their subcontractors to enhance in-service skills

training, the Government introduced a new technical score on workers' training in its tender evaluation for public works contracts in August 2017. As a result of this initiative, there was a 28% growth in yearly recruits under the collaborative training schemes in 2017 as compared with 2016.

(iii) Establishment of the STEM Alliance

To arouse students' interest in the construction industry, the CIC has formed the STEM Alliance to strengthen the network between secondary schools and the industry.

(iv) Services and Support for Ethnic Minorities

The CIC has set up the Ethnic Minority Service Team to enhance its services and support for ethnic minorities. In order to attract ethnic minority students to join the construction industry, the CIC organised a three-day taster programme in December 2017 to stimulate their interest in the construction industry.

(v) Promoting a Positive Image for the Construction Industry

We have been working with the CIC to promote the industry and attract newcomers through announcements in the public interest on TV and radio, hoardings around construction sites, sports and volunteering activities, etc. The CIC has also established the Construction Innovation and Technology Application Centre to nurture an innovative culture among practitioners to enhance professionalism and project a positive image for the construction industry.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)036

(Question Serial No.3142)

Head: (159) Government Secretariat: Development Bureau
(Works Branch)

Subhead (No. & title): Not specified

Programme: Not specified

Controlling Officer: Permanent Secretary for Development (Works) (C K HON)

Director of Bureau: Secretary for Development

Question:

It is mentioned in the Budget Speech that the Government “will adopt building information modelling (BIM) technology in the design and construction of major government capital works projects. The Construction Industry Council will formulate BIM technical standards, help equip the industry and encourage the use of such technology in private works projects.” Will the Government inform this Committee:

- a) of the amount of resources and the staff establishment involved in adopting BIM technology in works projects;
- b) of the names and details of projects that are expected to adopt BIM technology in the financial year 2018-19; and
- c) whether the Administration has any detailed plans to promote the development and adoption of BIM technology? If yes, what are the details? If no, what are the reasons?

Asked by: Hon SHEK Lai-him, Abraham (Member Question No. (LegCo use): 35)

Reply:

a) Works departments are required to adopt BIM technology in designing and implementing capital works projects costing over \$30 million from January 2018 onwards. A total of 25 time-limited civil service posts with a 10-year duration will be created in the Development Bureau (DEVB) and works departments from 2018-19, with the total estimated expenditure being \$200 million, to provide the project teams responsible for spearheading the adoption of BIM technology with the manpower required.

b) We anticipate that about 65 consultancies and contracts scheduled for tender invitation in 2018 will involve the adoption of BIM technology. The names and details of those consultancies and contracts are shown on the webpage “Forecast of Consultancies and

Works Tenders” on the DEVB website and will be updated quarterly. The link to the webpage is as follows -

https://www.devb.gov.hk/en/construction_sector_matters/tender_notices/forecast_of_consultancies_and_tenders/index.html

c) DEVB has been collaborating with the Construction Industry Council in supporting and promoting the use of BIM technology in the construction industry. In the 2018-19 Budget, the Financial Secretary proposed to set up a \$1 billion Construction Innovation and Technology Fund. The fund will, among other things, provide financial assistance for BIM training, procurement of associated hardware/software and trial adoption of BIM in local projects with a view to expediting the application of BIM technology in the construction industry. The Government plans to seek the approval of the Finance Committee of the Legislative Council in mid-2018.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)037

(Question Serial No. 3188)

Head: (159) Government Secretariat: Development Bureau
(Works Branch)

Subhead (No. & title): (000) Operational Expenses

Programme: (5) Intra-Governmental Services

Controlling Officer: Permanent Secretary for Development (Works) (C K HON)

Director of Bureau: Secretary for Development

Question:

In 2016, the Development Bureau established the Project Cost Management Office (PCMO) to strengthen cost management of capital works projects. In replying to questions raised by Members in examining the Estimates of Expenditure in 2017-18, the Administration indicated that the PCMO targeted to carry out the cost scrutiny of around 100 projects at the planning and design stage in 2017-18. In this connection, please set out the following information:

- a) the actual number of projects at the planning and design stage that were scrutinised by the Administration in 2017-18, and the total amount and the percentage saved in all these projects;
- b) whether any conclusions have been drawn regarding the reasons for achieving cost saving in works projects? If yes, what are the details? If no, what are the reasons? and
- c) the target number of projects to be scrutinised in 2018-19?

Asked by: Hon SHEK Lai-him, Abraham (Member Question No. (LegCo use): 40)

Reply:

The Project Cost Management Office (PCMO) was established in June 2016 to strengthen management over construction costs and enhance the cost-effectiveness of public works projects in order to ensure that public funds are spent properly and effectively.

Our responses to the questions raised are as follows: -

- (a) In 2017-18, PCMO has reviewed the cost estimates of about 70 projects, including those concerning site formation, government offices, staff quarters, hospitals, schools, parks, roadworks, waterworks, drainage works etc. The reviews have led to savings of about 12% in project costs, or about \$11 billion.

- (b) From the projects examined, we have noted that on occasions in striving to satisfy the requirements of various stakeholders, cost implications may not have been accorded a higher priority. To tackle this issue, PCMO has exercised rigorous cost management for public works projects through system re-engineering and design optimisation, and will continue to do so. At the moment, we are comprehensively reviewing the various policies and requirements on public works projects. Under the overriding principle of not compromising the functionality, quality and safety of any works, we are also exploring different design options and construction methods so as to optimise project design on the basis of “fitness for purpose” and “no frills” to ensure cost-effectiveness.
- (c) In 2018-19, PCMO aims to scrutinise the costs of around 80 projects at the planning and design stage to ensure that the projects are carried out cost-effectively.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)038

(Question Serial No. 3396)

Head: (159) Government Secretariat: Development Bureau
(Works Branch)

Subhead (No. & title): Not specified

Programme: (5) Intra-Governmental Services

Controlling Officer: Permanent Secretary for Development (Works) (C K HON)

Director of Bureau: Secretary for Development

Question:

It is mentioned in Matters Requiring Special Attention in 2018-19 that the Works Branch will continue the drafting of a new legislation to enhance payment practice in the construction industry. Please specify the scope of the bill to be drafted, details of the proposals and the scale, the manpower and resources allocated for the work, and the timetables for the submission of the bill to the Legislative Council and the implementation of the bill.

Asked by: Hon SHEK Lai-him, Abraham (Member Question No. (LegCo use): 45)

Reply:

The Construction Industry Security of Payment Bill aims to promote fair payment practices and enhance cash flows in the construction industry. It seeks not only to ensure that service providers can receive timely payments when their work is completed, but also to introduce an adjudication system to speed up the settlement of payment disputes.

The provisions of the Bill, once enacted, will apply to-

- (a) construction contracts entered into by the Government and specified statutory/public bodies or corporations;
- (b) private sector construction contracts:
 - (i) with a value exceeding \$5 million, or consultancies or supply-only contracts with a value exceeding \$0.5 million, and
 - (ii) for construction of new structures or construction works that will result in changes of more than 50% of the existing structures;
- (c) sub-contracts of all tiers of a construction contract under (a) or (b) above, regardless of value.

We are drafting the Bill with in-house resources with input from one Assistant Secretary and two Senior Government Counsels from the Development Bureau, and one Senior Government Counsel and one Government Counsel from the Department of Justice. We will strive to introduce the Bill to the Legislative Council in 2018-19. A transitional period

will be allowed after the enactment of the legislation for industry stakeholders to make necessary arrangements (e.g. revise contract forms) to conform to the requirements under the legislation.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)039

(Question Serial No. 3410)

Head: (159) Government Secretariat: Development Bureau
(Works Branch)

Subhead (No. & title): Not specified

Programme: (5) Intra-Government Services

Controlling Officer: Permanent Secretary for Development (Works) (C K HON)

Director of Bureau: Secretary for Development

Question:

In Matters Requiring Special Attention in 2018-19, the Administration states that it will introduce the bill to enhance payment practice in the construction industry. Under this connection, will the Administration inform this Council the scope, the legislative initiative, the legislative timetable of this bill.

Asked by: Hon SHEK Lai-him, Abraham (Member Question No. (LegCo use): 76)

Reply:

The Construction Industry Security of Payment Bill aims to promote fair payment practices and enhances cash flows in the construction industry. It seeks not only to ensure that service providers can receive timely payments when their work is completed, but also to introduce an adjudication system to speed up the settlement of payment disputes.

The provisions of the Bill, once enacted, will apply to-

- (a) all construction contracts entered into by the Government and specified statutory/public bodies or corporations;
- (b) private sector construction contracts :
 - (i) with a value exceeding \$5 million, or to consultancies or supply-only contracts with a value exceeding \$0.5 million, and
 - (ii) for construction of new structures or construction works that will result in changes of more than 50% to existing structures;
- (c) sub-contracts of all tiers of a construction contract under (a) or (b) above, regardless of value.

We are drafting the Bill and will strive to introduce it to the Legislative Council in 2018-19.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)040

(Question Serial No. 3419)

Head: (159) Government Secretariat: Development Bureau
(Works Branch)

Subhead (No. & title): Not specified

Programme: (4) Energizing Kowloon East

Controlling Officer: Permanent Secretary for Development (Works) (C K HON)

Director of Bureau: Secretary for Development

Question:

Regarding the work to “carry out the smart city consultancy and proof-of-concept trials, and facilitate different sectors to use Kowloon East as a test bed to explore the feasibility of developing a smart city”, please provide the following information:

1. Whether there are timetables for the consultancy and the trials? If yes, what are the details? If no, what are the reasons?
2. What are the costs required?
3. Whether an assessment has been made of the level of public participation and its effectiveness? If yes, what are the details? If no, what are the reasons?
4. Whether new measures will be necessary to further promote public participation. If yes, what are the details? If no, what are the reasons?

Asked by: Hon SHEK Lai-him, Abraham (Member Question No. (LegCo use): 73)

Reply:

- 1 & 2. The Energizing Kowloon East Office (EKEO) commissioned a consultancy study to explore smart city development in Kowloon East (KE) in February 2016. The Stage 1 public engagement (PE) exercise was completed in January 2017 and the Stage 2 PE exercise is scheduled for the third quarter of 2018. The study is targeted for completion by end 2018 at a cost of approximately \$7.8 million. Among other recommendations, the study has proposed eight proof of concept (PoC) trials for implementation in Kowloon East. The timetables and expenditures of the PoC trials are as follows:

	PoC Trial	Timetable	Expenditure (\$ million)
Completed			
1	Smart Crowd Management System	Completed in May 2017	0.35 (Actual)
2	Persona and Preference-based Way-finding for Pedestrians	Completed in first quarter of 2018	1.26 (Actual)
Ongoing			
3	Energy Efficiency Data System	Commenced in September 2017 for completion in second quarter of 2019	1.63 (Estimate)
4	Kerbside Loading and Unloading Bay Monitoring System	Commenced in January 2018 for completion in second quarter of 2019	1.50 (Estimate)
PoC Trials under Preparation			
5	Multi-purpose Lamp Post	Target to commence in second quarter of 2018	Subject to finalisation of tender specifications
6	Smart Waste Bin System	Target to commence in second quarter of 2018	
7	Real-time Road Works Information	Target to commence in third quarter of 2018	
8	Illegal Parking Monitoring System	Target to commence in third quarter of 2018	

More details can be found in the https://www.ekeo.gov.hk/en/smart_city/index.html webpage.

3. To facilitate co-creation in Smart City development in KE, EKEO promotes participation from all sectors in various ways including the following:
 - (a) A public engagement (PE) exercise under the consultancy study was held between November 2016 and January 2017. The PE exercise comprised roving exhibitions, focus group meetings and workshops. An exhibition, allowing different innovative technologies to showcase, was also held. These events were attended by over 600 participants in total. All stakeholders and the general public are welcome to provide views and suggestions on Smart City development in KE anytime.
 - (b) The community, in particular the local community in KE, have been invited to take part in relevant PoC trials, such as the trial on Smart Crowd Management System providing real-time information to the runners, organiser and government departments concerned during the marathon event in KE, and the trial on Energy Efficiency Data System inviting households in Kai Ching Estate and Tak Long Estate to participate.
 - (c) EKEO encourages universities and research institutes to develop innovative smart city solutions and has provided policy support for smart city-related

research projects using KE as a test bed in their funding applications. Five such research projects have already secured research funding from various sources and are ongoing. EKEO also facilitates CLP Power's smart energy community project which involves the installation of energy-saving devices for several developments in the Kai Tak Development Area.

- (d) EKEO have been proactively inviting car park owners/operators in KE to provide real-time parking vacancy data for dissemination via the My Kowloon East (MyKE) mobile app. About 55% of the hourly parking spaces in KE are already providing such data. More car parks are expected to join the system.
- (e) EKEO has been supporting schools, universities and non-profit making organisations in holding various smart city-related activities including briefings, workshops, case studies, and competitions for students. Workshops for teachers and volunteers working with students on Science, Technology, Engineering and Mathematics (STEM) studies were also held. Over 1 000 participants attended these events in total.

The above events, activities and projects were generally well received with positive responses.

- 4. The Stage 2 PE exercise under the consultancy study will be held in the third quarter of 2018 and a symposium is being planned for late 2018 to enable more knowledge sharing on the Smart City development in KE. We will continue to engage the community to demonstrate the benefits that may be brought about by Smart City development.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)041

(Question Serial No. 3420)

Head: (159) Government Secretariat: Development Bureau
(Works Branch)

Subhead (No. & title): Not specified

Programme: (5) Intra-Governmental Services

Controlling Officer: Permanent Secretary for Development (Works) (C K HON)

Director of Bureau: Secretary for Development

Question:

Regarding the work to “monitor the progress of the various initiatives and enhanced them where necessary” for the manpower resources in the construction industry, please provide the following information:

1. It is estimated by the construction industry that it will still be short of about 10 000 to 15 000 skilled workers in the next few years. In light of the current situation, can local workers meet the demand? If yes, what are the details? If no, how will the shortage be addressed?
2. Will the Administration consider relaxing the application requirements of the Supplementary Labour Scheme in the new financial year? If yes, what are the details? If no, what are the reasons?

Asked by: Hon SHEK Lai-him, Abraham (Member Question No. (LegCo use): 77)

Reply:

1. According to the latest manpower forecast published by the Construction Industry Council (CIC) in January 2018, there will be a shortage of about 5 000 to 10 000 skilled workers in the coming five years. To address this challenge, we are implementing a number of measures in collaboration with the CIC and industry stakeholders, as follows —

(a) Establishment of the Hong Kong Institute of Construction (HKIC)

The CIC established the HKIC in 2018 to train high-calibre construction practitioners to meet industry demand. By offering programmes recognised under the Qualification Framework (QF), such as diploma courses (QF Level 3), with a clear career progression path, the HKIC will help encourage youngsters to join the industry.

(b) Enhancing Training for Workers

The CIC is strengthening its effort to enhance collaborative training schemes. To encourage contractors and their subcontractors to enhance in-service skills training, the Government introduced a new technical score on workers' training in its tender evaluation for public works contracts in August 2017. As a result of this initiative, there is a 28% growth in yearly recruits under the collaborative training schemes in 2017 as compared with 2016.

(c) Establishment of the STEM Alliance

To arouse students' interest in the construction industry, the CIC has formed the STEM Alliance to strengthen the network between secondary schools and the industry.

(d) Services and Support for Ethnic Minorities

The CIC has set up the Ethnic Minority Service Team to enhance its services and support for ethnic minorities. In order to attract ethnic minority students to join the construction industry, the CIC organised a three-day taster programme in December 2017 to stimulate their interest in the construction industry.

(e) Promoting a Positive Image for the Construction Industry

We have been working with the CIC to promote the industry's image and attract newcomers through announcements in the public interest on TV and radio, hoardings around construction sites, sports and volunteering activities, etc. The CIC has also established the Construction Innovation and Technology Application Centre to nurture an innovative culture among practitioners to enhance professionalism and project a positive image for the construction industry.

(f) Encouraging Adoption of Innovative Construction Technologies

To address manpower shortages, we will encourage the industry to enhance productivity through a wider adoption of innovative construction methods and new technologies by establishing the \$1 billion Construction Innovation and Technology Fund.

2. According to the CIC's forecast, the overall annual construction expenditure in Hong Kong will exceed \$250 billion in the coming five years. We will continue to monitor the manpower situation closely, strengthen training initiatives and promote the industry vigorously with a view to attracting local entrants to meet the manpower demand generated by the high volume of work. On the premise of giving employment priority to local workers and safeguarding their wage levels, contractors of projects in genuine need may apply for importing construction workers at the technician level or below through the Supplementary Labour Scheme.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)042

(Question Serial No. 3421)

Head: (159) Government Secretariat: Development Bureau
(Works Branch)

Subhead (No. & title): Not specified

Programme: (5) Intra-Governmental Services

Controlling Officer: Permanent Secretary for Development (Works) (C K HON)

Director of Bureau: Secretary for Development

Question:

Regarding the work to “continue to promote the construction and related professional services and to liaise with the relevant Mainland authorities to pursue further market access in the Mainland, with focus on extending the existing scope of the professional services and striving for further liberalisation measures, direct provision of services in Pilot Free Trade Zones and more opportunities to participate in the national foreign aid projects”, please provide the following information:

1. Please set out in detail the specific achievements attained in promoting Hong Kong’s construction and related professional services to the Mainland with focus on extending the existing scope of the professional services and striving for further liberalisation measures in the past 3 years.
2. It is said that the construction and related professional services are shrinking in the Mainland market as compared with the past and that it is difficult to expand their businesses. Has the Administration noticed and evaluated the situation? If yes, what are the details? If no, what are the reasons?
3. Is there any information on the Hong Kong enterprises that have participated in the national foreign aid projects in the past 5 years? If yes, please list the projects, locations, content and business turnovers respectively. If no, what are the reasons?

Asked by: Hon SHEK Lai-him, Abraham (Member Question No. (LegCo use): 78)

Reply

1. For the construction and related engineering professions, the liberalisation measures secured by Hong Kong in the past 3 years are mainly as follows:
 - On the basis of the Guangdong Agreement under the Mainland and Hong Kong Closer Economic Partnership Arrangement (CEPA), the Mainland and Hong Kong signed the Agreement on Trade in Services in November 2015. As undertaken in this latter agreement, the geographical coverage of the liberalisation measures

which have opened up 11 sub-sectors of construction and related engineering services for participation by Mainland-registered Hong Kong enterprises on a “national treatment” basis has been extended from Guangdong to the entire Mainland. In addition, most of the liberalisation measures already implemented in Guangdong have also been extended to Guangxi and Fujian. For example, Hong Kong professionals who have obtained Mainland construction professional qualifications through mutual recognition are allowed to register and practise in Guangdong, Guangxi and Fujian and enjoy the same treatment as Mainland professionals having the same professional qualifications.

- In February 2016, the Development Bureau (DEVB) signed the Co-operation Arrangement for Trial Implementation of Hong Kong Construction Model in Qianhai Shenzhen-Hong Kong Modern Service Industry Co-operation Zone of Shenzhen with the Qianhai Authority and the Housing and Construction Bureau of Shenzhen. The measures that have already been launched by the Qianhai Authority include the selection of two pilot projects to adopt the “Hong Kong construction management model”, the promulgation of the Register of Hong Kong Professional Firms and the establishment of a registration system for Hong Kong professionals. Enterprises on the list and registered professionals need not satisfy the Mainland’s enterprise qualifications or registration requirements before they can provide services directly for construction projects wholly owned or with majority shares held by Hong Kong businesses.

- In June 2017, the Mainland and Hong Kong signed the Agreement on Economic and Technical Co-operation under the CEPA framework, undertaking to, among other things, deepen the co-operation between Hong Kong and the three Free Trade Zones, namely Qianhai, Hengqin and Nansha, and support sustained negotiations on the continuation and extension of the arrangements over mutual recognition of professional qualifications between the two sides.

- DEVB and the Hengqin Management Committee signed a co-operation agreement in August 2017. A working group has been set up by the two sides to extend the co-operation and liberalisation measures being implemented in Qianhai to Hengqin.

2. DEVB has all along maintained close contact and communication with the construction and engineering professions in Hong Kong. We consult with members of the professions from time to time to learn about the difficulties they have encountered when practising and starting their businesses in the Mainland, relay their suggestions and problems to relevant Mainland authorities and discuss with them so as to address those problems. DEVB does not have statistics on the businesses run by these professions in the Mainland. That said, to create more business opportunities for them in the Mainland, we have all along strived to secure more liberalisation measures for Hong Kong’s construction and related professions, and widen the market for our construction industry through negotiations with relevant Mainland authorities.

3. In the past five years, two Hong Kong consultants have undertaken supervision contracts of two national foreign aid projects through open tender. Details are as follows:

Country	Nepal	Cambodia
Project name	Supervising the construction of the National Armed Police Force Academy in Nepal	Supervising the construction of Kratie Agricultural Technical Schools in Cambodia
Total tender price	US\$2.298M	US\$1.086M
Percentage against the total project cost	7.9%	10.1%

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)043

(Question Serial No. 1000)

Head: (159) Government Secretariat: Development Bureau
(Works Branch)

Subhead (No. & title): Not Specified

Programme: (1) Water Supply

Controlling Officer: Permanent Secretary for Development (Works) (C K HON)

Director of Bureau: Secretary for Development

Question:

In 2018-19, the Works Branch will set up a dedicated team for overseeing the performance of the Water Supplies Department on water safety aspect as well as the related consultancy studies with a view to establishing a suitable water safety regime in Hong Kong. Will the Administration inform this Committee of the membership of the dedicated team and its work plan, as well as the scope of the related consultancy studies with a breakdown of expenditures?

Asked by: Hon SHIU Ka-fai (Member Question No. (LegCo use): 38)

Reply:

The proposed dedicated team will be led by a Principal Government Engineer (PGE), the post of which is yet to be created. Subject to approval of the Legislative Council, we plan to create the proposed PGE post in 2018-19. The PGE will be supported by five non-directorate civil servants and contract staff of professional and general grades. Subject to further development of the regulatory regime as mentioned in the ensuing paragraphs, we will review the final set-up of the dedicated team in due course.

The dedicated team will monitor the performance of the Water Supplies Department (WSD) over drinking water safety in an independent manner. It will carry out its own regular audits and surprise checks, and arrange additional external audits through engaging independent auditing firms, as and when necessary, on WSD's quality system for supplying potable water. The team will also provide secretariat support to the operation of the Drinking Water Safety Advisory Committee (the Committee) which was set up by the Government in January 2018 with members comprising academics and experts of related fields to give impartial advice to the Development Bureau on various drinking water safety issues.

In addition to the above, the dedicated team will conduct a detailed study to establish a drinking water safety regulatory regime suitable for Hong Kong (the Study). The scope of the Study is mainly to devise a model of drinking water safety regulatory regime taking into account the relevant conditions in Hong Kong. It is expected that the Study will take about 18 months to complete. The estimated cost of the Study is about \$3 million and its estimated expenditure in 2018-19 is \$2.3 million. Subject to the outcome of the Study, further studies, such as the ensuing implementation details, may need to be carried out in due course. The dedicated team will seek advice from the Committee and liaise with experts of different sectors and relevant government bureaux and departments throughout the course of the Study.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)044

(Question Serial No. 2270)

Head: (159) Government Secretariat: Development Bureau
(Works Branch)

Subhead (No. & title): Not specified

Programme: (4) Energizing Kowloon East

Controlling Officer: Permanent Secretary for Development (Works) (C K HON)

Director of Bureau: Secretary for Development

Question:

In the financial year 2018-19, financial provision for the programme Energizing Kowloon East under the Works Branch of the Development Bureau is \$43.4 million, which is an increase of 11.3% over the original estimate in the previous financial year. What purposes will the additional provision be used for? What percentage of the provision will be used for the development of Kwun Tong and Wong Tai Sin? What is the amount set aside for the planning and development of the San Po Kong Business Area.

Asked by: Hon TSE Wai-chun, Paul (Member Question No. (LegCo use): 51)

Reply:

It was announced in the Policy Agenda in October 2017 that the Energizing Kowloon East initiative would be extended to San Po Kong. The additional financial provision of \$1.2 million in 2018-19 (equivalent to an increase of 2.8% when compared with the revised estimate of 2017-18) is mainly to cater for the additional staff resources required by the Energizing Kowloon East Office to take forward this new initiative, which includes the planning and development of projects in the San Po Kong Business Area.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)045

(Question Serial No. 2271)

Head: (159) Government Secretariat: Development Bureau
(Works Branch)

Subhead (No. & title): Not specified

Programme: (4) Energizing Kowloon East

Controlling Officer: Permanent Secretary for Development (Works) (C K HON)

Director of Bureau: Secretary for Development

Question:

In the previous financial year, the Administration carried out a planning and engineering study on the Kwun Tong Action Area. What is the progress of the study so far and what are the related expenditures and costs of the study? When will the findings of the study be available with specific recommendations made?

Asked by: Hon TSE Wai-chun, Paul (Member Question No. (LegCo use): 52)

Reply:

The Planning and Engineering Study on Kwun Tong Action Area (KTAA) – Feasibility Study has formulated a Preliminary Outline Development Plan (PODP) for KTAA and water body co-use proposals at Kwun Tong Typhoon Shelter for consultation with the Kwun Tong District Council, the Kowloon City District Council, the Task Force on Kai Tak Harbourfront Development of the Harbourfront Commission, and the Land and Development Advisory Committee between August and November 2017. The PODP has been refined to take account of the comments received. Various technical assessments are being undertaken for the formulation of a Recommended Outline Development Plan. The cost of the study is about \$7.5 million. The findings and recommendations of the study are expected to be available by end 2018.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)046

(Question Serial No. 3131)

Head: (159) Government Secretariat: Development Bureau
(Works Branch)

Subhead (No. & title): Not specified

Programme: (4) Energizing Kowloon East

Controlling Officer: Permanent Secretary for Development (Works) (C K HON)

Director of Bureau: Secretary for Development

Question:

The Administration will extend the Energizing Kowloon East initiative to San Po Kong. What development/works projects have been launched so far or are expected to be launched in the area? What are the manpower and expenditure involved as well as the commencement and completion dates for each project (please set out in tabular form)? What is the percentage of expenditure per project against the overall expenditure for the new financial year?

The Back Alley Project @ Kowloon East of the Energizing Kowloon East Office has been criticised by the public as ineffective. (Hundreds of thousands of dollars were spent to invite artists to paint graffiti to beautify a number of back alleys, which are ridiculed as “ugly alleys” and the project is queried for wasting public money.) Will the Administration transplant the much-criticised Back Alley Project @ Kowloon East to San Po Kong? If yes, what are the details?

Asked by: Hon TSE Wai-chun, Paul (Member Question No. (LegCo use): 53)

Reply:

Following the announcement of extending the Energizing Kowloon East initiative to San Po Kong in the Policy Agenda in October 2017, the Energizing Kowloon East Office (EKEO) commissioned a consultancy study in February 2018 to formulate a comprehensive plan for enhancing the connectivity, walkability and traffic condition in the San Po Kong area. The study will propose improvement measures for taking forward progressively to support the transformation of the area. EKEO has also holistically reviewed the planned Sze Mei Street District Open Space (DOS) project and proposed phased development in order to incorporate an underground public vehicle park at the Kai Tak East Playground site to cater for the parking demand. In tandem, EKEO is exploring with relevant government bureaux and departments on other proposals for the area.

In addition, car park owners and operators in the San Po Kong area have been invited to provide real-time parking vacancy data via the “My Kowloon East” (MyKE) mobile app.

To promote walkability, EKEO plans to expand the “Easy Walking” and “Self-guided Tour” functions in MyKE to cover San Po Kong. Besides, EKEO’s proof of concept (PoC) trial on illegal parking monitoring system will include a trial location in San Po Kong.

More information of the above known projects is provided below. For more relevant comparison, the percentage of expenditure per project against the overall expenditure in the new financial year is expressed in terms of the same category of work.

Project Name	Estimated Expenditure in 2018-19	Commencement / Completion	Percentage of EKEO’s expenditure in 2018-19
San Po Kong Business Area Pedestrian Environment and Traffic Improvement – Feasibility Study	\$2 million (consultancy fee)	February 2018 / Q1 2019	About 18% of expenditure on consultancy studies.
Sze Mei Street DOS second phase development	As the proposal is at planning stage, the estimated expenditure of the project has yet to be assessed.	To be determined	To be determined.
Various functions in MyKE Mobile App	In-house resources	Q1 2018 / Q4 2018	Not applicable
PoC Trial on Illegal Parking Monitoring System	To be determined, subject to finalisation of tender specifications.	Q3 2018 / Q4 2019	To be determined.

The number of staff in EKEO is currently 25 and will increase to 29 in 2018-19.

On the Back Alley Project @ Kowloon East, on-site surveys conducted in 2016 and 2017 indicated that more pedestrians were using all the revitalised back alleys than before. The pedestrian flow in some of them has increased by more than 13% to around 18%. As the Wong Tai Sin District Council has requested for extending the project to San Po Kong, EKEO will explore the feasibility of transforming suitable back alleys in the area to form part of the pedestrian network.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)047

(Question Serial No. 3201)

Head: (159) Government Secretariat: Development Bureau
(Works Branch)

Subhead (No. & title): Not specified

Programme: (4) Energizing Kowloon East

Controlling Officer: Permanent Secretary for Development (Works) (C K HON)

Director of Bureau: Secretary for Development

Question:

The Administration will extend the Energizing Kowloon East initiative to the industrial area in San Po Kong to actively transform it into a new business area. However, many people and members of the community have complained about the large number of industrial buildings, and serious traffic congestion and vehicle-pedestrian conflicts in the area. In the new financial year, what are the amount of financial provision and manpower earmarked for studying, planning and co-ordinating policies to ease the traffic problems in San Po Kong and meet the conditions for developing it into a core business district in Kowloon East in future?

Has the Administration considered implementing measures to widen the carriageways and pavements in the area to ease the abovementioned traffic problems? If yes, what are the details and the expenditure involved? If no, what are the reasons?

Asked by: Hon TSE Wai-chun, Paul (Member Question No. (LegCo use): 54)

Reply:

Following the announcement of extending the Energizing Kowloon East initiative to San Po Kong in the Policy Agenda in October 2017, the Energizing Kowloon East Office (EKEO) commissioned a consultancy study at an amount of \$2.61 million in February 2018 to formulate a comprehensive plan for enhancing the connectivity, walkability and traffic situation in the San Po Kong Business Area (SPKBA). The study will identify and assess the feasibility of improvement schemes and their associated costs, covering footpath and road widening works, and prioritise the improvement schemes for implementation. The details and estimated expenditure of the improvement schemes would be available upon completion of the study.

To address the parking demand in SPKBA, EKEO is exploring with relevant bureaux and departments for providing an underground public vehicle park (PVP) underneath part of the

proposed Sze Mei Street District Open Space. As the proposal is at a preliminary stage, the estimated expenditure of the project has yet to be assessed.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)048

(Question Serial No. 2778)

Head: (159) Government Secretariat: Development Bureau
(Works Branch)

Subhead (No. & title): Not specified

Programme: (5) Intra-Governmental Services

Controlling Officer: Permanent Secretary for Development (Works) (C K HON)

Director of Bureau: Secretary for Development

Question:

The Government has mentioned the adoption of Building Information Modelling (BIM) technology in the construction industry. Is BIM technology a patented product that requires an annual service fee? What is the amount of government expenditure incurred by the technology per year? Also, how will the Administration popularise the use of the technology in future?

Asked by: Hon WAN Siu-kin, Andrew (Member Question No. (LegCo use): 203)

Reply:

BIM is a construction work process which uses computer software to model the building assets in question and their surrounding environment three-dimensionally, so that designers and contractors can review, verify and improve the design in a virtual environment collaboratively before actual construction work starts. This process has proven to help minimise changes, reduce risks and render clarity to project costs at different stages. There are quite a number of BIM software packages available on the market. They can be purchased as off-the-shelf software suites or subscribed through paying an annual fee.

In the past two fiscal years (2016-17 and 2017-18), 40 capital works projects have adopted BIM technology at their design and/or construction stage, with their BIM-related expenditures (including those on hardware, software, consultancy studies and staff training) being \$17.2 million and \$26.1 million respectively.

To promote the use of BIM technology, works departments are required to adopt the technology in the design and construction of capital works projects costing over \$30M from January 2018 onwards. The Development Bureau has been collaborating with the Construction Industry Council in supporting and promoting the use of BIM technology in the construction industry. In the 2018-19 Budget, the Financial Secretary proposed to set

up a \$1 billion Construction Innovation and Technology Fund. The fund will, among other things, provide financial assistance for BIM training, procurement of associated hardware/software and trial adoption of BIM in local projects with a view to expediting the application of BIM technology in the construction industry. The Government plans to seek the approval of the Finance Committee of the Legislative Council in mid-2018.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)049

(Question Serial No. 2780)

Head: (159) Government Secretariat: Development Bureau
(Works Branch)

Subhead (No. & title): (000) Operational expenses

Programme: (5) Intra-Governmental Services

Controlling Officer: Permanent Secretary for Development (Works) (C K HON)

Director of Bureau: Secretary for Development

Question:

The Government has mentioned that it is now assisting the construction industry in establishing large-scale, highly automated steel reinforcing bar prefabrication yards. Where are the sites identified? Will the Government rent out the sites by way of private treaty? What are the land values and tenure in the treaties drawn up by the Government?

Asked by: Hon WAN Siu-kin, Andrew (Member Question No. (LegCo use):204)

Reply:

The Government is adopting multi-pronged measures to assist the construction industry in establishing large-scale, highly automated steel reinforcing bar (rebar) prefabrication yards to enhance productivity, built quality, environmental performance and site safety. The measures include encouraging contractors to use rebar products made by the rebar prefabrication yards approved by the Civil Engineering and Development Department (CEDD) and streamlining the regulatory mechanism for public and private sector works to cope with the operation of rebar prefabrication yards. At present, there are two rebar prefabrication yards (located in Tsing Yi and Tuen Mun respectively) in the CEDD-approved list. Also, there are two other yards (located in Tsing Yi and Tai Po respectively) applying to be included in the list. The approved rebar yard in Tsing Yi is on government land leased in 2014 for six years and nine months by short-term tenancy through open tender.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)050

(Question Serial No. 2448)

Head: (159) Government Secretariat: Development Bureau
(Works Branch)

Subhead (No. & title): Not specified

Programme: (5) Intra-Governmental Services

Controlling Officer: Permanent Secretary for Development (Works) (C K HON)

Director of Bureau: Secretary for Development

Question:

The Construction Industry Council established the Construction Innovation and Technology Application Centre last year, leading the industry to embrace innovation through collecting, exhibiting and experiencing the latest construction technologies and applications. Regarding the application centre, will the Government inform this Committee of:

1. the types of new construction technologies and new technologies it has brought in so far that are applicable to the local construction industry;
2. the staff establishment; and
3. the amount of expenditure per year?

Asked by: Hon WONG Kwok-kin (Member Question No. (LegCo use): 48)

Reply:

1. While the Construction Innovation and Technology Application Centre (CITAC) was officially opened only in late November 2017, we observe that construction projects have already started to embrace technologies displayed at the centre. For example, exoskeletons and zero-gravity arms are under trial by a major local contractor to better protect its workers in lifting heavy equipment and machinery. We can also see the construction industry is transforming itself as it enters a “digital built” era. Building Information Modelling (BIM) technology is starting to be adopted widely in projects of different natures, scales and complexities, with about 65 major capital works consultancies and contracts involving the use of BIM scheduled for tender invitation in 2018.

2. The Construction Industry Council has currently deployed nine full-time staff at the CITAC. Staff of the CITAC are not on the civil service establishment.

3. The Construction Industry Council funds the operation of the CITAC and has earmarked \$140 million for the first five years (from 2017 to 2022) of the CITAC's operations. The CITAC's operating budget for 2018-19 is about \$24 million.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)051

(Question Serial No. 3146)

Head: (159) Government Secretariat: Development Bureau
(Works Branch)

Subhead (No. & title): Not specified

Programme: (5) Intra-Governmental Services

Controlling Officer: Permanent Secretary for Development (Works) (C K HON)

Director of Bureau: Secretary for Development

Question:

Regarding the Construction Innovation and Technology Fund, consultants can apply for financial support from the Fund; and the Fund will also support students and practitioners of the construction industry to receive training on innovative construction technologies. In this connection, will the Government inform this Committee of the following:

1. What will be the unit dedicated to overseeing the funding applications under the Fund and monitoring the use of funding? and
2. Will there be any guidelines formulated for the approval of applications? If yes, when will such guidelines be formulated? If no, will the Administration formulate guidelines to better ensure that the approval process is fair and just?

Asked by: Hon WONG Kwok-kin (Member Question No. (LegCo use): 49)

Reply:

The primary objectives of the Construction Innovation and Technology Fund are to encourage wider adoption of innovative construction methods and new technologies, and to prepare practitioners and students of construction-related disciplines to embrace new technologies, with a view to promoting productivity, raising built quality, improving site safety and enhancing environmental performance. The use of advanced technologies will also help enhance the professional image of the construction industry and attract new blood.

The information sought is provided as follows:

- (1) We will commission the Construction Industry Council, a statutory body with a mission to encourage the use of innovative techniques and advance the skills of construction industry personnel, to operate the Fund, including vetting applications, disbursing funds, conducting spot checks etc. A steering committee, to be chaired by

the Permanent Secretary for Development (Works), will be set up under the Development Bureau to oversee and monitor the Fund's implementation.

- (2) We are consulting industry stakeholders with a view to formulating suitable implementation arrangements to meet industry needs and ensure a fair and just approval process.

- End -

CONTROLLING OFFICER'S REPLY**DEVB(W)052****(Question Serial No. 3593)**

Head: (159) Government Secretariat: Development Bureau
(Works Branch)

Subhead (No. & title): Not specified

Programme: (4) Energizing Kowloon East

Controlling Officer: Permanent Secretary for Development (Works) (C K HON)

Director of Bureau: Secretary for Development

Question:

Regarding the work to promote walkability in Kowloon East through short, medium and long-term measures proposed under the pedestrian and traffic environment feasibility studies on the Kowloon Bay and Kwun Tong Business Areas, please inform this Committee of the following:

1. What are the details of the improvement works completed, in progress and under planning, the expenditures involved, and the anticipated commencement and completion dates in the past 2 years?
2. Regarding the proposals to further improve the pedestrian environment in the Kowloon Bay area formulated under the study, how many consultancy contracts are being drafted and awarded by the Energizing Kowloon East Office? What are the contractual details including the objectives of the studies, the expenditures, the winning consultants and the contractual periods?

Asked by: Hon WU Chi-wai (Member Question No. (LegCo use): 141)

Reply:

1. The Energizing Kowloon East Office (EKEO) commissioned two consultancy studies to formulate short, medium and long-term improvement measures for promoting walkability and improving the traffic condition in the Kowloon Bay and Kwun Tong Business Areas. The details of the improvement works completed, in progress and under planning in the past 2 years are summarised in the table below:

Item No.	Nature of Project	Details of Improvement Works	Status	Estimated Expenditure (\$ million)
1	Minor Works by HyD	12 items of pedestrian improvement works in the Kowloon Bay Business Area (KBBA)	50% completed (including 3 items in the past 2 years)	33.99

Item No.	Nature of Project	Details of Improvement Works	Status	Estimated Expenditure (\$ million)
2	Minor Works by HyD	20 items of pedestrian improvement works in the Kwun Tong Business Area (KTBA)	40% completed	
3	Minor Works by HyD	Revitalisation of 11 back alleys in KTBA	Completed (including 5 back alleys in the past 2 years)	
4	Minor Works by HyD	Tai Yip Street Link improvement works	Design in progress	
5	Minor Works by ArchSD	Refurbishment/Provision of 5 sitting-out areas along Green Spine and Green Link in KBBA	45% completed	
6	Public Works Programme (PWP) Project by HyD	Footbridge across Kai Fuk Road to replace existing subway	Design study in progress	
7	PWP Project by CEDD	Northern Kai Tak Link (except footbridge across Kai Fuk Road) and Southern Kai Tak Link	Design study in progress	Funding for these PWP projects subject to the approval of the Finance Committee of the Legislative Council
8	PWP Project by HyD	Proposed footbridge near Mass Transit Railway (MTR) Kowloon Bay Station Exit B	Design study in progress	
9	PWP Project by HyD	Proposed footbridge near Ngau Tau Kok Police Station and associated road works	Investigation study in progress	
10	PWP Project by HyD	Pedestrian Environment Improvement Works in KTBA (Ngau Tau Kok Portion) including construction of subways between MTR Ngau Tau Kok Station and Hoi Bun Road Park	Investigation study in progress	
11	PWP Project by DSD	Revitalisation of King Yip Lane and footbridge across Kwun Tong Road	Design study in progress	
12	Project under planning	Proposed footbridge near MTR Kowloon Bay Station Exit A	For inclusion in PWP	Subject to study

ArchSD – Architectural Services Department

DSD – Drainage Services Department

CEDD – Civil Engineering and Development Department

HyD – Highways Department

The proposed minor works are targeted for substantial completion by the end of 2018-19. We will progressively take forward the PWP projects including carrying out the required studies. Their implementation programmes are subject to the outcome of the investigation/design studies and funding approval.

- Items 1, 4 to 9 and 12 in the table above cover improvement proposals formulated for KBBA. We are actively taking forward the various proposals in collaboration with the government departments concerned. More details on those involving consultancies are provided below:

Improvement Works	Consultancy	Objective	Estimated Expenditure (\$ million)	Consultant Appointed	Contractual Period of Consultancy
Proposed Footbridge near MTR Kowloon Bay Station Exit B (by HyD)	Proposed Footbridge near Kowloon Bay MTR Station Exit B – Investigation, Design and Construction	To design and provide construction supervision for the proposed footbridge	4.68 (consultancy fee)	WSP(Asia) Limited	October 2016 to end of construction period
Northern Kai Tak Link (section by HyD)	Central Kowloon Route (CKR) – Design and Construction	The overall objective is to achieve the goal of constructing CKR. One of the specific objectives is to provide a footbridge across Kai Fuk Road prior to demolition of the existing subway under the implementation of CKR.	No separate breakdown for the footbridge as it is a lump sum consultancy	Arup - Mott MacDonald Joint Venture	June 2011 to 2027
Northern Kai Tak Link (section by CEDD)	Kai Tak Development – Infrastructure at Former Runway and Remaining Areas of North Apron and Improvement of Adjacent Waterways – Design and Construction	The main objective is to design and supervise the construction of infrastructure, environmental improvement and associated works to enable implementation of the planned developments in Kai Tak Development, including a footbridge linking KBBA across Kai Tak Approach Channel.	No separate breakdown for the footbridge as it is a lump sum consultancy	AECOM	Under review to suit the pace of the development of nearby sites
Southern Kai Tak Link (by CEDD)	Kai Tak Development – Trunk Road T2 and Infrastructure at South Apron – Investigation, Design and Construction	The main objective is to investigate, design and supervise the construction of Trunk Road T2 and infrastructure at the former south apron, including a footbridge linking KBBA across Trunk Road T2.	No separate breakdown for the footbridge as it is a lump sum consultancy	Hyder-Meinhardt Joint Venture	Under review to suit the pace of the development of nearby sites

- End -

CONTROLLING OFFICER'S REPLY**DEVB(W)053****(Question Serial No. 3594)**

Head: (159) Government Secretariat: Development Bureau
(Works Branch)

Subhead (No. & title): Not specified

Programme: (4) Energizing Kowloon East

Controlling Officer: Permanent Secretary for Development (Works) (C K HON)

Director of Bureau: Secretary for Development

Question:

Please inform this Committee of the details of the following works projects in 2018-19, as well as the expenditures and manpower involved:

- 1) face-lifting of the Hoi Bun Road Park and Lam Wah Street Playground together with their adjacent areas;
- 2) conversion of Tsun Yip Street Playground and associated reprovisioning of ballcourts;
- 3) transformation of King Yip Street nullah into Tsui Ping River; and
- 4) implementation of Tsui Ping River Garden.

Asked by: Hon WU Chi-wai (Member Question No. (LegCo use): 142)

Reply:

Relevant information of the above works projects is provided below:

Project Name	Details of the Projects in 2018-19	Estimated Expenditure in 2018-19 (HK\$ million)
Improvement of Hoi Bun Road Park and adjacent area	Subject to funding approval by the Legislative Council, construction works will commence in 2018-19.	13.7
Improvement of Lam Wah Street Playground and adjacent area	Detailed design in progress.	Nil (in-house design)
Converting Tsun Yip Street Playground as Kwun Tong Industrial Culture Park	Construction works to be completed within 2018-19.	31.2

Reprovisioning of Tsun Yip Street Playground facilities to Hong Ning Road Park and Ngau Tau Kok Fresh Water Service Reservoir	Construction works to be in progress in 2018-19.	30.3
Revitalisation of Tsui Ping River	Detailed design in progress.	4.5 (design fee)
Reprovisioning of Shing Yip Street Rest Garden as Tsui Ping River Garden	Construction works to be completed within 2018-19.	35.0

The manpower involved in managing the above projects is absorbed by the existing resources of the Development Bureau and relevant government departments.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)054

(Question Serial No. 3595)

Head: (159) Government Secretariat: Development Bureau
(Works Branch)

Subhead (No. & title): Not specified

Programme: (4) Energizing Kowloon East

Controlling Officer: Permanent Secretary for Development (Works) (C K HON)

Director of Bureau: Secretary for Development

Question:

Regarding the work to “carry out the smart city consultancy including the proof of concept trials proposed under the framework strategy, and facilitate different sectors to use Kowloon East as a test bed to explore the feasibility of developing a smart city”, please inform this Committee of the following:

1. What is the progress of the consultancy study? What are the expenditure for the study and its contractual period? What are the content, scope or direction regarding the study at present?
2. Regarding the “smart city” concept already proposed in the Policy Address in 2015, what measures or studies have been launched by the Energizing Kowloon East Office currently? What are the expenditures involved?

Asked by: Hon WU Chi-wai (Member Question No. (LegCo use): 143)

Reply:

1. The Energizing Kowloon East Office (EKEO) commissioned a consultancy study to explore smart city development in Kowloon East (KE) in February 2016. The study aims to formulate a framework strategy, set directions and priorities for various smart city proposals in KE. Among other recommendations, the study has proposed eight proof of concept (PoC) trials for implementation in KE. The Stage 1 public engagement (PE) exercise was completed in January 2017 and the Stage 2 PE exercise is scheduled for the third quarter of 2018. The study is targeted for completion by end 2018 at a cost of approximately \$7.8 million.
2. Besides the abovementioned study, the following measures have been launched since the announcement of the KE smart city initiative in the 2015 Policy Address:

- a. EKEO continues to implement PoC trials. Two PoC trials (namely Smart Crowd Management System, and Persona and Preference-based Way-finding for Pedestrians) have been completed and two are ongoing (namely Energy Efficiency Data Management System, and Kerbside Loading/Unloading Bay Monitoring System). The total expenditure of the above PoC trials is about \$4.74 million. The remaining four PoC trials are under preparation and their estimated expenditures are subject to the finalisation of tender specifications. More details on the PoC trials can be found in the https://www.ekeo.gov.hk/en/smart_city/index.html webpage.
- b. Since November 2016, requirements for provision of smart water meter system and electric vehicle charging facilities have been stipulated for all new land sale sites in KE, and supply of real-time parking vacancy information is also required at appropriate land sale sites in KE. New government buildings in KE will generally comply with the same requirements.
- c. A mobile app “My Kowloon East” was launched in December 2016 to promote smart city development in KE and to serve as an interactive platform for real-time data sharing. Real-time parking vacancy data of about 55% of the hourly parking spaces in KE are already made available through the mobile app. The mobile app includes other functions such as suggesting personalised walking routes according to users’ needs and preferences.
- d. To create a knowledge-driven platform for co-creating a smart KE, EKEO encourages universities and research institutes to develop innovative smart city solutions and has provided policy support for smart city-related research projects using KE as a test bed in their funding applications. Five such research projects have already secured research funding from various sources and are ongoing. EKEO also facilitates CLP Power’s smart energy community project which involves the installation of energy-saving devices for several developments in the Kai Tak Development Area.

Existing resources are deployed for the implementation of the above measures except the PoC trials.

- End -

CONTROLLING OFFICER'S REPLY**DEVB(W)055****(Question Serial No. 3186)**

Head: (159) Government Secretariat: Development Bureau
(Works Branch)

Subhead (No. & title): Not specified

Programme: (3) Greening, Landscape and Tree Management

Controlling Officer: Permanent Secretary for Development (Works) (C K HON)

Director of Bureau: Secretary for Development

Question:

Regarding the life-cycle planning and management of street trees, please provide the following information:

a.) The costs for tree management in the past 3 years.

	Manpower cost	Administrative cost	Tender invitation cost (if any)	Logistics cost	Works cost	Premises rental (if any)	Responsible department
2015-16							
2016-17							
2017-18							

b.) Please set out in the table below the estimated costs for tree management for this year.

	Manpower cost	Administrative cost	Tender invitation cost (if any)	Logistics cost	Works cost	Premises rental (if any)	Responsible department
2018-19 (estimated)							

c.) Please set out in the table below the estimated costs for the outsourcing of tree management for this year.

	Company name	Project nature	Cost	Responsible department
2018-19 (estimated)				

d.) Please set out in the table below the costs for the outsourcing of tree management in the past 4 years.

	Company name	Project nature	Cost	Responsible department
2014-15				
2015-16				
2016-17				
2017-18				

e.) Please set out the principles of roadside tree management.

f.) Please set out the urban forestry principles for vegetation diversity.

g.) Please advise us of the costs for achieving the policy objective of continuing to formulate an urban forestry management strategy in the past 2 years.

h.) Please advise us of the provision for achieving the policy objective of continuing to formulate an urban forestry management strategy for this year.

Asked by: Hon YEUNG Alvin (Member Question No. (LegCo use): 27)

Reply:

a.) & b.) Tree management departments deploy their allocated resources to handle the maintenance of street trees as part of their normal duties regarding tree and facility management. There is no separate breakdown on the resources specifically for tree maintenance.

c.) & d.) Tree management contracts cover a range of general horticultural and vegetation maintenance services and include all the trees, shrubs, turf etc in areas under the purview of tree management departments. There is no separate breakdown on the cost of outsourcing street tree management work.

e.) On roadside tree planting, we advocate the basic planting principle of “Right Plant Right Place” and adopt a holistic approach taking into account the overall character of the street environment, land use, circulation, structures, below- and above-ground services and infrastructure, transport, vistas, urban furniture, functionality and subsequent maintainability.

f.) Maintaining a landscape of healthy vegetation is one of the most effective ways to safeguard tree health and public safety. Like any other living organisms, plants (including trees) grow, age and eventually decline. The management of this life-cycle is important in minimising tree risks to safeguard public safety while sustaining our urban forest. Besides the age profile of our landscape assets, a diversified plant community is preferred, as this can increase their resilience to pests and disease and, therefore, guard against a significant loss or the premature decline of trees.

g.) & h.) The formulation of an urban forestry management strategy is part of the normal duties of the staff of the Greening, Landscape and Tree Management Section. There is no separate breakdown on the resources dedicated to the individual tasks involved.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)056

(Question Serial No. 3507)

Head: (25) Architectural Services Department

Subhead (No. & title): Not specified

Programme: (1) Monitoring and Advisory Services, (3) Facilities Development

Controlling Officer: Director of Architectural Services (Mrs LAM YU Ka-wai, Sylvia)

Director of Bureau: Secretary for Development

Question:

“Promote rooftop and vertical greening, and enhance practices on greening, landscape works and tree management in government building works” can be found under the Matters Requiring Special Attention in 2018-19 in both Programmes (1) Monitoring and Advisory Services and (3) Facilities Development. In regard to this, will the Administration inform this Committee of the following:

- (1) A green roof structure at the City University of Hong Kong collapsed in May 2016. In this connection, has the Architectural Services Department (ArchSD) put in place any specific measures or publicity work in relation to the safety issue of these facilities while promoting rooftop and vertical greening? What are the manpower and estimates involved?
- (2) What specific measures has the ArchSD formulated for implementation in connection with enhancing tree management in government building works? What are the manpower and estimates involved?

Asked by: Hon IP LAU Suk-ye, Regina (Member Question No. (LegCo use): 59)

Reply:

- (1) It is the established practice of the Architectural Services Department (ArchSD) to include roof and vertical greening in its projects where practicable. ArchSD will provide technical advice to management departments if roof and vertical greening projects are initiated in government buildings. For works projects with roof and vertical greening, ArchSD will conduct feasibility studies, including the impact of such greening on building structures, before commencing the projects.

The estimated expenditures on rooftop and vertical greening projects in 2018-19 are as follows –

	Estimated Expenditure for 2018-19 (\$ million)
(A) Rooftop greening	
- New buildings	11.4
- Retrofitted projects	3.0
Sub-total (A)	14.4
(B) Vertical greening	
- New buildings	11.8
- Retrofitted projects	0.4
Sub-total (B)	12.2

Note: Information is based on project status as at end of 2017. The estimated expenditures on rooftop greening exclude those on structural works.

ArchSD does not have staff specifically deployed for rooftop and vertical greening work. Thus, there is no separate breakdown of the manpower involved in handling such greening work.

- (2) To enhance the management of trees under ArchSD’s building works projects, ArchSD includes the requirement of tree risk assessments in building contracts and audits the implementation of such assessments in accordance with the “Guidelines for Auditing of Tree Risk Assessment for Tree Management Departments” promulgated by the Greening, Landscape and Tree Management Section of the Development Bureau in 2013.

ArchSD does not have staff specifically deployed for tree management work. Thus, there is no separate breakdown of the manpower and estimates involved for such work.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)057

(Question Serial No. 3025)

Head: (25) Architectural Services Department

Subhead (No. & title): Not specified

Programme: (3) Facilities Development

Controlling Officer: Director of Architectural Services (Mrs LAM YU Ka-wai, Sylvia)

Director of Bureau: Secretary for Development

Question:

Please advise if the Department has any plan to update the facility standards for new government buildings:

1. Drinking fountains should be provided in a building. If yes, what is the plan and the estimated expenditure involved? If not, what are the reasons?
2. Breast-feeding and baby-care facilities should be provided in a building. If yes, what is the plan and the estimated expenditure involved? If not, what are the reasons?

Asked by: Hon KWOK Ka-ki (Member Question No. (LegCo use): 26)

Reply:

1. For a new government building project, the user department, having regard to the nature of the project, will consider including the installation of drinking fountains in the schedule of accommodation. As works related to drinking fountains are integrated with other contract works, an expenditure breakdown regarding the provision of drinking fountains is not available.
2. The Government supports the establishment of breast-feeding friendly environment. The user department will include breast-feeding and baby-care facilities in the schedule of accommodation as appropriate for the Architectural Services Department to carry out design and construction work. As works related to breast-feeding and baby-care facilities are integrated with other contract works, an expenditure breakdown regarding for the provision of such facilities is not available.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)058

(Question Serial No. 0494)

Head: (25) Architectural Services Department

Subhead (No. & title): (Not specified)

Programme: (3) Facilities Development

Controlling Officer: Director of Architectural Services (Mrs LAM YU Ka-wai, Sylvia)

Director of Bureau: Secretary for Development

Question:

It is mentioned under this Programme that the Department will plan and implement government facilities in Kai Tak, including hospitals, government offices, schools and recreational facilities. Please advise this Committee on the following:

- 1) the details of works projects commenced in each of the past 2 years, including the project titles, locations, areas, anticipated completion dates and expenditure involved;
- 2) the details of works projects that are expected to commence in 2018-19, including the project titles, locations, areas, anticipated completion dates and expenditure involved; and
- 3) the details of works projects that are expected to complete in 2018-19, including the project titles, locations, areas, anticipated completion dates and expenditure involved.

Asked by: Hon WU Chi-wai (Member Question No. (LegCo use): 21)

Reply:

According to Rule 49 of the Finance Committee Procedures, special meetings of the Finance Committee are convened to examine the annual Estimates of Expenditure prepared by the Government in support of the Appropriation Bill.

*Expenditure charged to the Capital Works Reserve Fund does **not** form part of the Appropriation Bill. As such, questions relating to expenditure under the Fund are **not** relevant to the examination of the Estimates of Expenditure or the Appropriation Bill.*

- 1) Please see Table 1 for details of works projects commenced in past two years.
- 2) Please see Table 2 for details of works projects expected to commence in 2018-19.

3) There are no works projects expected to be completed in 2018-19.

Table 1

Item	Project No.	Project Title	Location	Total Construction Floor Area (CFA)	Project Status	Commencement Date	Actual/ Anticipated Completion Date	2018-19 Estimated Expenditure (\$ million)	Bureau/ Department involved
1.	3237LP	Kowloon East Regional Headquarters and Operational Base-cum-Ngau Tau Kok Divisional Police Station	105 Concorde Road, Kai Tak Development Site 1C1, Kowloon (address to be confirmed upon completion of the project)	58 503m ²	Construction works in progress	July 2016	Q4 2021	901.1	Security Bureau / Hong Kong Police Force
2.	3271ES	A 30-classroom secondary school at site 1A-2, Kai Tak Development, Kowloon	Muk Hung Street, Kai Tak Development Site 1A-2, Kowloon	12 944 m ²	Construction works in progress	Dec 2016	Q2 2019	140.0	Education Bureau
3.	3092MM	New Acute Hospital in the Kai Tak Development Area - Preparatory Works	Shing Cheong Road, Kai Tak Development Site 3C1(A) and Site 3C1(B), Kowloon	N/A (CFA only applicable to Main Building Works)	Design works and site investigation works & minor studies in progress	Sep 2017	Q1 2021	168.1	Food and Health Bureau (FHB)/ Hospital Authority (HA)

Table 2 (Page 1 of 2)

Item	Project No.	Project Title	Location	Total Construction Floor Area (CFA)	Project Status	Commencement Date	Actual/ Anticipated Completion Date	2018-19 Estimated Expenditure (\$ million)	Bureau/ Department involved
1.	3094MM	New Acute Hospital in the Kai Tak Development Area – Foundation, Excavation & Lateral Support and Basement Excavation Works	Shing Cheong Road, Kai Tak Development Site 3C1(A) and Site 3C1(B), Kowloon	N/A (CFA only applicable to main building works)	Design stage	Q3 2018 (tentative)	Q4 2021 (tentative)	283.6 (subject to funding approval by the Legislative Council's Finance Committee (FC))	FHB/ HA
2.	3436RO	Avenue Park at Kai Tak	Concorde Road, Kai Tak	998 m ²	Tender stage	Q2 2018 (tentative)	Q4 2020 (tentative)	15.8 (tentative, subject to FC's funding approval)	Home Affairs Bureau (HAB)/ Leisure and Cultural Services Department (LCSD)

Table 2 (Page 2 of 2)

Item	Project No.	Project Title	Location	Total Construction Floor Area (CFA)	Project Status	Commencement Date	Actual/ Anticipated Completion Date	2018-19 Estimated Expenditure (\$ million)	Bureau/ Department involved
3.	3122KA	Inland Revenue Tower in the Kai Tak Development Area	Concorde Road, Kai Tak Development Site 1D3, Kowloon	79 000 m ²	Endorsed by the Legislative Council's Public Works Subcommittee	Q3 2018 (tentative)	Q2 2022 (tentative)	126.2 (tentative, subject to FC's funding approval)	Financial Services and Treasury Bureau / Inland Revenue Department
4.	3467RO	Station Square at Kai Tak	Muk On Street, Kai Tak	9 647 m ²	Design stage	Q4 2018 (tentative)	Q4 2022 (tentative)	15.0 (tentative, subject to FC's funding approval)	HAB / LCSD
5.	3452RO	Waterfront promenade adjacent to Hong Kong Children's Hospital	Promenade area adjacent to Hong Kong Children's Hospital	115 m ² (tentative)	Design stage	Q4 2018 (tentative)	Q3 2020 (tentative)	7.4 (tentative, subject to FC's funding approval)	HAB / LCSD

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)059

(Question Serial No. 0495)

Head: (25) Architectural Services Department

Subhead (No. & title): Not specified

Programme: (3) Facilities Development

Controlling Officer: Director of Architectural Services (Mrs LAM YU Ka-wai, Sylvia)

Director of Bureau: Secretary for Development

Question:

In regard to the expenditure on works projects undertaken by the Architectural Services Department (ArchSD), please inform this Committee of the following:

1. among the capital works projects and refurbishment of government building projects awarded by the ArchSD in the past 3 years, the information of each project that experienced cost overrun in the following table format;

Project title	Estimated cost	Actual payment	Cause of cost overrun
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2. the number of cases that actions had been taken by the ArchSD to recover the cost overruns from the contractors who failed to complete the works on schedule in each of the past 3 years.

Asked by: Hon WU Chi-wai (Member Question No. (LegCo use): 22)

Reply:

1. In the past three years, there has been no cost overrun in capital works or government building refurbishment projects awarded by ArchSD. Such projects are closely monitored by the department to ensure their expenditures are within their approved project estimates.
2. Given the above, there has been no need to take recovery action regarding cost overruns.

- End -

CONTROLLING OFFICER'S REPLY**DEVB(W)060****(Question Serial No. 1579)**Head: (33) Civil Engineering and Development DepartmentSubhead (No. & title): Not specifiedProgramme: (3) Provision of Land and InfrastructureControlling Officer: Director of Civil Engineering and Development (LAM Sai-hung)Director of Bureau: Secretary for DevelopmentQuestion:

It is stated in the matters requiring special attention under this Programme in 2018-19 that the Government will commence studies for various projects. In this connection, would the Government advise this Committee:

- (1) the operational expenses, staffing establishment and estimated payroll expenditure to be involved in conducting the detailed feasibility study for the Environmentally Friendly Linkage System for Kowloon East in 2018-19;
- (2) the operational expenses, staffing establishment and estimated payroll expenditure to be involved in commencing the review for the ground decontamination works at the site of ex-Kennedy Town incineration plant/abattoir and adjoining area in 2018-19;
- (3) the operational expenses, staffing establishment and estimated payroll expenditure to be involved in continuing the preparatory work on strategic studies for artificial islands in the central waters in 2018-19;
- (4) the operational expenses, staffing establishment and estimated payroll expenditure to be involved in continuing the preparatory work on planning and engineering study for nearshore reclamation at Lung Kwu Tan and Ma Liu Shui in 2018-19.

Asked by: Hon CHAN Chi-chuen (Member Question No. (LegCo use): 2)Reply:

Operational expenses in 2018-19 under Head 33 for taking forward the items (1) to (4) are mainly personal emoluments of in-house staff working on the projects. The details are summarised below:-

Item	Operational Expenses (\$ million) (Note 1)	Staffing (Note 2)
(1) Detailed feasibility study for the Environmentally Friendly Linkage System for	2.4	2 professional staff

Kowloon East		
Item	Operational Expenses (\$ million) (Note 1)	Staffing (Note 2)
(2) Review for ground decontamination works at the site of ex-Kennedy Town incineration plant/abattoir and adjoining area	0.8	2 professional staff (Note 3)
(3) Preparatory work on strategic studies for artificial islands in the central waters	1.9	3 professional staff (Note 3)
(4) Preparatory work on planning and engineering study for nearshore reclamation at Lung Kwu Tan and Ma Liu Shui	4.8	4 professional staff

Note 1: Operational expenses refer to annual staff cost in terms of notional annual mid-point salary value.

Note 2: There are directorate officers overseeing the above projects as well as other supporting technical and clerical staff involved. There is no separate breakdown for the personal emoluments of such staff involved.

Note 3: The staff are working partially for the projects.

- End -

CONTROLLING OFFICER'S REPLY**DEVB(W)061****(Question Serial No. 1584)**Head: (33) Civil Engineering and Development DepartmentSubhead (No. & title): Not specifiedProgramme: (3) Provision of Land and InfrastructureControlling Officer: Director of Civil Engineering and Development (LAM Sai-hung)Director of Bureau: Secretary for DevelopmentQuestion:

It was stated in the matters requiring special attention under this Programme in 2018-19 that the Government would continue the preparatory work on the planning and engineering study for nearshore reclamation at Ma Liu Shui. Would the Government advise the staffing establishment and estimated annual payroll cost to be involved in this work in 2018-19?

Asked by: Hon CHAN Chi-chuen (Member Question No. (LegCo use): 8)Reply:

Operational expenses in 2018-19 under Head 33 for taking forward the preparatory work on the planning and engineering study for nearshore reclamation at Ma Liu Shui are set out below:-

Item	Operational Expenses (\$ million) (Note 1)	Staffing (Note 2)
Preparatory work on the planning and engineering study for nearshore reclamation at Ma Liu Shui	2.4	2 professional staff

Note 1: Operational expenses refer to annual staff cost in terms of notional annual mid-point salary value.

Note 2: There are directorate officers overseeing the above project as well as other supporting technical and clerical staff involved. There is no separate breakdown for the personal emoluments of such staff involved.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)062

(Question Serial No. 0600)

Head: (33) Civil Engineering and Development Department

Subhead (No. & title): (000) Operational Expenses

Programme: (3) Provision of Land and Infrastructure

Controlling Officer: Director of Civil Engineering and Development (LAM Sai-hung)

Director of Bureau: Secretary for Development

Question:

The estimate expenditure under Programme (3) for 2018-19 is \$668.2 million, increasing by 10.2% over the revised estimate for 2017-18. It is stated in the Analysis of Financial and Staffing Provision that there will be an increase of 66 posts under this Programme. Please specify:

- (1) the posts and their job nature;
- (2) the details of the expenditure to be involved in such posts.

Asked by: Hon CHAN Chun-ying (Member Question No. (LegCo use): 36)

Reply:

(1) In 2018-19, 68 new posts will be created under Programme (3). As two time-limited posts will lapse in 2018-19, the net increase of posts in 2018-19 is 66. The nature of work and ranks of these 68 new posts are set out in the table below -

Item	Nature of Work	Number and rank of new posts to be created in 2018-19	Total
1	Landscape services on tree works quality review and vetting on infrastructure developments, land formation and geotechnical works	1 Chief Landscape Architect* 1 Senior Landscape Architect 2 Landscape Architect/ Assistant Landscape Architect 1 Field Officer I	5

2	Planning and development of the reclamation at Ma Liu Shui and Lung Kwu Tan	1 Senior Engineer 2 Engineer/ Assistant Engineer	3
Item	Nature of Work	Number and rank of new posts to be created in 2018-19	Total
3	Development and Conservation of Lantau	1 Senior Engineer 1 Senior Landscape Architect 1 Engineer/ Assistant Engineer 1 Structural Engineer/ Assistant Structural Engineer 1 Landscape Architect/ Assistant Landscape Architect 1 Senior Forestry Officer 4 Forestry Officer/ Assistant Forestry Officer	10
4	Strengthening the clerical support in the Administration Division in the Civil Engineering and Development Department (CEDD) Headquarters	2 Assistant Clerical Officer	2
5	Strengthening the administrative and clerical support in the East Development Office	1 Assistant Clerical Officer	1
6	Building Information Modelling implementation in CEDD	1 Senior Land Surveyor 1 Engineer/ Assistant Engineer 1 Senior Survey Officer 1 Technical Officer/ Technical Officer Trainee	4
7	Provision of engineering services to support development of potential sites in North District and Ma On Shan	1 Senior Engineer 1 Engineer/ Assistant Engineer	2
8	Implementation of the Lok Ma Chau Loop development	1 Chief Engineer 1 Senior Engineer 4 Engineer/ Assistant Engineer 1 Landscape Architect/ Assistant Landscape Architect	7
9	Overseeing the implementation of Cross Bay Link project	1 Engineer/ Assistant Engineer	1

Item	Nature of Work	Number and rank of new posts to be created in 2018-19	Total
10	Overseeing Site Formation and Infrastructure Works for Public Housing Sites	1 Government Engineer* 1 Chief Engineer* 4 Senior Engineer 1 Senior Landscape Architect 1 Senior Geotechnical Engineer 8 Engineer/ Assistant Engineer 1 Landscape Architect/ Assistant Landscape Architect 1 Geotechnical Engineer/ Assistant Geotechnical Engineer 1 Principal Technical Officer 1 Senior Technical Officer 3 Technical Officer/ Technical Officer Trainee 1 Senior Clerical Officer 1 Clerical Officer 3 Assistant Clerical Officer 2 Clerical Assistant	30
11	Public columbarium development in Tsuen Wan and Yuen Long Districts	1 Senior Engineer 2 Engineer/ Assistant Engineer	3
Total:			68

* The creation of directorate posts is subject to the approval of the Finance Committee of Legislative Council.

(2) The annual staff cost for the net increase of the 66 posts is \$56.2 million in terms of notional annual mid-point salary value.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)063

(Question Serial No. 1837)

Head: (33) Civil Engineering and Development Department
Subhead (No. & title): Not Specified
Programme: (5) Greening and Technical Services
Controlling Officer: Director of Civil Engineering and Development (LAM Sai-hung)
Director of Bureau: Secretary for Development

Question:

Last year, there were suspected cases of falsifying concrete test reports on the part of the Public Works Laboratories under your Department. How will the Government step up its monitoring effort on the fronts of financial resources and staffing deployment in a bid to prevent the recurrence of such incidents?

Asked by: Hon CHAN Han-pan (Member Question No. (LegCo use): 41)

Reply:

After the suspected malpractice of falsifying concrete compression tests, the following resources and manpower improvement measures have been implemented to step up the quality assurance system of concrete cube compression tests:

1. deploying additional government staff to each of the consultants-manned Public Works Regional Laboratories to strengthen auditing of tests and monitoring of supervision by the Consultants;
2. installing additional CCTV for monitoring of concrete cube compression tests;
3. recording the tests by video cameras;
4. increasing the number of parallel testing;
5. strengthening routine auditing check of test records;
6. arranging different laboratories to carry out concrete compression tests on a rotational basis;
7. lengthening the retention period of all tested samples for random audit by consultants' supervisory staff and Government officers; and
8. regular rotation of consultants' staff to take part in testing of different materials.

In addition, the Civil Engineering and Development Department (CEDD) has set up a Review Team to comprehensively review the quality management system, outsourcing strategy and institutional arrangement of the Public Works Laboratories. The Review Team will complete the first stage review by mid-2018. The CEDD will consider and implement necessary improvement measures recommended by the Review Team.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)064

(Question Serial No. 1059)

Head: (33) Civil Engineering and Development Department
Subhead (No. & title): Not specified
Programme: (3) Provision of Land and Infrastructure
Controlling Officer: Director of Civil Engineering and Development (LAM Sai-hung)
Director of Bureau: Secretary for Development

Question:

The Government will soon commence the construction of the advance works for the Tuen Mun to Tsuen Wan section of the cycle track network. In this connection, please advise this Committee:

- a) whether the proposed cycle track has been opposed by local residents and, if yes, whether provision has been earmarked for compensation or expenses incurred by delays in works;
- b) whether the Government has measures in place to control construction costs, given the construction cost of the Tuen Mun to Tsuen Wan section of the cycle track network is as high as \$61,000 per metre;
- c) whether the Government will consider either shelving the proposed works or exploring alternatives in the face of rising construction costs; and
- d) whether the Government has set a timetable for the completion of the cycle track network connecting various areas in the New Territories and , if yes, the details of such a timetable.

Asked by: Hon CHAN Kin-por (Member Question No. (LegCo use): 8)

Reply:

According to Rule 49 of the Finance Committee Procedures, special meetings of the Finance Committee are convened to examine the annual Estimates of Expenditure prepared by the Government in support of the Appropriation Bill.

*Expenditure charged to the Capital Works Reserve Fund does **not** form part of the Appropriation Bill. As such, questions relating to expenditure under the Fund are **not** relevant to the examination of the Estimates of Expenditure or the Appropriation Bill.*

- a) The current design of the proposed advance works has incorporated comments of the public including members of the Tsuen Wan District Council. The scheme of the proposed advance works was gazetted under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) in March 2016 and no objection was received during the statutory objection period.
- b) We will tender the construction contract of the proposed advance works under established mechanism to ensure reasonable market prices be obtained. The construction contract will be implemented via a New Engineering Contract form which emphasises cooperation, mutual trust and collaborative risk management between contracting parties. This will enable speedy resolution of issues arising in the course of contract thus providing a good control of the contract cost.
- c) The proposed advance works, with its estimated cost of \$140.9 million (in MOD prices), includes construction of 2.3 km long cycle track and ancillary works. Its estimated unit cost of about \$61,000 per metre of cycle track is considered reasonable having regard to that of about \$80,000 per metre under a similar contract for construction of cycle track from Yuen Long to Sheung Shui. We are now seeking funding approval from the Legislative Council for proceeding with the proposed advance works.
- d) We are implementing the cycle track network in the New Territories in stages. The section between Ma On Shan and Tuen Mun is largely open for public use except the section between Yuen Long and Sheung Shui which is under construction for completion in 2020. As regards the sections between Tsuen Wan and Tuen Mun, subject to the availability of funds, we target to commence construction of the proposed advance works in late 2018 for completion by 2020. For the remaining section between Tsuen Wan and Tuen Mun, we are reviewing its alignment and associated technical issues with stakeholders, and will formulate an implementation timetable upon completion of the review.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)065

(Question Serial No. 2589)

Head: (33) Civil Engineering and Development Department

Subhead (No. & title): Not Specified

Programme: (3) Provision of Land and Infrastructure

Controlling Officer: Director of Civil Engineering and Development (LAM Sai-hung)

Director of Bureau: Secretary for Development

Question:

In 2017, the Government explored with the MTR Corporation Limited the development potential of stations and related sites along existing and future rail lines. Please advise the progress of the consultancy study on the railway services connecting Tung Chung, the airport island and Hong Kong Boundary Crossing, expenses to be involved, as well as estimated financial provision for such a study.

Asked by: Hon CHOW Ho-ding, Holden (Member Question No. (LegCo use): 17)

Reply:

Under the Planning, Engineering and Architectural Study for Topside Development at Hong Kong Boundary Crossing Facilities (HKBCF) Island of Hong Kong–Zhuhai–Macao Bridge (HKZMB), we are studying the feasibility of possible transport connection options between HKBCF Island, North Lantau and airport island. These possible options include enhancing the public transport services, the feasibility for the provisions of parking facilities, road network, footbridges and rail, etc. The study of possible transport connection options is expected to be completed by end 2018. There is no separate breakdown for the expenses on the study of various possible transport connection options.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)066

(Question Serial No. 2075)

Head: (33) Civil Engineering and Development Department

Subhead (No. & title): Not Specified

Programme: (3) Provision of Land and Infrastructure

Controlling Officer: Director of Civil Engineering and Development (LAM Sai-hung)

Director of Bureau: Secretary for Development

Question:

Please advise the payroll cost and other expenditure involved in the establishment of the Sustainable Lantau Office.

Asked by: Hon CHU Hoi-dick (Member Question No. (LegCo use): 45)

Reply:

The expenditure forecast of the Sustainable Lantau Office in 2018-19 is \$99 million, which is mainly personal emoluments of in-house staff in terms of notional annual mid-point salary value.

- End -

CONTROLLING OFFICER'S REPLY**DEVB(W)067****(Question Serial No. 3241)**Head: (33) Civil Engineering and Development DepartmentSubhead (No. & title): Not specifiedProgramme: (5) Greening and Technical ServicesControlling Officer: Director of Civil Engineering and Development (LAM Sai-hung)Director of Bureau: Secretary for DevelopmentQuestion:

Please provide in tabulated form (1) the landscape works in greening master plans over the past 3 years, (2) the recommended landscape works in greening master plans over the next 3 years, as well as the staffing and expenditure involved or to be involved in each of such works.

Asked by: Hon IP LAU Suk-ye, Regina (Member Question No. (LegCo use): 56)Reply:

- (1) From 2015 to 2017, the Civil Engineering and Development Department (CEDD) carried out the landscape works set out in the Greening Master Plans for Southeast and Northwest New Territories. They were substantially completed in October 2017.

Greening Master Plan (GMP)	Expenditure on Greening Works (\$ million)		
	2015	2016	2017
GMP for Southeast New Territories (Sha Tin, Ma On Shan, Sai Kung and Tseung Kwan O)	19.6	28.1	37.7
GMP for Northwest New Territories (Tuen Mun, Tin Shui Wai and Yuen Long)	23.9	36.0	36.7
Total Expenditure on greening works	43.5	64.1	74.4

Five professional staff were involved in the above work. Directorate officers were also involved in overseeing the projects and other supporting technical and clerical staff provided support as well.

- (2) CEDD is planning for the implementation of the Greening Master Plans for Southwest and Northeast New Territories (covering Sheung Shui, Fanling, Tai Po, Tung Chung, Tsuen Wan, Kwai Chung, Tsing Yi and Islands). The work involved will include detailed design, estimation of project costs and application for the required funding. For project implementation, five professional staff will be involved.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)068

(Question Serial No. 3286)

Head: (33) Civil Engineering and Development Department
Subhead (No. & title): Not specified
Programme: Not specified
Controlling Officer: Director of Civil Engineering and Development (LAM Sai-hung)
Director of Bureau: Secretary for Development

Question:

Regarding the provision of sign language interpretation services over the past 5 years, would the Government advise this Committee:

1. whether sign language interpretation services were provided; if yes, the frequency, occasions and causes for providing such services in each year;
2. the number of sign language interpreters involved in each year, their pay and the organisations to which they belong; the total expenditure so involved in each year; and
3. whether the Government will consider allocating more resources to improve the services for communicating with the deaf and/or persons with hearing impairment in future; if yes, the details (including measures, manpower, expenditure involved and timetable, etc.); if no, the reasons for that?

Asked by: Hon LEUNG Yiu-chung (Member Question No. (LegCo use): 58)

Reply:

1. We do not provide sign language interpretation services in the Civil Engineering and Development Department.
2. Not applicable.
3. We will consider provision of the services as and when required.

- End -

CONTROLLING OFFICER'S REPLY**DEVB(W)069****(Question Serial No. 1969)**

Head: (33) Civil Engineering and Development Department

Subhead (No. & title): Not specified

Programme: (3) Provision of Land and Infrastructure

Controlling Officer: Director of Civil Engineering and Development (LAM Sai-hung)

Director of Bureau: Secretary for Development

Question:

It is stated in the matters requiring attention in 2018-19 under this Programme that “the Department will continue the preparatory work on the planning and engineering study for nearshore reclamation at 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”. Would the Government advise this Committee:

1. the current progress of such planning and preparatory work, and please tabulate the details; and
2. the staffing establishment and expenditure on administrative costs to be involved in such planning and preparatory work? Please tabulate the details.

Asked by: Hon QUAT Elizabeth (Member Question No. (LegCo use): 7)

Reply:

1. The status of the planning and preparatory work is tabulated as follows:

Planning and Preparatory Work	Status
Technical Study	The technical study has been completed.
Planning and Engineering (P&E) Study	Based on the findings of the technical study, the subsequent P&E study is being planned.

2. Operational expenses in 2018-19 under Head 33 for taking forward the planning and preparatory work for nearshore reclamation at Ma Liu Shui are mainly personal emoluments of in-house staff working on the project. The details are summarised below:

Item	Operational Expenses (\$ million) (Note 1)	Staffing (Note 2)
Planning and preparatory work for nearshore reclamation at Ma Liu Shui	2.4	2 professional staff

Note 1: Operational expenses refer to annual staff cost in terms of notional annual mid-point salary value.

Note 2: There are directorate officers overseeing the above project as well as other supporting technical and clerical staff involved. There is no separate breakdown for the personal emoluments of such staff involved.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)070

(Question Serial No. 0071)

Head: (33) Civil Engineering and Development Department
Subhead (No. & title): Not Specified
Programme: (3) Provision of Land and Infrastructure
Controlling Officer: Director of Civil Engineering and Development (LAM Sai-hung)
Director of Bureau: Secretary for Development

Question:

In connection with “continuing the preparatory work on the strategic studies for artificial islands in the central waters”, would the Department advise:

1. what preparatory work is involved and when it will be completed;
2. whether there is a timetable for the whole strategic studies, and if so, the time frame for each stage of studies; if not, the reason for that.

Asked by: Hon SHEK Lai-him, Abraham (Member Question No. (LegCo use): 22)

Reply:

According to Rule 49 of the Finance Committee Procedures, special meetings of the Finance Committee are convened to examine the annual Estimates of Expenditure prepared by the Government in support of the Appropriation Bill.

*Expenditure charged to the Capital Works Reserve Fund does **not** form part of the Appropriation Bill. As such, questions relating to expenditure under the Fund are **not** relevant to the examination of the Estimates of Expenditure or the Appropriation Bill.*

The funding application for the strategic studies for artificial islands in the central waters (the Study) was withdrawn at the Public Works Subcommittee meeting of the Legislative Council on 26 November 2014. We are addressing concerns of Legislative Council members and will re-submit the item to the Legislative Council for consideration as soon as possible. Once approval of the Finance Committee of the Legislative Council on the funding application is obtained, we will start the consultants selection procedure, which will normally take about 6 months to complete. The Study will include engineering feasibility and infrastructure study, port operations and marine traffic and safety study, strategic environmental assessment, associated site investigation, etc. According to the current planning, the Study will take about 3 years to complete.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)071

(Question Serial No. 1082)

Head: (33) Civil Engineering and Development Department

Subhead (No. & title): Not specified

Programme: (3) Provision of Land and Infrastructure

Controlling Officer: Director of Civil Engineering and Development (LAM Sai-hung)

Director of Bureau: Secretary for Development

Question:

In connection with “the planning, engineering and architectural study for topside development on the Hong Kong Boundary Crossing Facilities Island of the Hong Kong-Zhuhai-Macao Bridge” (the Study), please advise this Committee:

- (1) the expenditure and staffing involved in the Study, as well as the details of the consultants commissioned;
- (2) the originally anticipated commencement and completion dates of the Study;
- (3) the results of the Study, given that the funding approval for such a Study was obtained from the Finance Committee as early as 2015;
- (4) how the Government will implement the planning for topside development on the Hong Kong Boundary Crossing Facilities Island of the Hong Kong-Zhuhai-Macao Bridge (HZMB), given the imminent commissioning of the HZMB.

Asked by: Hon TIEN Puk-sun, Michael (Member Question No. (LegCo use): 1)

Reply:

- (1) The Civil Engineering and Development Department (CEDD) and the Planning Department jointly commissioned an engineering consultant to conduct the planning, engineering and architectural study for topside development on the Hong Kong Boundary Crossing Facilities Island of the Hong Kong-Zhuhai-Macao Bridge (the Study). The main objective of the Study is to ascertain the feasibility of the potential commercial development and other economic activities on the Hong Kong Boundary Crossing Facilities Island through topside and underground development.

The estimated expenditure of the Study in 2018-19 is about \$7.6 million in money-of-the-day prices. In CEDD, mainly 3 professional staff will manage the study supported by some technical and clerical staff. In addition, there are

directorate officers overseeing the project.

- (2) The Study commenced in January 2015 and was originally anticipated to be completed by February 2017. Since we need to take longer time than originally anticipated to resolve technical issues and to formulate the development proposal, the Study is still in progress.
- (3) & (4) The Study includes two stages of community engagement. The Stage 1 Community Engagement was conducted from July to September 2015. We are conducting the technical assessments on the proposed development option and are formulating a draft Recommended Outline Development Plan (RODP) for the proposed development. We will then proceed with the Stage 2 Community Engagement to consult the public on the draft RODP. Subject to the public comments received and the findings of the Study, we will optimise the proposed development with a view to formulating the RODP. Afterwards, we will prepare an implementation programme. The topside development will be implemented in a manner without affecting the commissioning of the HZMB and the subsequent operation of the Hong Kong boundary crossing facilities.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)072

(Question Serial No. 1083)

Head: (33) Civil Engineering and Development Department

Subhead (No. & title): Not specified

Programme: (3) Provision of Land and Infrastructure

Controlling Officer: Director of Civil Engineering and Development (LAM Sai-hung)

Director of Bureau: Secretary for Development

Question:

In connection with “the strategic studies for artificial islands in the central waters”, please advise this Committee:

- (1) the necessary staffing and expenditure to be involved in the strategic studies for artificial islands in the central waters (AICW), including the expenditure on engaging consultants;
- (2) the commencement and completion dates of such studies;
- (3) whether such studies will cover the railway for AICW proposed by the Lantau Development Advisory Committee linking New Territories West, Lantau Island, AICW and Hong Kong Island; as well as the progress and details of the study on such a proposal;
- (4) the length and estimated cost for each of the sections of the proposed railway for AICW, namely from Tuen Mun to artificial island of Hong Kong-Zhuhai-Macao Bridge (HZMB), from artificial island of HZMB to Mui Wo, from Mui Wo to AICW, as well as from AICW to Hong Kong Island;
- (5) the anticipated completion date for the study on the proposed railway for AICW and its construction timetable;
- (6) whether such strategic studies have a bearing on “Hong Kong 2030+ : Towards a Planning Vision and Strategy Transcending 2030” and, if yes, the details.

Asked by: Hon TIEN Puk-sun, Michael (Member Question No. (LegCo use): 2)

Reply:

- (1) The funding application for the strategic studies for artificial islands in the central waters (the Study) was withdrawn at the Public Works Subcommittee meeting on 26 November 2014. We are addressing the concerns of the Legislative Council members and will re-submit the item to the Legislative Council for consideration as soon as possible.

The estimated operational expenses of in-house staff in 2018-19 under Head 33 for taking forward the Study are set out below. Since we are still reviewing the scope of the Study, the estimated expenditure of the Study on engaging consultants is not available.

Item	Estimated Operational Expenses (\$ million) (Note 1)	Estimated Staffing (Note 2)
The strategic studies for artificial islands in the central waters	1.9	3 professional staff (Note 3)

Note 1: Operational expenses refer to annual staff cost in terms of notional annual mid-point salary value.

Note 2: There are directorate officers overseeing the Study as well as other supporting technical and clerical staff involved. There is no separate breakdown for the personal emoluments of such staff involved.

Note 3: The staff are working partially for the Study.

- (2)-(5) Under the Study, we plan to explore, among others, the preliminary feasibility of strategic transport links including highway and railway connections for the proposed artificial islands in the central waters. Once the scope of the Study is finalised and the approval of the Finance Committee of the Legislative Council on the concerned funding application is obtained, we will start the consultants selection procedure which will normally take about six months to complete. According to the current planning, the Study will take about three years to complete. As the Study has not yet commenced, information on details of the railway schemes such as alignment and length of individual railway links, estimated construction cost as well as construction programme is not available.
- (6) "Hong Kong 2030+: Towards a Planning Vision and Strategy Transcending 2030" (Hong Kong 2030+) is a comprehensive strategic study to update the territorial development strategy and provide a spatial planning framework to guide the future planning, land and infrastructure development and the shaping of the built and natural environment of Hong Kong beyond 2030. Among others, under the conceptual spatial framework of Hong Kong 2030+, the East Lantau Metropolis (ELM) is one of the two proposed strategic growth areas to meet the long term social and economic needs of Hong Kong. While the preliminary concepts for the

development of the ELM are included in Hong Kong 2030+ for evaluation in the territorial context, the Study will further assess the planning and engineering feasibility of the proposal.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)073

(Question Serial No. 0809)

Head: (33) Civil Engineering and Development Department
Subhead (No. & title): Not Specified
Programme: (3) Provision of Land and Infrastructure
Controlling Officer: Director of Civil Engineering and Development (LAM Sai-hung)
Director of Bureau: Secretary for Development

Question:

In connection with the works projects under construction under this Programme, please advise this Committee of:

1. the works progress of the Project “Kai Tak Development – Reconstruction and Upgrading of Kai Tak Nullah” as at March 2018 and its anticipated completion date, as well as the anticipated reopening date of the section of Choi Hung Road between Po Kong Village Road and Tai Shing Street, which is currently closed for works;
2. the works progress of both Development of Anderson Road Quarry Site and provision of the Bus-to-Bus Interchange at the Tseung Kwan O Tunnel Toll Plaza as at March 2018 and their anticipated completion dates.

Asked by: Hon WU Chi-wai (Member Question No. (LegCo use): 33)

Reply:

According to Rule 49 of the Finance Committee Procedures, special meetings of the Finance Committee are convened to examine the annual Estimates of Expenditure prepared by the Government in support of the Appropriation Bill.

*Expenditure charged to the Capital Works Reserve Fund does **not** form part of the Appropriation Bill. As such, questions relating to expenditure under the Fund are **not** relevant to the examination of the Estimates of Expenditure or the Appropriation Bill.*

1. The project “Kai Tak Development – Reconstruction and Upgrading of Kai Tak Nullah” within Kai Tak Development Area undertaken by this Department commenced construction in January 2013 and has achieved 95% completion as at March 2018. It is anticipated to be substantially completed by mid-2018.

The Drainage Services Department is also carrying out improvement works at Kai Tak Nullah (Wong Tai Sin Section) between Po Kong Village Road and Prince Edward Road

East. Its remaining works including reconstruction of Choi Hung Road are anticipated to be completed in the second half of 2018.

2. The site formation and associated infrastructure works of the Development of Anderson Road Quarry Site (ARQ Site) commenced in 2016 and are in progress. The works will be completed in phases to tie in with the planned population intake of the ARQ Site starting from 2023-24 onwards. For the provision of the Bus-to-Bus Interchange at the Tseung Kwan O Tunnel Toll Plaza, the works are in progress and scheduled for completion in 2019.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)074

(Question Serial No. 3547)

Head: (33) Civil Engineering and Development Department

Subhead (No. & title): Not specified

Programme: (3) Provision of Land and Infrastructure

Controlling Officer: Director of Civil Engineering and Development (LAM Sai-hung)

Director of Bureau: Secretary for Development

Question:

Regarding the works projects of Kai Tak Development, please advise this Committee:

- 1) the current works progress and anticipated completion date of Kai Tak Development - Stage 4 infrastructure at north apron area of Kai Tak Airport;
- 2) the current works progress and anticipated completion date of Kai Tak Development - infrastructure works for developments at the southern part of the former runway (Stages 2 and 3);
- 3) the current works progress and anticipated completion date of Kai Tak Development - Stages 3B and 5A infrastructure works at former north apron area;
- 4) whether the works projects mentioned in items 1) to 3) can be completed within the approved project estimates; if not, the details of the works projects requiring increased estimate and anticipated amount of additional provision;
- 5) whether the works of Kai Tak Development - Stage 3A infrastructure works at north apron area of Kai Tak Airport are being carried out, exceeding the approved project estimate; if yes, the amount of additional funding so required.

Asked by: Hon WU Chi-wai (Member Question No. (LegCo use): 85)

Reply:

According to Rule 49 of the Finance Committee Procedures, special meetings of the Finance Committee are convened to examine the annual Estimates of Expenditure prepared by the Government in support of the Appropriation Bill.

*Expenditure charged to the Capital Works Reserve Fund does **not** form part of the Appropriation Bill. As such, questions relating to expenditure under the Fund are **not** relevant to the examination of the Estimates of Expenditure or the Appropriation Bill.*

- 1) The Kai Tak Development - Stage 4 infrastructure works at former north apron area commenced construction in September 2013. It is anticipated that the construction works will be progressively completed in 2018.
- 2) The Kai Tak Development - Stages 2 and 3 infrastructure works for developments at the southern part of the former runway commenced construction in November 2015. It is anticipated that the construction works will be completed in phases by end 2019.
- 3) The Kai Tak Development - Stages 3B and 5A infrastructure works at former north apron area commenced construction in December 2016 and September 2016 respectively. It is anticipated that the construction works will be substantially completed in phases by end 2020.
- 4) Based on the latest estimates, the projects mentioned in items 1) to 3) above will be completed within the respective approved budget.
- 5) Based on the latest estimates, the Kai Tak Development - Stage 3A infrastructure works at north apron area of Kai Tak Airport will be completed within the approved budget.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)075

(Question Serial No. 3548)

Head: (33) Civil Engineering and Development Department

Subhead (No. & title): Not specified

Programme: (3) Provision of Land and Infrastructure

Controlling Officer: Director of Civil Engineering and Development (LAM Sai-hung)

Director of Bureau: Secretary for Development

Question:

Please advise this Committee the progress of the following main works projects under planning and design in 2018-19 and whether the contracts involved can be completed within this financial year:

- 1) Kai Tak Development - remaining infrastructure works for developments at the former runway and south apron
- 2) Kai Tak Development - infrastructure at north apron area of Kai Tak Airport

Asked by: Hon WU Chi-wai (Member Question No. (LegCo use): 86)

Reply:

According to Rule 49 of the Finance Committee Procedures, special meetings of the Finance Committee are convened to examine the annual Estimates of Expenditure prepared by the Government in support of the Appropriation Bill.

*Expenditure charged to the Capital Works Reserve Fund does **not** form part of the Appropriation Bill. As such, questions relating to expenditure under the Fund are **not** relevant to the examination of the Estimates of Expenditure or the Appropriation Bill.*

- 1) Kai Tak Development – remaining infrastructure works for developments at the former runway and south apron is under active planning and design to dovetail with the development pace of Kai Tak Development. The related contracts will be completed beyond this financial year.
- 2) Kai Tak Development – remaining infrastructure at former north apron area is under active planning and design to dovetail with the development pace of Kai Tak Development. The related contracts will be completed beyond this financial year.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)076

(Question Serial No. 3549)

Head: (33) Civil Engineering and Development Department

Subhead (No. & title): Not specified

Programme: (3) Provision of Land and Infrastructure

Controlling Officer: Director of Civil Engineering and Development (LAM Sai-hung)

Director of Bureau: Secretary for Development

Question:

Regarding the feasibility study for the Environmentally Friendly Linkage System for Kowloon East, please advise this Committee:

- 1) the results of the interim public consultation conducted in mid-2017;
- 2) the details of such study in 2018-19, as well as staffing and expenditure to be involved;
- 3) the anticipated completion date of such study.

Asked by: Hon WU Chi-wai (Member Question No. (LegCo use): 87)

Reply:

- 1) The interim public consultation conducted in mid-2017 with the recommendation of adopting elevated green transport mode as Environmentally Friendly Linkage System (EFLS) for Kowloon East (KE) received general support.
- 2) & 3) The Detailed Feasibility Study (DFS) for the EFLS for KE is proceeding with the Stage 2 study to develop a viable EFLS scheme, including the formulation of its network coverage, alignment, station locations, etc., and undertaking of the associated technical assessments to ascertain its feasibility. The study is targeted for completion in 2018.

Operational expenses in 2018-19 under Head 33 for taking forward the DFS for EFLS are mainly personal emoluments of in-house staff working on the project. The details are summarised below -

Item	Operational Expenses (\$ million) (Note 1)	Staffing (Note 2)
DFS for the EFLS for KE	2.4	2 professional staff

Note 1: Operational expenses refer to annual staff cost in terms of notional annual mid-point salary value.

Note 2: There are directorate officers overseeing the above project as well as other supporting technical and clerical staff involved. There is no separate breakdown for the personal emoluments of such staff involved.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)077

(Question Serial No. 1343)

Head: (33) Civil Engineering and Development Department

Subhead (No. & title): Not specified

Programme: (3) Provision of Land and Infrastructure

Controlling Officer: Director of Civil Engineering and Development (LAM Sai-hung)

Director of Bureau: Secretary for Development

Question:

In connection with reclamation works and their feasibility studies, please advise:

Reclamation project	Commencement date for study	Expense involved in study	Anticipated/ actual commencement date for public consultation	Anticipated reclamation area	Anticipated area of residential site	Anticipated number of residential unit
Sunny Bay						
Lung Kwu Tan						
Siu Ho Wan						
South West Tsing Yi						
Ma Liu Shui						
Artificial islands in the central waters						
Other reclamation projects under planning						

Asked by: Hon YEUNG Alvin (Member Question No. (LegCo use): 48)

Reply:

According to Rule 49 of the Finance Committee Procedures, special meetings of the Finance Committee are convened to examine the annual Estimates of Expenditure prepared by the Government in support of the Appropriation Bill.

*Expenditure charged to the Capital Works Reserve Fund does **not** form part of the Appropriation Bill. As such, questions relating to expenditure under the Fund are **not** relevant to the examination of the Estimates of Expenditure or the Appropriation Bill.*

As requested, the information on the reclamation works and their feasibility studies is set out below:

Reclamation project	Commencement date for study	Expense involved in study	Anticipated/ actual commencement date for public consultation	Anticipated reclamation area	Anticipated area of residential site	Anticipated number of residential unit
Sunny Bay	Note 1	Note 1	Subject to review	60 to 100 ha	Nil	Nil
Lung Kwu Tan	October 2015 (Note 2)	About \$20 million	Subject to review	220 to 250 ha	Nil	Nil
Siu Ho Wan	July 2015 (Note 2)	About \$24 million	Subject to review	About 82 ha	Subject to separate planning and engineering study	Subject to separate planning and engineering study
South West Tsing Yi	Not yet started	Not available	Not available	Not available	Not available	Not available
Ma Liu Shui	February 2015 (Note 2)	About \$7 million	Subject to review	About 60 ha	Subject to separate planning and engineering study	Subject to separate planning and engineering study
Artificial islands in the central waters	Not yet started	Not available	Not available	About 1 000 ha, subject to study	Not available	Not available
Other reclamation projects under planning (Note 3)	Not available	Not available	Not available	Not available	Not available	Not available

Note:

1. The preliminary feasibility of reclamation at Sunny Bay was assessed in the "Northshore Lantau Development Feasibility Study" conducted in 1998. There is no separate breakdown for the feasibility study of reclamation at Sunny Bay.
2. The date refers to the commencement of the Technical Study of the concerned reclamation project, in which the preliminary feasibility is assessed.
3. No other major reclamation project is currently under planning.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)078

(Question Serial No. 1347)

Head: (33) Civil Engineering and Development Department

Subhead (No. & title): Not specified

Programme: (3) Provision of Land and Infrastructure

Controlling Officer: Director of Civil Engineering and Development (LAM Sai-hung)

Director of Bureau: Secretary for Development

Question:

It was stated in the brief description under Programme (3) that “the Department has largely completed the technical studies for nearshore reclamations at Siu Ho Wan, Lung Kwu Tan and Ma Liu Shui”. During the examination of Estimates of Expenditure last year, your department replied that “upon its substantial completion, the scope of the subsequent Planning and Engineering (P&E) Study will be determined and the manpower and cost so involved will be estimated taking into account the findings of the technical study.”

In this connection, please advise:

1. the scope of the Engineering Study on reclamations at Ma Liu Shui and estimated expenses to be involved, and the anticipated commencement date;
2. whether the scope of the Engineering Study on reclamations at Ma Liu Shui will cover the adjoining site vacated upon the proposed relocation of the Sha Tin sewage treatment works into caverns;
3. the expenses involved in the studies for reclamations at Ma Liu Shui last year;
4. the estimated consultancy fee expenses on “the potential sites for reclamation at Ma Liu Shui” in the next 3 years, and please tabulate the details as follows:

Year	Company/Organisation	Nature of project	Estimated expense
2018-19			
2019-20			
2020-21			

Asked by: Hon YEUNG Alvin (Member Question No. (LegCo use): 49)

Reply:

According to Rule 49 of the Finance Committee Procedures, special meetings of the Finance Committee are convened to examine the annual Estimates of Expenditure prepared by the Government in support of the Appropriation Bill.

*Expenditure charged to the Capital Works Reserve Fund does **not** form part of the Appropriation Bill. As such, questions relating to expenditure under the Fund are **not** relevant to the examination of the Estimates of Expenditure or the Appropriation Bill.*

1. While the technical study has been completed, we have yet to firm up the scope and timing and hence the estimate of the subsequent Planning and Engineering (P&E) Study for Ma Liu Shui (MLS) reclamation.
2. At this stage, we intend to take into account the planning of the site vacated after relocation of the Sha Tin Sewage Treatment Works to caverns in the P&E Study for the MLS reclamation.
3. The expenses involved in the technical study for the MLS reclamation in 2017-18 are about \$2.4 million.
4. The estimated consultancy fee expenses on “The potential sites for reclamation at Ma Liu Shui” in the next 3 years are tabulated below:

Study	Year	Company/Organisation	Estimated expense (\$ million)
Technical Study	2018-19	AECOM Asia Company Limited	1.6
	2019-20		Nil
	2020-21		Nil
P&E Study (Note)	2018-19	To be determined	To be determined
	2019-20		To be determined
	2020-21		To be determined

Note: The scope and timing of the P&E study are yet to be confirmed.

- End -

CONTROLLING OFFICER'S REPLY**DEVB(W)079****(Question Serial No. 0568)**Head: (39) Drainage Services DepartmentSubhead (No. & title): (000) Operational ExpensesProgramme: (1) Stormwater Drainage, (2) Sewage ServicesControlling Officer: Director of Drainage Services (TONG Ka Hung, Edwin)Director of Bureau: Secretary for DevelopmentQuestion:

The estimated expenditure for 2018-19 under Programme (1) is \$575.5 million, which is 8.1% higher than the revised estimate for the year. The estimated expenditure for 2018-19 under Programme (2) is \$2.2464 billion, which is 5.8% higher than the revised estimate for the year. Regarding the creation of ten posts under Programme (1) and net increase of 48 posts under Programme (2), please list:

- 1) the related posts and job nature;
- 2) the details of expenditure for each post.

Asked by: Hon CHAN Chun-ying (Member Question No. (LegCo use): 21)Reply:

A breakdown showing the ten posts to be created under Programme (1) and 48 posts to be created under Programme (2) in 2018-19 by nature of work, rank, number of posts and notional annual mid-point salary (NAMS) is provided as follows -

Programme Number	Nature of Work	Rank	Number of Posts to be created / deleted (-)	NAMS of Rank (\$)
1	Professional services for stormwater drainage infrastructure works	Senior Engineer	2	1,389,540
		Engineer/Assistant Engineer	4	749,010
	Building information modelling (BIM) services for drainage projects	Senior Engineer	1	1,389,540
		Electrical and Mechanical Engineer/ Assistant Electrical and Mechanical Engineer	1	749,010
	Technical support for BIM services for drainage projects	Senior Technical Officer (Electrical and Mechanical)	1	583,560

Programme Number	Nature of Work	Rank	Number of Posts to be created / deleted (-)	NAMS of Rank (\$)
	Engineering surveying support for BIM services for drainage projects	Survey Officer (Engineering)/Survey Officer Trainee (Engineering)	1	268,590
2	Professional services for sewerage and sewage treatment infrastructure works	Senior Engineer	3	1,389,540
		Engineer/Assistant Engineer	12	749,010
		Engineer/Assistant Engineer	-1	749,010
	Professional services for sewage treatment facilities	Electrical and Mechanical Engineer/Assistant Electrical and Mechanical Engineer	2	749,010
	Technical support for implementation, operation and maintenance of sewerage facilities	Inspector of Works	3	669,900
		Assistant Inspector of Works	2	421,020
		Works Supervisor I (Civil)	4	346,380
		Works Supervisor II (Civil)	5	278,700
	Technical support for operation and maintenance of electrical and mechanical facilities	Senior Electrical Inspector	1	862,920
		Senior Mechanical Inspector	1	862,920
		Assistant Electrical Inspector	2	421,020
		Assistant Mechanical Inspector	1	421,020
		Assistant Electronics Inspector	3	421,020
		Works Supervisor I (Electrical and Mechanical)	1	346,380
		Works Supervisor II (Electrical and Mechanical)	1	278,700
		Senior Artisan (Electrical and Mechanical)	2	247,800
		Artisan (Electrical and Mechanical)	1	218,460
Supplies and procurement matters support	Assistant Supplies Officer	1	401,100	
Technical support for laboratory service	Engineering Laboratory Technician I	2	557,340	
Executive support for laboratory service	Executive Officer II	2	486,060	

Programme Number	Nature of Work	Rank	Number of Posts to be created / deleted (-)	NAMS of Rank (\$)
Total			58	

- End -

CONTROLLING OFFICER'S REPLY**DEVB(W)080****(Question Serial No. 3243)**Head: (39) Drainage Services DepartmentSubhead (No. & title): Not specifiedProgramme: (1) Stormwater Drainage, (2) Sewage ServicesControlling Officer: Director of Drainage Services (TONG Ka Hung, Edwin)Director of Bureau: Secretary for DevelopmentQuestion:

Please provide the Drainage Services Department's annual expenditure and manpower for greening and tree management work related to its projects in the past three years.

Asked by: Hon IP LAU Suk-ye, Regina (Member Question No. (LegCo use): 57)

Reply:

The Drainage Services Department's (DSD's) annual expenditure and manpower for greening and tree management work related to its projects in the past three years are shown below –

	2015-16	2016-17	2017-18
Annual expenditure (\$ million) ^(Note 1)	14.0	13.7	13.8
Number of greening and tree management staff involved ^(Note 2)	12	12	12

Note 1:

The figures include only project expenditure on greening and tree management work, but exclude the cost of the government staff involved.

Note 2:

The figures include only the government staff involved on a full-time or part-time basis, but exclude those of directorate ranks. In addition to government staff, DSD engages contractors to assist with the work.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)081

(Question Serial No. 0410)

Head: (39) Drainage Services Department

Subhead (No. & title): Not specified

Programme: (1) Stormwater Drainage

Controlling Officer: Director of Drainage Services (TONG Ka Hung, Edwin)

Director of Bureau: Secretary for Development

Question:

In the indicators under Programme (1), the value of capital projects under detailed design in 2017 was \$25.243 billion, which was significantly higher than \$9.943 billion in 2016. In this connection, please advise the reasons for the increase; whether there has been a consequential increase in establishment? If yes, please advise the details.

Asked by: Hon LO Wai-kwok (Member Question No. (LegCo use): 16)

Reply:

The increase in the value of capital projects under detailed design in 2017 is mainly due to the commencement of design for the following projects -

- (a) Drainage improvement works in Ta Kwu Ling,
- (b) Drainage improvement works in Mong Kok,
- (c) Drainage improvement works in Tsim Sha Tsui,
- (d) Drainage improvement works in Wong Tai Sin,
- (e) Drainage improvement works in Kwun Tong,
- (f) Yuen Long barrage scheme, and
- (g) Drainage improvement works in Kowloon City.

There has been no increase in manpower resources for implementing the above projects.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)082

(Question Serial No. 0411)

Head: (39) Drainage Services Department

Subhead (No. & title): Not specified

Programme: (2) Sewage Services

Controlling Officer: Director of Drainage Services (TONG Ka Hung, Edwin)

Director of Bureau: Secretary for Development

Question:

Regarding the feasibility study on the relocation of Sai Kung Sewage Treatment Works to caverns:

1. please advise the current progress and anticipated date of completion;
2. what are the difficulties revealed in the technical assessment relating to the size of caverns, construction methods, geological considerations, sewage treatment methods, etc.?
3. has the cost of the relocation works been estimated preliminarily for cost effectiveness? If yes, please advise the details; and
4. will the Government conduct public consultation again for the relocation project? If yes, what are the details? If not, what are the reasons?

Asked by: Hon LO Wai-kwok (Member Question No. (LegCo use): 17)

Reply:

According to Rule 49 of the Finance Committee Procedures, special meetings of the Finance Committee are convened to examine the annual Estimates of Expenditure prepared by the Government in support of the Appropriation Bill.

*Expenditure charged to the Capital Works Reserve Fund does **not** form part of the Appropriation Bill. As such, questions relating to expenditure under the Fund are **not** relevant to the examination of the Estimates of Expenditure or the Appropriation Bill.*

1. The Drainage Services Department (DSD) has completed the technical assessment of relocating Sai Kung Sewage Treatment Works to caverns and is striving to conclude the project's feasibility study this year.
2. Findings from the technical assessment show no insurmountable difficulties regarding the size of caverns, construction methods, geological considerations, sewage treatment methods, etc.

3&4. The feasibility study, which includes a cost-effectiveness assessment, is underway. Upon establishing the project's feasibility and cost-effectiveness, DSD will proceed to the investigation and design stage of the project, during which the public will be consulted.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)083

(Question Serial No. 0412)

Head: (39) Drainage Services Department

Subhead (No. & title): Not specified

Programme: (2) Sewage Services

Controlling Officer: Director of Drainage Services (TONG Ka Hung, Edwin)

Director of Bureau: Secretary for Development

Question:

Regarding the feasibility study on the relocation of Sham Tseng Sewage Treatment Works to caverns:

1. please advise the current progress and anticipated date of completion;
2. what are the difficulties revealed in the technical assessment relating to the size of caverns, construction methods, geological considerations, sewage treatment methods, etc.?
3. has the cost of the relocation works been estimated preliminarily for cost effectiveness? If yes, please advise the details;
4. as the new site selected by the Government is adjacent to residential areas, has the Government assessed the impact of blasting on the residents? If yes, please advise the details. If not, what are the reasons? and
5. will the Government conduct public consultation again for the relocation project? If yes, what are the details? If not, what are the reasons?

Asked by: Hon LO Wai-kwok (Member Question No. (LegCo use): 19)

Reply:

According to Rule 49 of the Finance Committee Procedures, special meetings of the Finance Committee are convened to examine the annual Estimates of Expenditure prepared by the Government in support of the Appropriation Bill.

*Expenditure charged to the Capital Works Reserve Fund does **not** form part of the Appropriation Bill. As such, questions relating to expenditure under the Fund are **not** relevant to the examination of the Estimates of Expenditure or the Appropriation Bill.*

1. The Drainage Services Department (DSD) has completed the technical assessment of relocating Sham Tseng Sewage Treatment Works to caverns, and is striving to conclude the project's feasibility study this year.
- 2&4. Findings from the technical assessment show no insurmountable difficulties regarding the size of caverns, construction methods, geological considerations,

sewage treatment methods etc. Besides, the extent of the vibrations in nearby residential areas and facilities caused by blasting operations inside the caverns will fall within relevant statutory limits.

- 3&5. The feasibility study, which includes a preliminary cost estimation and cost-effectiveness assessment for the relocation works, is underway. Upon establishing the project's feasibility and cost-effectiveness, DSD will proceed to the investigation and design stage of the project, during which the public will be consulted.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)084

(Question Serial No. 0077)

Head: (39) Drainage Services Department

Subhead (No. & title): Not specified

Programme: (1) Stormwater Drainage

Controlling Officer: Director of Drainage Services (TONG Ka Hung, Edwin)

Director of Bureau: Secretary for Development

Question:

Currently, a number of cities have turned river channels into leisure and tourist attractions through beautification works. Please advise whether the department:

1. has any plan to beautify the rivers in Hong Kong, such as Shan Pui River in Yuen Long, Lam Tsuen River in Tai Po and Shing Mun River in Sha Tin? If yes, what are the details? If not, what are the reasons?
2. has included the factor of beautifying and enhancing the ecological environment in the current drainage works for consideration? If yes, what are the details? If not, what are the reasons?

Asked by: Hon SHEK Lai-him, Abraham (Member Question No. (LegCo use): 52)

Reply:

1. To enhance both the living and the ecological environment without compromising the prime function of watercourses in flood prevention, the Drainage Services Department (DSD) is conducting a holistic study to identify suitable watercourses for revitalisation. DSD has identified four potential river sections, namely the Tai Wai Nullah, the middle Tuen Mun River Channel, the Fo Tan Nullah and the Jordan Valley Nullah, for revitalisation. It will consult relevant District Councils after completing the feasibility study.
2. DSD will take into account all relevant factors, including the beautification and enhancement of the ecological environment, in its planning, design and implementation of drainage projects. Take the completed river improvement works at the Upper Lam Tsuen River as an example. The department successfully conserved the natural river and maintained its biodiversity, keeping the natural river bed and creating habitats. Upon the works' completion, native species, such as the Hong Kong newt, have significantly increased in numbers. As another example, for the ongoing improvement works at the Kai Tak River, natural stones will be placed on the river bed and river banks to create different habitats for ecological development. The third example concerns the planning of the Tsui Ping River improvement project. The department is exploring the provision of water-friendly facilities such as additional

walkways alongside the river, footbridges, landscaped decks and a floating pontoon so as to connect people closer to water bodies. With growing experience in successfully implementing river improvement works in an ecologically minded way, DSD promulgated a practice note titled “Guidelines on Environmental and Ecological Considerations for River Channel Design” in 2015 for staff and relevant industry practitioners to refer to and follow.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)085

(Question Serial No. 2112)

Head: (39) Drainage Services Department

Subhead (No. & title): Not specified

Programme: (1) Stormwater Drainage

Controlling Officer: Director of Drainage Services (TONG Ka Hung, Edwin)

Director of Bureau: Secretary for Development

Question:

What is the expenditure on the replacement and rehabilitation works of stormwater drainage systems conducted by the Drainage Services Department (DSD)? Besides, which districts (by District Council district) are hard hit by ageing stormwater drains? What is the total length of these ageing stormwater drains? Do they overlap with the existing footpaths or carriageways?

Asked by: Hon WONG Pik-wan, Helena (Member Question No. (LegCo use): 67)

Reply:

According to Rule 49 of the Finance Committee Procedures, special meetings of the Finance Committee are convened to examine the annual Estimates of Expenditure prepared by the Government in support of the Appropriation Bill.

*Expenditure charged to the Capital Works Reserve Fund does **not** form part of the Appropriation Bill. As such, questions relating to expenditure under the Fund are **not** relevant to the examination of the Estimates of Expenditure or the Appropriation Bill.*

The estimated expenditure on replacing and rehabilitating stormwater drainage facilities under DSD's maintenance programme in 2018-19 is \$30 million.

There are about 2 400 kilometres (km) of underground stormwater drains in Hong Kong. Many of them have been in service for decades (e.g. about 1 100 km of them have been in use for 30 years or more) and are suffering from ageing and deterioration. Noting the scale of the ageing problem, additional resources are required to cope with the increasing replacement and rehabilitation (R&R) needs in the form of public works projects. Based on the findings of a consultancy study, a territory-wide R&R programme (172CD) has been formulated for the pipelines with a high R&R priority. The programme, involving surveying the condition of about 168 km of drains and rehabilitating about 41 km of drains, is to be carried out in phases.

DSD plans to seek funding for upgrading part of 172CD (i.e. stage 1 works) to Category A status in mid-2018 so as to survey the condition of about 35 km of drains and rehabilitate about 11 km of drains distributed throughout the territory. The distribution of the

underground stormwater drains to be rehabilitated under stage 1 of 172CD is tabulated below:

District	Length (km)
Central & Western	0.6
Eastern District	0.3
Islands	0.3
Southern District	0.4
Wan Chai	0.5
Kowloon City	0.8
Kwai Tsing	1.0
Kwun Tong	0.6
Sai Kung	0.2
Sham Shui Po	0.7
Sha Tin	0.8
Tsuen Wan	0.6
Wong Tai Sin	0.2
Yau Tsim Mong	0.4
North District	0.8
Tai Po	0.9
Tuen Mun	1.2
Yuen Long	0.4
Total:	10.7 (about 11)

Most of stormwater drains are located underneath public roads and footpaths. In carrying out condition surveys and/or rehabilitation works, DSD will consider measures to reduce the impacts on traffic flow whenever possible. These measures can include trenchless construction and traffic impact assessments to ascertain that the surveys and/or works will not significantly affect the traffic on surrounding/nearby roads.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)086

(Question Serial No. 3592)

Head: (39) Drainage Services Department

Subhead (No. & title): Not specified

Programme: (1) Stormwater Drainage

Controlling Officer: Director of Drainage Services (TONG Ka Hung, Edwin)

Director of Bureau: Secretary for Development

Question:

Please advise this Committee:

1. as at end-December 2017, the respective completion rate and provision spent on the reconstruction and rehabilitation works at the Kai Tak Nullah;
2. in 2018-19, the details and anticipated completion dates of the expected major works as well as whether the works can be completed within the approved estimates;
3. in 2018-19, the progress of transforming the King Yip Street Nullah into the Tsui Ping River.

Asked by: Hon WU Chi-wai (Member Question No. (LegCo use): 140)

Reply:

According to Rule 49 of the Finance Committee Procedures, special meetings of the Finance Committee are convened to examine the annual Estimates of Expenditure prepared by the Government in support of the Appropriation Bill.

*Expenditure charged to the Capital Works Reserve Fund does **not** form part of the Appropriation Bill. As such, questions relating to expenditure under the Fund are **not** relevant to the examination of the Estimates of Expenditure or the Appropriation Bill.*

1. The reconstruction and rehabilitation works along the Kai Tak Nullah are being implemented in stages by the Civil Engineering and Development Department (CEDD) and the Drainage Services Department (DSD) under four packages. The progress and cumulative expenditure of the improvement works under each package are as follows:
 - Advance works for improvement of the Kai Tak Nullah, comprising the construction of a box culvert at Prince Edward Road East and the widening of a section of Choi Hung Road, were substantially completed in January 2014. The cumulative expenditure up to the end of December 2017 was \$138.28 million.
 - About 92% of the improvement works to the upstream reaches of the Kai Tak Nullah from Po Kong Village Road to Tung Kwong Road were completed by the end of December 2017. The cumulative expenditure up to the end of December 2017 was about \$861.77 million.

- The improvement works to the midstream reaches of the Kai Tak Nullah from Tung Kwong Road to Prince Edward Road East were substantially completed in November 2017. The cumulative expenditure up to the end of December 2017 was about \$378.80 million.
 - The improvement works to the downstream reaches of the Kai Tak Nullah at the downstream reaches within the Kai Tak Development Area are being undertaken by CEDD. About 90% of the works were completed by the end of December 2017. The cumulative expenditure up to the end of December 2017 is about \$1,651 million.
2. For the Kai Tak Nullah project, the remaining works mainly concern the upstream and downstream reaches. Those concerning the upstream reaches, which mainly involve landscaping works and the reconstruction of a section of Choi Hung Road, are anticipated to be completed before the end of 2018. Those concerning the downstream reaches, which involve external works and green roofs for desilting compounds, rock works for open channels and landscaping works, are anticipated to be completed by the second quarter of 2018. The projects could be completed within the approved project estimates.
 3. Detailed design work for the Tsui Ping River project is in progress. DSD aims to conduct second-stage public engagement in 2018.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)087

(Question Serial No. 0569)

Head: (42) Electrical and Mechanical Services Department

Subhead (No. & title): (000) Operational expenses

Programme: (2) Mechanical Installations Safety

Controlling Officer: Director of Electrical and Mechanical Services (Alfred W H SIT)

Director of Bureau: Secretary for Development

Question:

Under Programme (2), the estimated expenditure in 2018-19 is \$151.6 million, 10.3% higher than the revised estimate for the current year. Regarding the escalator incident that happened last year, are there any plans and improvement measures in the aspects of regulatory control and training? If yes, what are the details and the estimated expenditure and manpower resources involved? If no, what are the reasons?

Asked by: Hon CHAN Chun-ying (Member Question No. (LegCo use): 3)

Reply:

The Electrical and Mechanical Services Department (EMSD) is committed to strictly enforcing the Lifts and Escalators Ordinance (Cap. 618) (the Ordinance) to ensure that the public is served with safe lift and escalator services. Regulation of escalator safety covers type approval on the design, and subsequent audit inspections of the installation, examination and maintenance works of escalators. All escalators are periodically maintained by registered contractors at intervals not exceeding one month, and examined by registered engineers at intervals not exceeding six months for application of renewal of the use permits by the EMSD. The EMSD has also adopted a risk-based approach to conduct audit inspections of lifts and escalators to identify any non-compliance with the requirements. This approach takes into account a host of factors including the equipment age and type of installation, complaints received, incidents happened, change-over of maintenance contractors, and performance of contractors involved. Prosecution/disciplinary actions will be instituted against the concerned registered persons if non-compliance with the Ordinance is found during the EMSD's audit inspections.

After the escalator incident at Langham Place, the EMSD has completed a round of special audit inspections in 2017 for each of the 64 high-rise escalators with a vertical rise of 15 metres or above. No abnormality was found and all escalators were confirmed to be in safe working conditions. The incident was attributed to failure of the concerned practitioners to properly discharge their duties, resulting in simultaneous failure of both the

main drive chain and the broken chain safety device installed for monitoring breakage and excessive elongation of the main drive chain. Although such simultaneous failure of the aforesaid devices is very rare, the EMSD issued circulars to remind all registered contractors to properly inspect and maintain key protective devices and drive systems of escalators in accordance with the relevant Code of Practice, and to ensure the workers are fully aware of the technical requirements to diligently carry out escalator maintenance works. The EMSD also issued a letter to provide specific guidelines to the Responsible Persons and registered contractors of high-rise escalators on maintenance of these escalators.

The EMSD has established a staff posting and training mechanism to ensure all members of its lift and escalator safety team have sufficient work experience and training to carry out lift and escalator audit inspections in a competent manner. In 2018-19, the lift and escalator safety team will comprise 43 staff members with an estimated total expenditure of \$45.1 million.

The EMSD will continue to strictly enforce the Ordinance and step up public education and publicity to enhance lift and escalator safety.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)088

(Question Serial No. 1838)

Head: (42) Electrical and Mechanical Services Department

Subhead (No. & title): Not specified

Programme: (2) Mechanical Installations Safety

Controlling Officer: Director of Electrical and Mechanical Services (Alfred W H SIT)

Director of Bureau: Secretary for Development

Question:

There was a major escalator incident in 2017. The Government has therefore increased the planned number of inspections. In deploying the resources, will the Government first select those lifts and escalators with higher risk? If yes, what are the criteria for selection?

At present, how many lifts and escalators in Hong Kong are under the regulatory control of the Electrical and Mechanical Services Department? How many qualified persons can carry out examination and maintenance for lifts and escalators?

What measures does the Government have to attract people to join the industry related to examination and maintenance of lifts and escalators? What is the expenditure for such measures?

Asked by: Hon CHAN Han Pan (Member Question No. (LegCo use): 42)

Reply:

The Electrical and Mechanical Services Department (EMSD) has adopted a risk-based approach to conduct audit inspections of lifts and escalators taking into account aspects such as the equipment age and type of installation, complaints received, incidents happened, change-over of maintenance contractors, and performance of contractors involved. After the escalator incident at Langham Place, the EMSD has completed a round of special inspections in 2017 for each of the 64 high-rise escalators with a vertical rise of 15 metres or above. No abnormality was found and all escalators were confirmed to be in safe working conditions. Another round of such inspections would be conducted in 2018.

At the end of 2017, there were 66 291 lifts and 9 379 escalators in Hong Kong that are under the regulatory control of the EMSD. There were 342 registered lift/escalator engineers and 5 616 registered lift/escalator workers who are qualified to carry out maintenance, examination, installation and demolition of lifts and escalators. In addition,

there were about 1 800 general workers who work under the supervision of registered engineers or registered workers.

The EMSD has been working closely with the trade and various organisations in monitoring the manpower situation and implementing measures in recent years to attract and train up new talents. Major measures include:

- The Vocational Training Council (VTC) and the Construction Industry Council (CIC) jointly introduced the Earn & Learn Scheme in 2014. The number of new apprentices joining the lift and escalator industry has significantly increased from about 70 a year to over 250 a year in 2016 and 2017;
- In 2016, the VTC and the University of Hong Kong School of Professional and Continuing Education launched two lift and escalator courses for practising workers for them to acquire the academic qualification for registration as registered workers; and
- The CIC has implemented the Contractor Cooperative Training Scheme for the electrical and mechanical trades (including lift mechanic and escalator mechanic) to provide financial support to those who wish to join the lift and escalator industry.

The whole range of the EMSD's work on lift and escalator safety is carried out collectively by a team, and the EMSD does not have a breakdown of the manpower for individual work such as implementing measures to attract new entrants to join the industry. The estimated total expenditure for lift and escalator safety in 2018-19 is \$45.1 million.

- End -

CONTROLLING OFFICER'S REPLY**DEVB(W)089****(Question Serial No. 1282)**Head: (42) Electrical and Mechanical Services DepartmentSubhead (No. & title): Not specifiedProgramme: (2) Mechanical Installations SafetyControlling Officer: Director of Electrical and Mechanical Services (Alfred W H SIT)Director of Bureau: Secretary for DevelopmentQuestion:

On 25 March 2017, a serious escalator incident happened at Langham Place in Mong Kok, causing 18 injuries. Since then, there have been various minor escalator incidents across the territory, arousing public concern about the safety of long escalators. Would the Electrical and Mechanical Services Department (EMSD) please advise this Committee of the following:

- a) What are the total numbers of incidents arising from faulty escalators and the total casualties resulted from 2015 to 2017? Please list by year.
- b) How many escalator inspections were conducted by the EMSD annually from 2015 to 2017? What was the average time spent on each inspection? How many escalators were confirmed to be in need of repair after inspection? What was the total expenditure involved?
- c) What is the provision earmarked for escalator safety inspection and associated repair works to be conducted by the EMSD in 2018-19? Are there any manpower shortage problems regarding the inspection and repair works?

Asked by: Hon LAU Kwok-fan (Member Question No. (LegCo use): 25)Reply:

- a) The number of faulty escalator incidents causing passenger casualties and the number of passenger injuries involved from 2015 to 2017 (*) are listed in the following table:

Year	2015	2016	2017
Number of faulty escalator incidents causing passenger casualties (**)	7	3	2
Number of passenger injuries involved	12	3	19

(*) There was no death case involved.

(**) Incidents relating to passenger behaviour (e.g. loss of balance) and external factors (e.g. tiny metallic objects, stroller wheels, etc. being wedged in the space between the step and combplate) are not included.

- b) The number of audit inspections for escalators conducted by the EMSD under the Lifts and Escalators Ordinance (Cap. 618) and the number of escalators confirmed to be in need of repair after such inspections from 2015 to 2017 are listed in the following table:

Year	2015	2016	2017
Number of audit inspections for escalators conducted by the EMSD	1 710	1 363	2 430
Number of escalators confirmed to be in need of repair after audit inspections	51	131	23

The time spent on each audit inspection varied and on average each inspection took about one hour to complete. The duration of each audit inspection depends on its scope which differs in various stages of escalator works, such as during routine maintenance and annual examination, after major alteration works, on completion of new installation works, during incident investigation, etc. The EMSD has no access to the cost data of the subsequent repair works, which is commercial information between the Responsible Persons (RPs) for escalators and the registered escalator contractors (RCs) concerned.

- c) The estimated total expenditure of the EMSD for lift and escalator safety in 2018-19 is \$45.1 million which covers the whole range of work to be carried out collectively by a dedicated team of the EMSD. However, there is no breakdown of the estimated expenditure for carrying out escalator audit inspections alone. The EMSD has sufficient manpower for carrying out audit inspections and associated regulatory works for lift and escalator safety, and would flexibly deploy resources to suit the needs when there is any change in service demand. With regard to the repair works to escalators arising from the audit inspections, they are carried out by the RCs engaged by the RPs, and the EMSD has no access to the cost data of such repair works, which is commercial information between the RPs and the RCs concerned. With regard to the manpower for the escalator inspection and repair works, according to the regular manpower survey results and manpower forecast conducted by the EMSD, it is estimated that there is sufficient manpower in the trade to carry out the works. The EMSD would continue to monitor the manpower situation and work closely with the trade to ensure adequate manpower supply.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)090

(Question Serial No. 3287)

Head: (42) Electrical and Mechanical Services Department

Subhead (No. & title): Not specified

Programme: Not specified

Controlling Officer: Director of Electrical and Mechanical Services (Alfred W H SIT)

Director of Bureau: Secretary for Development

Question:

Regarding the provision of sign language interpretation services in the past five years, will the Government inform this Committee of the following:

1. Were there any sign language interpretation services provided? If yes, what were the frequency, occasions and causes for providing sign language interpretation services in each year?
2. Referring to the above question, what were the number of sign language interpreters involved in each year, their pay and the organisations to which they belong? What was the total expenditure involved in each year?
3. Will the Government consider allocating more resources to improve the services for communicating with the deaf and/or persons with hearing impairment in future? If yes, what are the details (including measures, manpower and expenditure involved and timetable, etc.)? If no, what are the reasons?

Asked by: Hon LEUNG Yiu-chung (Member Question No. (LegCo use): 59)

Reply:

The Electrical and Mechanical Services Department (EMSD) did not provide any sign language interpretation services in the past five years. As there has been no demand for such services, the EMSD does not allocate resources in this respect. However, the EMSD is committed to engaging relevant non-governmental organisations for sign language interpretation services when situation requires.

- End -

CONTROLLING OFFICER'S REPLY**DEVB(W)091****(Question Serial No. 0158)**Head: (42) Electrical and Mechanical Services DepartmentSubhead (No. & title): Not specifiedProgramme: Not specifiedControlling Officer: Director of Electrical and Mechanical Services (Alfred W H SIT)Director of Bureau: Secretary for DevelopmentQuestion:

The Electrical and Mechanical Services Department will create 64 non-directorate posts in 2018-19. Will the Government set out in detail the ranks, duties and expenditures on emoluments of these posts? How many of them are related to the engineering profession?

Asked by: Hon LO Wai-kwok (Member Question No. (LegCo use): 3)Reply:

A breakdown showing the 64 new non-directorate posts to be created in the Electrical and Mechanical Services Department in 2018-19 with ranks, main duties and notional annual mid-point salary (NAMS) values is provided as follows. Among the 64 new non-directorate posts, 38 are engineering professional posts.

Rank	Number of Posts	Main Duties	NAMS Value of the Rank (\$)
Electrical and Mechanical Engineer / Assistant Electrical and Mechanical Engineer	Two	<u>Vehicle Safety</u> To step up compliance inspections under the voluntary registration schemes for vehicle mechanics and vehicle maintenance workshops_	\$749,010
Mechanical Inspector	Four		\$669,900
Assistant Clerical Officer	One		\$262,560
Clerical Assistant	One		\$204,960

Rank	Number of Posts	Main Duties	NAMS Value of the Rank (\$)
Senior Electrical and Mechanical Engineer	One	<u>Railway Safety</u> <ul style="list-style-type: none"> To develop and implement a new regulatory regime for the recognition/authorisation of the high-speed train drivers of the Guangzhou-Shenzhen-Hong Kong Express Rail Link (XRL) To step up the assessment and auditing of MTRCL's Asset Management System and Safety Management System To oversee safety matters of the new railway projects, including the XRL project 	\$1,389,540
Senior Electronics Engineer	Two		\$1,389,540
Electrical and Mechanical Engineer / Assistant Electrical and Mechanical Engineer	Four		\$749,010
Electronics Engineer / Assistant Electronics Engineer	Three		\$749,010
Clerical Assistant	One		\$204,960
Senior Building Services Engineer	Two	<u>Energy Efficiency</u> <ul style="list-style-type: none"> To implement district cooling service in various new development areas and redevelopment areas To support the Environment Bureau in implementing the Energy Saving Plan for Hong Kong's Built Environment 2015-2025+ and the Hong Kong's Climate Action Plan 2030+ To support the Environment 	\$1,389,540
Senior Electrical and Mechanical Engineer	Two		\$1,389,540
Senior Engineer	Two		\$1,389,540
Building Services Engineer / Assistant Building Services Engineer	Eight		\$749,010

Rank	Number of Posts	Main Duties	NAMS Value of the Rank (\$)	
Electrical and Mechanical Engineer / Assistant Electrical and Mechanical Engineer	Four		\$749,010	
Assistant Clerical Officer	Two		\$262,560	
Senior Electrical and Mechanical Engineer	One	<u>Lift and Escalator Safety</u> To step up the promotion of modernisation schemes and increase the number of inspections for aged lifts and escalators	\$1,389,540	
Electrical and Mechanical Engineer / Assistant Electrical and Mechanical Engineer	Two		\$749,010	
Electrical Inspector	One		\$669,900	
Assistant Mechanical Inspector	Six		\$421,020	
Executive Officer I	One		\$734,040	
Clerical Assistant	Two		\$204,960	
Senior Electrical and Mechanical Engineer	One		<u>Gas Safety</u> To implement a comprehensive monitoring regime on the development of refrigerants of low global warming potential	\$1,389,540
Building Services Engineer / Assistant Building Services Engineer	One			\$749,010
Electrical and Mechanical Engineer / Assistant Electrical and Mechanical Engineer	One	\$749,010		

Rank	Number of Posts	Main Duties	NAMS Value of the Rank (\$)
Senior Mechanical Inspector	One		\$862,920
Mechanical Inspector	Two		\$669,900
Air-Conditioning Inspector	One		\$669,900
Assistant Clerical Officer	One		\$262,560
Senior Electronics Engineer	One	<u>Building Information Modelling (BIM) Technology in Works Projects</u> To research and develop applications of the BIM - Asset Management (BIM-AM) System and related advanced technologies	\$1,389,540
Building Services Engineer / Assistant Building Services Engineer	One		\$749,010
Senior Technical Officer	One		\$583,560
Technical Officer / Technical Officer Trainee	One		\$268,590

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)092

(Question Serial No. 0159)

Head: (42) Electrical and Mechanical Services Department

Subhead (No. & title): Not specified

Programme: (2) Mechanical Installations Safety

Controlling Officer: Director of Electrical and Mechanical Services (Alfred W H SIT)

Director of Bureau: Secretary for Development

Question:

In 2018, the targeted number of inspection for lifts and escalators is estimated as 14 000, which is 18.4% of the number of existing lifts and escalators. It is higher than the actual number of 11 231 in 2017 due to the implementation of modernisation scheme by the Government. In this regard, would the Government advise on the following:

1. What is the estimated expenditure for the modernisation works?
2. In view of the increase in the number of inspections, will there be any increase in the establishment of the EMSD? Are there sufficient competent practitioners at present for carrying out the modernisation works as well as the maintenance and repair works in future?
3. Please advise on the current numbers of competent lift and escalator practitioners and the wastage rate in the past three years.
4. Is there any measure to improve the working environment and remuneration packages of lift and escalator practitioners so as to reduce brain drain and attract new blood? If yes, what are the details? If no, what are the reasons?
5. Is there any new measure to assist the trade in training new talents? If yes, what are the details? If no, what are the reasons?

Asked by: Hon LO Wai-kwok (Member Question No. (LegCo use): 4)

Reply:

1. There is room for improvement of the performance of aged lifts through modernisation works. The Electrical and Mechanical Services Department (EMSD) will step up the promotion of lift and escalator modernisation schemes by strengthening the publicity to Responsible Persons (RPs) and increasing the inspection to lifts and escalators. The estimated additional expenditure in 2018-19 is \$7.3 million.
2. In 2018-19, one Senior Electrical and Mechanical Engineer, two Electrical and Mechanical Engineers, one Electrical Inspector, six Assistant Mechanical Inspectors,

two Clerical Assistants and one Executive Officer will be added to the lift and escalator teams of the EMSD to carry out additional inspections and strengthen the publicity to RPs.

Based on the regular manpower survey results and manpower forecast conducted by the EMSD, it is estimated that there is sufficient practitioners for carrying out the modernisation works as well as the maintenance and repair works in future. The EMSD would continue to monitor the trade manpower and work closely with the trade to ensure adequate manpower supply.

3. The number of lift/escalator practitioners kept on increasing in recent years, although there is some staff wastage. The total numbers of registered lift/escalator engineers and registered lift/escalator workers in 2015, 2016 and 2017 are 5 643, 5 767 and 5 958 respectively. In addition, the numbers of general workers in the trade in these years are 1 452, 1 725 and 1 838 respectively. The rate of registration withdrawal of registered engineers and registered workers are 0.02%, 0.10% and 0.45% respectively in these years.
4. The EMSD has been collaborating with the lift and escalator trade to take forward measures to improve the working environment of lift and escalator practitioners. The EMSD continues to review and update the Code of Practice for Lift Works and Escalator Works with a view to improving the working conditions, such as enhancing the safety requirements and providing better ventilation, lightings, etc. in the working environment. As for the worker's remuneration, following introduction of the new registration system for lift and escalator workers under the Lifts and Escalators Ordinance in late 2012, which replaced the employer-tied registration arrangement, the lift and escalator workers are provided with more flexibility in choosing their jobs and hence better bargaining power in negotiating remuneration packages. The trade provides better remuneration packages in recent years to practitioners to attract new blood and to retain expertise in the trade. The EMSD conducts regular trade survey to monitor the salary level of practitioners. The latest survey results show that the remuneration of registered workers and engineers rose by 6.6% and 8.2% respectively in 2015 and 6.2% and 5.1% respectively in 2016.
5. The EMSD has been working closely with the trade and various organisations in monitoring the manpower situation and implementing measures in recent years to attract and train up new talents. Major measures include:
 - The Vocational Training Council (VTC) and the Construction Industry Council (CIC) jointly introduced the Earn & Learn Scheme in 2014. The number of new apprentices joining the lift and escalator industry has significantly increased from about 70 a year to over 250 a year in 2016 and 2017;
 - In 2016, the VTC and the University of Hong Kong School of Professional and Continuing Education launched two lift and escalator courses for practicing workers for them to acquire the academic qualification for registration as registered workers; and

- The CIC has implemented the Contractor Cooperative Training Scheme for the Electrical and Mechanical (E&M) trades (including lift mechanic and escalator mechanic) to provide financial support to those who wish to join the lift and escalator industry.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)093

(Question Serial No. 0472)

Head: (42) Electrical and Mechanical Services Department

Subhead (No. & title): (000) Operational Expenses

Programme: Not specified

Controlling Officer: Director of Electrical and Mechanical Services (Alfred W H SIT)

Director of Bureau: Secretary for Development

Question:

Would the Electrical and Mechanical Services Department please provide the following information regarding the Artisan and Works Supervisor grades:

1. the establishment, strength, number of retirees and staff wastage by ranks of the various Artisan and Works Supervisor grades in the Department in 2016-17, 2017-18 and 2018-19 (estimate);
2. the total number of monthly overtime hours of the staff in these grades in 2017-18;
 - 2.1 the percentage of overtime work compensated by time-off in lieu within one month of the date on which the overtime was worked;
 - 2.2 the percentage of overtime work compensated by overtime allowance; and
 - 2.3 the expenditure on monthly overtime allowance.

Asked by: Hon POON Siu-ping (Member Question No. (LegCo use): 11)

Reply:

1. The establishment, strength, number of retirees and staff wastage by ranks of the various Artisan and Works Supervisor grades in the Electrical and Mechanical Services Department (EMSD) in 2016-17, 2017-18 and 2018-19 (estimate) are as follows:

	Establishment	Strength	Number of Retirees	Staff Wastage
WS I	0	0	0	0
WS II	0	0	0	0
Sr Art	1	1	0	0
Art	1	1	0	0

Note: WSI / WSII stand for Works Supervisor I / Works Supervisor II; Sr Art / Art stand for Senior Artisan / Artisan. The above table shows the establishment and strength of the EMSD under Head 42, which does not cover the staff under the Electrical and Mechanical Services Trading Fund.

2. The total number of overtime hours of the Artisan and Senior Artisan grades in 2017-18 is 447.5 hours. Nil for the Works Supervisor grade.

2.1 The average percentage of overtime work compensated by time-off in lieu for the Artisan and Senior Artisan grades in 2017-18 is 31%.

(Remarks: The above figure reflects time-off in lieu taken in 2017-18. We do not have the figure for overtime work compensated by time-off in lieu within one month of the date on which the overtime was worked as the claimant may choose to take time-off within one month from the date when the overtime was worked or accumulate them in his time-off pool for future use.)

2.2 The average percentage of overtime work compensated by overtime allowance for the Artisan and Senior Artisan grades in 2017-18 is 69%.

2.3 The total expenditure on overtime allowance for the Artisan and Senior Artisan grades in 2017-18 is \$45,000.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)094

(Question Serial No. 0091)

Head: (42) Electrical and Mechanical Services Department

Subhead (No. & title): Not specified

Programme: (2) Mechanical Installations Safety

Controlling Officer: Director of Electrical and Mechanical Services (Alfred W H SIT)

Director of Bureau: Secretary for Development

Question:

With regard to the manpower of the Electrical and Mechanical Services Department for lift and escalator inspection:

1. What are the number of staff who received relevant training, their salaries and the expenditure involved in the past three years?
2. What is the wastage rate of the competent technical staff for lift and escalator inspection in the past three years?
3. Will the Government allocate more resources to increase the manpower for lift inspection? What is the estimated expenditure?
4. What measures will the Government plan to enhance lift and escalator safety? What is the estimated expenditure?

Asked by: Hon SHEK Lai-him, Abraham (Member Question No. (LegCo use): 31)

Reply:

1. The whole range of the work of the Electrical and Mechanical Services Department (EMSD) on lift and escalator safety is carried out collectively by a team, and the EMSD does not have a breakdown of the manpower for individual work such as lift and escalator inspection. The whole team of staff is technically competent and has received relevant training. The number of staff in the team, their salaries and the total expenditure in years 2015-16, 2016-17 and 2017-18 are listed below:

	2015-16	2016-17	2017-18
Number of staff in the lift and escalator safety team	36	27	34
Total salary of staff	\$24.2 million	\$19.2 million	\$23.9 million
Total expenditure (including salary)	\$35.9 million	\$32.6 million	\$36.8 million (estimated)

2. The wastage rate of the lift and escalator safety team in 2015, 2016 and 2017 are 3%, 4% and 3% respectively. The staff wastage in the past three years is entirely due to retirement. The EMSD has established a staff posting and training mechanism for filling vacancies arising from retirement and ensuring staff competence in carrying out work related to lift and escalator safety.

3. In 2018-19, one Senior Electrical and Mechanical Engineer, two Electrical and Mechanical Engineers, one Electrical Inspector, six Assistant Mechanical Inspectors, two Clerical Assistants and one Executive Officer will be added to the lift and escalator safety team of the EMSD to carry out additional inspections, and strengthen the support to the Responsible Persons (RPs) for lifts and escalators in managing their lifts and escalators and carrying out lift and escalator modernisation works. The estimated additional expenditure in 2018-19 is \$7.3 million.

4. In 2018-19, the EMSD will continue to strictly enforce the Lifts and Escalators Ordinance (the Ordinance) (Cap. 618) and step up public education and publicity to enhance lift and escalator safety. The work related to lift and escalator safety in 2018-19 includes:

- (i) Increasing the number of lift and escalator inspections to about 14 000 according to a risk-based approach;
- (ii) Taking enforcement actions against contravention of the Ordinance;
- (iii) Maintaining a registration system for lift and escalator contractors, engineers and workers; and
- (iv) Carrying out public education and publicity, including the provision of support to the RPs in managing their lifts and escalators and promotion of modernisation of aged lifts and escalators.

The estimated total expenditure for lift and escalator safety in 2018-19 is \$45.1 million.

- End -

CONTROLLING OFFICER'S REPLY**DEVB(W)095****(Question Serial No. 1790)**Head: (42) Electrical and Mechanical Services DepartmentSubhead (No. & title): Not specifiedProgramme: (2) Mechanical Installations SafetyControlling Officer: Director of Electrical and Mechanical Services (Alfred W H SIT)Director of Bureau: Secretary for DevelopmentQuestion:

Provision for 2018-19 is \$14.1 million (10.3%) higher than the revised estimate for 2017-18. This is mainly due to the creation of 32 posts. Please provide details of these 32 new posts, including their posts, ranks, emoluments and duties.

Asked by: Hon YICK Chi-ming, Frankie (Member Question No. (LegCo use): 50)Reply:

A breakdown showing the 32 new civil service posts under Programme (2) Mechanical Installation Safety to be created in the Electrical and Mechanical Services Department (EMSD) in 2018-19 with posts, ranks, notional annual mid-point salary (NAMS) values and main duties is provided as follows:

Post / Rank	Number of Posts	Main Duties	NAMS Value of the Rank (\$)
Senior Electrical and Mechanical Engineer	One	<u>Lift and Escalator Safety</u> To step up the promotion of modernisation schemes and increase the number of inspections for aged lifts and escalators	\$1,389,540
Electrical and Mechanical Engineer / Assistant Electrical and Mechanical Engineer	Two		\$749,010
Electrical Inspector	One		\$669,900
Assistant Mechanical Inspector	Six		\$421,020
Executive Officer I	One		\$734,040

Post / Rank	Number of Posts	Main Duties	NAMS Value of the Rank (\$)
Clerical Assistant	Two		\$204,960
Electrical and Mechanical Engineer / Assistant Electrical and Mechanical Engineer	Two	<u>Vehicle Safety</u> To step up compliance inspections under the voluntary registration schemes for vehicle mechanics and vehicle maintenance workshops	\$749,010
Mechanical Inspector	Four		\$669,900
Assistant Clerical Officer	One		\$262,560
Clerical Assistant	One		\$204,960
Senior Electrical and Mechanical Engineer	One		<u>Railway Safety</u> <ul style="list-style-type: none"> To develop and implement a new regulatory regime for the recognition/authorisation of the high-speed train drivers of the Guangzhou-Shenzhen-Hong Kong Express Rail Link (XRL) To step up the assessment and auditing of MTRCL's Asset Management System and Safety Management System To oversee safety matters of the new railway projects, including the XRL project
Senior Electronics Engineer	Two	\$1,389,540	
Electrical and Mechanical Engineer / Assistant Electrical and Mechanical Engineer	Four	\$749,010	
Electronics Engineer / Assistant Electronics Engineer	Three	\$749,010	
Clerical Assistant	One	\$204,960	

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)096

(Question Serial No. 1845)

Head: (60) Highways Department

Subhead (No. & title): Not specified

Programme: (4) Technical Services

Controlling Officer: Director of Highways (Daniel K W CHUNG)

Director of Bureau: Secretary for Development

Question:

During the typhoon season in each year, there will be accidents involving collapse of trees of invasive species. Regarding the estimate of expenditure for technical services, will the Government reserve resources and manpower for inspection on the safety of invasive tree species before the onset of typhoon season and for taking a proactive approach to handling trees with potential risk of failure?

Asked by: Hon CHAN Han-pan (Member Question No. (LegCo use): 50)

Reply:

The Highways Department (HyD) maintains vegetation within expressway boundaries and on the slopes under its purview. Vegetation maintenance operations, which include removal of invasive species (e.g. *Leucaena leucocephala*), are carried out at least once every six months. HyD also completes tree risk assessments and implements mitigation measures in accordance with the Guidelines for Tree Risk Assessment and Management Arrangement (issued by the Development Bureau's Greening, Landscape and Tree Management Section) before the rainy and typhoon season every year. Horticultural maintenance measures, such as removing dead or dangerous trees, pruning broken branches and overgrown vegetation, etc, are carried out in order to ensure public road safety.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)097

(Question Serial No. 1817)

Head: (60) Highways Department

Subhead (No. & title): (000) Operational expenses

Programme: (4) Technical Services

Controlling Officer: Director of Highways (Daniel K W CHUNG)

Director of Bureau: Secretary for Development

Question:

The Department will enhance the maintenance of vegetation for roadside slopes and expressways. Are there any plans to review the method of planting trees on major walkways in each district to ensure the safety of pedestrians? If so, what are the objectives and performance indicators?

Asked by: Hon CHENG Chung-tai (Member Question No. (LegCo use): 22)

Reply:

The Highways Department (HyD) is responsible for maintaining vegetation on slopes under HyD's maintenance and within the boundaries of expressways. Regular horticultural inspections are conducted at least once every six months and necessary maintenance operations, such as pruning, pest control and removal of hazardous trees, are carried out in order to ensure public road safety.

HyD carries out tree planting work on a slope, where suitable, when there are upgrading/improvement works for the slope. The planting work will be designed and implemented according to the "Right Tree, Right Place" principle and relevant planting guidelines, including "Proper Planting Practices" promulgated by the Greening, Landscape and Tree Management Section of the Development Bureau and "Technical Guidelines on Landscape Treatment for Slopes" (GEO Publication No. 1/2011) published by the Civil Engineering and Development Department. For example, trees will be pruned to maintain the minimum headroom required for footway and they will not be planted on slopes with a gradient greater than 35 degrees. By following the principle and guidelines, HyD will continue its efforts to ensure public road safety.

- End -

CONTROLLING OFFICER'S REPLY**DEVB(W)098****(Question Serial No. 3244)**Head: (60) Highways DepartmentSubhead (No. & title): Not SpecifiedProgramme: (4) Technical ServicesControlling Officer: Director of Highways (Daniel K W CHUNG)Director of Bureau: Secretary for DevelopmentQuestion:

Please provide information on the Highways Department (HyD)'s expenditure and manpower for greening and tree management work in projects in each of the past three years.

Asked by: Hon IP LAU Suk-ye, Regina (Member Question No. (LegCo use): 58)

Reply:

The expenditure and staff deployed for the greening works in projects and tree management works in the past three years in the HyD are set out below:

Financial year	Greening works in projects ^(Note 1)	Tree management works	
	Expenditure (\$ million)	Expenditure (\$ million)	Staff ^(Note 2)
2015-16	8.4	56.9	28
2016-17	14.4	54.5	28
2017-18 ^(Note 3)	61.8	52.4	28

Note 1:

Greening works form an integral part of projects. There is no separate data on the number of staff involved as dealing with such works constitutes only part of their duties.

Note 2:

The figures include only full-time government staff fully involved in tree management duties.

Note 3:

The expenditure figures are estimates, projected up to the end of March 2018, for greening works in projects and tree management works.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)099

(Question Serial No. 2221)

Head: (60) Highways Department

Subhead (No. & title): Not specified

Programme: (4) Technical Services

Controlling Officer: Director of Highways (Daniel K W CHUNG)

Director of Bureau: Secretary for Development

Question:

With the widening works for Tuen Mun Road completed in end of 2015, the Government carried out greening works on a number of noise barriers at various road sections between Tuen Mun and Tsuen Wan. As observed, there was massive withering of vegetation on the greening noise barriers, which failed to achieve the purpose of greening. In this connection, please advise on the following:

1. What were the expenses for the maintenance of greening vegetation at Tuen Mun Road over the past year?
2. What is the frequency of watering and applying fertilizers for vegetation on the greening noise barriers at Tuen Mun Road?
3. What was the quantity of vegetation that was replaced due to withering over the past year? What was the overall percentage involved? Is it on the high side when compared with other greening noise barriers? If so, has the Government conducted any review to find out the cause?

Asked by: Hon MA Fung-kwok (Member Question No. (LegCo use): 75)

Reply:

Under the Reconstruction and Improvement of Tuen Mun Road project, vertical green (VG) panels spanning approximately 3.4 kilometres were installed on noise barriers. The Highways Department (HyD) and the Leisure and Cultural Services Department (LCSD) undertake regular maintenance of the vegetation on these panels in different sections of the project.

1. The horticultural maintenance work is carried out under a maintenance term contract. There is no separate itemised breakdown for the cost of such maintenance work.
2. An automatic irrigation system has been installed for VG panels and the plants are irrigated every day for around ten to 20 minutes. As the VG panels are newly constructed,

with their proprietary soil medium supplying the nutrients needed by the plants, fertilisation is unnecessary for the time being.

3. About 303 700 plants were installed in the VG panels and approximately 42 600 plants (14%) were replaced in 2017. The overall percentage involved was within an acceptable range, as the withering of plants was mainly caused by damage to pipelines and driplines, and mechanical breakdowns of the irrigation system. HyD and LCSD will continue to monitor the growing conditions of the plants to ensure the performance of the VG panels.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)100

(Question Serial No. 2610)

Head: (118) Planning Department

Subhead (No. & title): Not specified

Programme: (1) Territorial Planning

Controlling Officer: Director of Planning (Raymond LEE)

Director of Bureau: Secretary for Development

Question:

It is stated in Matters Requiring Special Attention in 2018–19 under Programme (1) of this Head that the Government will continue to provide strategic planning input to Lantau development and conservation and other related studies. In this connection, please advise this Committee, in point form, of the details of the supporting measures to facilitate the taking forward of such work and the estimated expenditure for each measure.

Asked by: Hon CHOW Ho-ding, Holden (Member Question No. (LegCo use): 52)

Reply:

The Territorial Planning Branch of the Planning Department (PlanD) will continue to provide planning advice on and inputs to the spatial planning and conservation aspects related to the Sustainable Lantau Blueprint from a strategic planning perspective. Such work includes providing support to the Lantau Development Advisory Committee and its sub-committees, and various studies for Lantau including the “Study on Traffic, Transport and Capacity to Receive Visitors for Lantau - Feasibility Study” and the “Ecological Study for Pui O, Shui Hau, Tai O and Neighbouring Areas - Feasibility Study”.

Since the bulk of the work is mainly undertaken as part of the overall duties of the staff of PlanD, we are unable to provide a breakdown on the estimated expenditure solely for this area of work.

- End -

CONTROLLING OFFICER'S REPLY**DEVB(W)101****(Question Serial No. 1960)**Head: (194) Water Supplies DepartmentSubhead (No. & title): (000) Operational ExpensesProgramme: (1) Water Supply: Planning and DistributionControlling Officer: Director of Water Supplies (C L WONG)Director of Bureau: Secretary for DevelopmentQuestion:

What were the numbers of reports of fresh water main bursts and salt water main bursts in various districts that the Water Supplies Department received in each of the past 3 years? What was the quantity of fresh water wasted each year? What is the progress of Government's Replacement and Rehabilitation Programme for water mains?

Asked by: Hon CHAN Hak-kan (Member Question No. (LegCo use): 50)Reply:

The numbers of water main burst cases in 2015, 2016 and 2017 by districts are tabulated below –

District	Fresh Water			Salt Water		
	2015	2016	2017	2015	2016	2017
Central & Western	4	3	3	3	0	2
Eastern	2	7	6	4	4	6
Islands	3	9	2	0	0	0
Southern	2	3	1	1	1	1
Wan Chai	0	2	6	1	1	2
Kowloon City	9	7	1	16	11	4
Kwun Tong	2	2	0	4	7	6
Sham Shui Po	2	1	2	3	3	1
Wong Tai Sin	2	0	0	4	0	2
Yau Tsim Mong	5	4	1	12	3	3
North	7	1	0	0	1	0
Sai Kung	4	2	1	2	4	2
Sha Tin	6	5	2	2	1	4
Tai Po	3	2	1	12	6	2

Kwai Tsing	8	3	5	6	7	9
Tuen Mun	3	2	0	4	0	6
Tsuen Wan	1	3	2	2	3	2
Yuen Long	6	8	3	0	0	0
Total	69	64	36	76	52	52

The amount of water drained away due to fresh water main bursts was less than 0.01% of the total fresh water supplied.

The programme of replacement and rehabilitation of about 3 000 km water mains was implemented in stages starting from 2000. All stages of the programme were substantially completed by end 2015. The outstanding works remaining include some connections of the newly replaced/rehabilitated water mains to the customers and a few sections of mainlaying works with difficult site conditions due to heavy traffic, congested underground utilities or noise restriction. They are anticipated to be completed within 2018.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)102

(Question Serial No. 0718)

Head: (194) Water Supplies Department
Subhead (No. & title): Not Specified
Programme: (2) Water Quality Control
Controlling Officer: Director of Water Supplies (C L WONG)
Director of Bureau: Secretary for Development

Question:

The residues of treatment agents and disinfectants for drinking water may combine with the chemicals in water to form health-affecting chemical substances. In this regard, are regular tests conducted by the Water Supplies Department?

Asked by: Hon CHAN Tanya (Member Question No. (LegCo use): 10)

Reply:

All raw water undergoes stringent treatment processes at the water treatment works in Hong Kong before being supplied to the customers. The Water Supplies Department (WSD) has implemented a comprehensive water quality monitoring programme by taking water samples from water treatment works, service reservoirs, distribution networks and consumers' taps to monitor their water quality including the by-products formed from treatment chemicals and disinfectants to ensure the safety of the drinking water.

According to the monitoring results, the quality of treated water supplied by WSD complies fully with the Hong Kong Drinking Water Standards, which currently adopt the guideline values/provisional guidelines values recommended by the World Health Organization's Guidelines for Drinking-water Quality and the treated water is safe for consumption.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)103

(Question Serial No. 0101)

Head: (194) Water Supplies Department

Subhead (No. & title): Not Specified

Programme: (3) Customer Services

Controlling Officer: Director of Water Supplies (C L WONG)

Director of Bureau: Secretary for Development

Question:

What was the number of applications for meters in each of the past 4 years (i.e. from 2014 to 2017)? And, what was the respective number of applications made by the catering industry out of the total? What was the average, longest and shortest time needed respectively for handling applications for meters and completing installation of meters in each year of the same period? And, what were the respective figures for the catering industry? How many complaints about meters were received in each year of the same period? And, what was the respective number of complaints received from the catering industry? What were the respective expenditure and staffing required for processing meter applications for each of the said period and the estimated expenditure and staffing for 2018?

Asked by: Hon CHEUNG Yu-yan, Tommy (Member Question No. (LegCo use): 33)

Reply:

The applications for water supply are mainly for new buildings and from various trades including the catering industry. The whole approval process of the applications for water supply generally involves vetting of plumbing proposals submitted by the applicants, checking of their pipes/fittings proposals and inspection of the completed plumbing works. The Water Supplies Department (WSD) does not readily have information on the time for handling individual processes of these applications, but we can capture the total processing time of the whole approval process, i.e. from first application for water supply to the final approval of the completed plumbing works. The total processing time includes not only the time taken by WSD to process the application but also the time taken by the applicant for submission of plumbing proposal, revision(s) and supplementary information, and rectification of plumbing works not complying with the requirement. The numbers of applications for water supply, the total processing time, the numbers of staff and associated expenditures involved in processing the applications for new buildings and catering industry in the past four years from 2014 to 2017 are tabulated below.

	2014		2015		2016		2017	
	New Buildings	Catering	New Buildings	Catering	New Buildings	Catering	New Buildings	Catering
Number of applications #	2 510	379	2 224	305	1 871	136	1 303	291
Average total processing time of completed cases in calendar days	155 (12 – 797)^	81 (11 – 444)^	222 (15 – 647)^	129 (15 – 549)^	150 (26 – 325)^	105 (37 – 374)^	146 (15 – 307)^	98 (35 – 302)^
Number of staff and associated expenditure involved in processing the applications##	74 \$25 million		75 \$27 million		98 \$39 million		108 \$45 million	

This represents the number of applications received in that year that have also obtained approval of the completed plumbing works.

Applications from the catering industry are handled together with other applications by the same teams. There is no breakdown of the numbers of staff involved in handling applications from the catering industry.

^ The figures in bracket represent the range of the total processing time in calendar days.

Among the above four years, the average total processing time of applications for water supply in 2015 is comparatively longer. This is mainly due to the implementation of various measures for enhancing drinking water safety in the wake of the excess lead-in-water incident in July 2015. The vetting of applications for water supply involved more procedures and the processing time was therefore lengthened. With a view to shortening the processing time of applications for water supply, the WSD has implemented various measures, including streamlining internal workflow and deploying as well as recruiting additional manpower to handle the applications. These measures have been proved to be effective. The WSD will continue to review and enhance these measures to further shorten the time needed to process applications for water supply.

In addition, the WSD has implemented a pilot scheme in November 2017 to enhance the processing of applications for water supply from the catering industry. As at January 2018, 126 applications have been received under the scheme and among which 20 applications have obtained approval of the completed plumbing works, with an average total processing time of 30 days. Preliminary results of the pilot scheme show that the processing time of applications by the catering industry for water

supply can be substantially shortened which is welcomed by the plumbing industry. The WSD will continue to monitor the performance of the pilot scheme. If its effectiveness could sustain, the WSD is prepared to adopt such scheme as a standing arrangement.

The numbers of complaints relating to water meters in 2014, 2015, 2016 and 2017 were 278, 225, 282 and 281 respectively. The complaints mainly concerned defective meter and wrong meter arrangement which had been duly followed up. We do not maintain separate complaint record for the catering industry.

The expenditures associated with the processing of applications for water supply from 2014 to 2017 were shown in the above table and were mainly on staff costs.

The estimated number of staff involved in handling applications for water supply in 2018 is 108 and the associated expenditure is \$46 million.

- End -

CONTROLLING OFFICER'S REPLY**DEVB(W)104****(Question Serial No. 1038)**

Head: (194) Water Supplies Department

Subhead (No. & title): Not Specified

Programme: (1) Water Supply: Planning and Distribution

Controlling Officer: Director of Water Supplies (C L WONG)

Director of Bureau: Secretary for Development

Question:

It is mentioned under Programme (1) that the Water Supplies Department will study the feasibility of relocating service reservoirs into caverns. In this regard, please inform this Committee, in a tabular format, of:

1. the location, name and area of the service reservoirs being considered;
2. the future land uses of the released sites;
3. whether there will be a change in water quality after the relocation; if yes, the details of it.

Asked by: Hon HO Kai-ming (Member Question No. (LegCo use): 52)

Reply:

1. Details of service reservoirs being considered for relocation into caverns are tabulated below:

Name	Location	Approximate area of service reservoir(s) (square metre)
Diamond Hill fresh water and salt water service reservoirs	Sha Tin Pass Road, Wong Tai Sin	9 400
Yau Tong fresh water and salt water service reservoirs	Pik Wan Road, Yau Tong	6 000
Yau Tong No. 2 fresh water service reservoir	Ko Chiu Road, Yau Tong	7 300
Tsuen Wan No. 2 fresh water service reservoir	Shing Mun Road, Tsuen Wan	6 550

2. For the relocation of Diamond Hill fresh water and salt water service reservoirs into caverns, feasibility of relocation has been established. At present, we have

consulted the Development Panel of Legislative Council (LegCo) on the funding proposal to upgrade the investigation, design and associated site investigation works related to the relocation to Category A and will seek funding approval from Finance Committee of the LegCo. The future land uses of the released site are subject to a separate planning and engineering study to be carried out in due course.

For the relocation of Yau Tong fresh water and salt water service reservoirs, Yau Tong No. 2 fresh water service reservoir and Tsuen Wan No. 2 fresh water service reservoir into caverns, the relevant feasibility studies are under way. Upon establishing the feasibility of their relocations, the future land uses of the released sites will be considered at a subsequent stage.

3. Relocation of service reservoirs into caverns will not affect the water quality.

- End -

CONTROLLING OFFICER'S REPLY**DEVB(W)105****(Question Serial No. 2872)**

Head: (194) Water Supplies Department

Subhead (No. & title): Not Specified

Programme: (1) Water Supply: Planning and Distribution

Controlling Officer: Director of Water Supplies (C L WONG)

Director of Bureau: Secretary for Development

Question:

It is mentioned under Programme (1) that the Water Supplies Department will implement the total water management strategy with focuses on water conservation and water loss management as well as on development of new water resources. In spite of Department's implementation of Water Intelligent Network (WIN), with the mains aging, many districts encounter main bursts every year. In this regard, please inform this Committee, in tabular format, of:

1. the number of main bursts occurred in each district in Hong Kong in the past 3 years;
2. the average time needed for repair of a main burst in the past 3 years;
3. the quantity in cubic metre of fresh water wasted in each main burst in the past 3 years;
4. the progress and details of the main replacement in the coming year.

Asked by: Hon HO Kai-ming (Member Question No. (LegCo use): 51)

Reply:

1. The numbers of fresh and salt water main bursts occurred in the past three years by districts are tabulated below –

District	Fresh Water			Salt Water		
	2015	2016	2017	2015	2016	2017
Central & Western	4	3	3	3	0	2
Eastern	2	7	6	4	4	6
Islands	3	9	2	0	0	0
Southern	2	3	1	1	1	1
Wan Chai	0	2	6	1	1	2
Kowloon City	9	7	1	16	11	4
Kwun Tong	2	2	0	4	7	6
Sham Shui Po	2	1	2	3	3	1

District	Fresh Water			Salt Water		
	2015	2016	2017	2015	2016	2017
Wong Tai Sin	2	0	0	4	0	2
Yau Tsim Mong	5	4	1	12	3	3
North	7	1	0	0	1	0
Sai Kung	4	2	1	2	4	2
Sha Tin	6	5	2	2	1	4
Tai Po	3	2	1	12	6	2
Kwai Tsing	8	3	5	6	7	9
Tuen Mun	3	2	0	4	0	6
Tsuen Wan	1	3	2	2	3	2
Yuen Long	6	8	3	0	0	0
Total	69	64	36	76	52	52

2. The average time needed for repair of a main burst in the past three years is tabulated below—

	Fresh Water			Salt Water		
	2015	2016	2017	2015	2016	2017
Average time needed for repair of a main burst (hours)	8.1	10.0	10.0	17.0	19.4	20.0

In 2016 and 2017, the average time needed for repair of a main burst has increased due to the more congested underground conditions with lots of utilities, making repair of the water mains more difficult. Besides, there were occasions when adjacent sections of water mains were found to be in unsatisfactory condition and had to be replaced, resulting in longer repair time.

As regards the longer average time needed for repair of a salt water main burst, in addition to the above factors, there were cases when the repair of the salt water main bursts was deferred to minimise the traffic impact in the daytime or noise nuisance at night-time, thus lengthening the repair time of salt water mains.

3. The average amount of water drained away due to a fresh water main burst in the past three years is tabulated below –

	Fresh Water		
	2015	2016	2017
Average amount of water drained away due to a fresh water main burst (cubic metre)	1,097	914	543

4. The programme of replacement and rehabilitation (the programme) of about 3 000 kilometres aged water mains was implemented in stages starting from 2000. All stages of the programme were substantially completed by end 2015. Given the much

improved condition of the water supply network after completion of the programme, the Water Supplies Department considers it will be more effective to sustain the healthiness of the network by a continuous risk-based assessment of the water mains on their need for improvement works including reprovisioning. The risk-based assessment comprises a review of the consequence and probability of failure of the water mains which takes into account various factors such as population and customers served, location, material, age, failure record, pipe size, etc. Based on the risk-based approach, a total of about 40 kilometres of water mains of high-risk or repeated failures will be reprovisioned in 2018-19.

- End -

CONTROLLING OFFICER'S REPLY**DEVB(W)106****(Question Serial No. 2874)**Head: (194) Water Supplies DepartmentSubhead (No. & title): (000) Operational ExpensesProgramme: Not SpecifiedControlling Officer: Director of Water Supplies (C L WONG)Director of Bureau: Secretary for DevelopmentQuestion:

It is mentioned in the Programme under the Budget that, as at 31 March 2018, there will be 4 483 posts in the establishment of the Water Supplies Department (WSD). Please inform this Committee of:

1. the WSD's establishment, the strength, and the numbers of vacancies and their percentage share by nature of work (categories of Water Supply, Water Quality Control, and Customer Services), duty/rank, and mode of employment in the past 3 years;
2. the WSD's increases in establishment and the involved expenditure by nature of work (categories of Water Supply, Water Quality Control, and Customer Services), duty/rank, mode of employment, and amount of salary in the past 3 years and the coming 1 year.

Asked by: Hon HO Kai-ming (Member Question No. (LegCo use): 50)Reply:

1. The establishment in the Water Supplies Department (WSD) of various grades as categorised by types of duties in the past three years is tabulated below:

Types of Duties	Grade [#]	Establishment		
		2015-16 (As at 31 March 2016)	2016-17 (As at 31 March 2017)	2017-18 (Estimated as at 31 March 2018)
Water Supply	Directorate Grades	12	12	12
	Professional Grades	265	264	263
	Technical Grades	1 445	1 444	1 449
	General Grades/Common	1 169	1 168	1 168

Types of Duties	Grade [#]	Establishment		
		2015-16 (As at 31 March 2016)	2016-17 (As at 31 March 2017)	2017-18 (Estimated as at 31 March 2018)
	Grades			
Sub-total:		2 891	2 888	2 892
Water Quality Control	Directorate Grades	1	1	3
	Professional Grades	27	33	36
	Technical Grades	80	91	98
	General Grades/Common Grades	28	29	32
Sub-total:		136	154	169
Customer Services	Directorate Grades	1	1	1
	Professional Grades	28	34	35
	Technical Grades	427	438	439
	General Grades/Common Grades	510	510	520
Sub-total:		966	983	995
Management and Support	Directorate Grades	9	9	9
	Professional Grades	13	12	12
	Technical Grades	13	14	14
	General Grades/Common Grades	379	386	392
Sub-total:		414	421	427
Total:		4 407	4 446	4 483

involving around 100 ranks in the WSD

We do not have the breakdown of strength and vacancies as categorised by types of duties. The strength / vacancies and the vacancy rates in the WSD of various grades in the past three years are tabulated below:

Grade [#]	2015-16 (As at 31 March 2016)		2016-17 (As at 31 March 2017)		2017-18 (Estimated as at 31 March 2018)	
	Strength [*]	Vacancy (%)	Strength [*]	Vacancy (%)	Strength [*]	Vacancy (%)
Directorate Grades	22	1 (4.3)	25	-2 (N/A)	22	3 (12.0)
Professional Grades	341	-8 (N/A)	348	-5 (N/A)	351	-5 (N/A)
Technical Grades	1 926	39 (2.0)	1 942	45 (2.3)	1 941	59 (3.0)
General Grades/ Common Grades	1 656	430 (20.6)	1 609	484 (23.1)	1 736	376 (17.8)
Total:	3 945	462 (10.5)	3 924	522 (11.7)	4 050	433 (9.7)

involving around 100 ranks in the WSD

* staff are appointed on civil service terms; the strength may be greater than the establishment in some grades, thus giving a negative figure in the vacancy in the above table, mainly due to the inclusion of officers on pre-retirement leave in the strength figures.

2. The draft Estimates sought to increase the establishment ceiling by 27 and 45 non-directorate posts for 2015-16 and 2016-17 respectively. The draft Estimate for 2017-18 sought to increase the establishment ceiling by 20 non-directorate posts, comprising the creation of 23 posts and the lapse of three time-limited posts, and create two directorate posts (subject to the approval of the Legislative Council Finance Committee). The net increase of posts is therefore 22. The draft Estimate for 2018-19 seeks to increase the establishment ceiling by 83 non-directorate posts, comprising the creation of 84 posts and the lapse of one time-limited post, resulting in a net increase of 83 posts.

The additional posts envisaged in the draft Estimates and categorised by types of duties and their salaries are tabulated below. These do not include the creation or deletion of non-directorate posts by the Director of Water Supplies under delegated power, subject to the condition that the notional annual mid-point salary value specified in the relevant draft Estimate is not exceeded:

2015-16

Types of Duties	Rank	Number of Posts	Notional Annual Mid-point Salary Value of the Rank (\$million)
Water Supply	Engineer/ Assistant Engineer	1	0.674
Customer Services	Waterworks Inspector	1	0.594
	Assistant Waterworks Inspector	5	0.373
	Consumer Services Inspector	8	0.279
	Works Supervisor II	6	0.247
	Assistant Clerical Officer	6	0.233
Total:		27	

2016 -17

Types of Duties	Rank	Number of Posts	Notional Annual Mid-point Salary Value of the Rank (\$million)
Water Supply	Engineer/ Assistant Engineer	1	0.702
Water Quality Control	Senior Engineer	1	1.309
	Senior Mechanical Engineer	1	1.309
	Senior Waterworks Chemist	1	1.309
	Waterworks Chemist	2	0.851
	Engineer/ Assistant Engineer	4	0.702
	Mechanical Engineer/ Assistant Mechanical Engineer	2	0.702
	Waterworks Inspector	4	0.622
	Engineering Laboratory Technician I	3	0.517
	Assistant Waterworks Inspector	2	0.391
	Consumer Services Inspector	6	0.291
	Engineering Laboratory Technician II/ Student Engineering Laboratory Technician	6	0.241
	Laboratory Attendant	2	0.203
	Water Sampler	2	0.203
Customer Services	Consumer Services Inspector	2	0.291
Management and Support	Motor Driver	6	0.203
Total:		45	

2017-18

Types of Duties	Rank	Number of Posts	Notional Annual Mid-point Salary Value of the Rank (\$million)
Water Supply	Engineer/ Assistant Engineer	1	0.733
Water Quality Control	Administrative Officer Staff Grade C	1	2.056
	Chief Engineer	1	1.733
	Senior Mechanical Engineer	1	1.364
	Senior Waterworks Chemist	1	1.364

Types of Duties	Rank	Number of Posts	Notional Annual Mid-point Salary Value of the Rank (\$million)
	Engineer/ Assistant Engineer	1	0.733
	Assistant Waterworks Inspector	1	0.409
	Consumer Services Inspector	1	0.305
Customer Services	Systems Manager	1	0.971
	Analyst/ Programmer I	3	0.713
	Accounting Officer II	1	0.451
	Assistant Waterworks Inspector	1	0.409
	Assistant Clerical Officer	6	0.255
Management and Support	Executive Officer II	1	0.472
	Motor Driver	4	0.212
	Total:	25	

2018-19

Types of Duties	Rank	Number of Posts	Notional Annual Mid-point Salary Value of the Rank (\$Million)
Water Supply	Senior Engineer	1	1.390
	Engineer/ Assistant Engineer	6	0.749
	Electrical Engineer/ Assistant Electrical Engineer	1	0.749
	Waterworks Inspector	1	0.670
	Senior Technical Officer	1	0.584
	Liaison Officer II	1	0.442
	Assistant Waterworks Inspector	2	0.421
	Works Supervisor II	1	0.279
	Technical Officer/ Technical Officer Trainee	1	0.269
	Assistant Clerical Officer	1	0.263
	Artisan	2	0.218
Water Quality Control	Engineer/ Assistant Engineer	2	0.749
	Mechanical Engineer/ Assistant Mechanical Engineer	1	0.749
	Waterworks Inspector	2	0.670
	Engineering Laboratory Technician I	1	0.557
	Assistant Waterworks Inspector	7	0.421
	Consumer Services Inspector	6	0.314

Types of Duties	Rank	Number of Posts	Notional Annual Mid-point Salary Value of the Rank (\$Million)
	Works Supervisor II	1	0.279
	Engineering Laboratory Technician II/ Student Engineering Laboratory Technician	3	0.260
	Laboratory Attendant	1	0.218
	Water Sampler	3	0.218
	Artisan	3	0.218
	Clerical Assistant	1	0.205
	Workman II	2	0.163
Customer Services	Waterworks Inspector	4	0.670
	Clerical Officer	3	0.421
	Meter Reader I	1	0.314
	Assistant Clerical Officer	10	0.263
	Meter Reader II	1	0.218
	Clerical Assistant	5	0.205
Management and Support	Analyst/ Programmer I	3	0.734
	Analyst/ Programmer II	1	0.486
	Computer Operator I	1	0.401
	Motor Driver	4	0.218
	Total:	84	

The above posts are/ will be filled by staff appointed on civil service terms.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)107

(Question Serial No. 2171)

Head: (194) Water Supplies Department

Subhead (No. & title): Not Specified

Programme: (2) Water Quality Control

Controlling Officer: Director of Water Supplies (C L WONG)

Director of Bureau: Secretary for Development

Question:

The Water Supplies Department is responsible for water quality control. Regarding the incident of unpleasant odour in the water supplied to Tsuen Wan and Kwai Ching districts on 19 November, please inform this Committee:

1. In the report on the incident, the investigation revealed that the contractor did not seal off the two openings without plastic curtains for air insulation at the locations of the access manholes / cat ladders. Has the Department taken any punitive action against the contractor and made a claim for the additional cost incurred in the incident from the contractor? If yes, what are the details; if no, what are the reasons?

2. The investigation report pointed out that "The site work was supervised by a Works Supervisor II of the WSD. Both the staff responsible for reviewing the material and methodology proposed by the contractor and the staff supervising the work had underestimated the possibility that the VOCs released from the protective coating material in the eastern compartment could get into in the western compartment in operation through the two openings and dissolve in the drinking water." Were the related staff punished for the incident?

3. Did the Department adopt and implement the recommendations given in the report? If yes, what are the details and progress? If not, what are the reasons? How can the recurrence of the incident be prevented?

Asked by: Hon KWOK Ka-ki (Member Question No. (LegCo use): 10)

Reply:

1. The unsatisfactory performance of the contractor has been reflected in its performance report. We are also considering claiming the contractor for the additional cost incurred due to the incident.

2. The incident showed that the staff responsible for reviewing the material and methodology proposed by the contractor and the staff supervising the works lacked the awareness of the possible impact of the maintenance works on drinking water quality. In this connection, we consider that provision of necessary training to the staff is more appropriate than taking disciplinary action against them. To this end, we have already taken steps to strengthen training for front-line staff to enhance their awareness of the possible risks on drinking water quality posed by construction and maintenance works.
3. All improvement measures as recommended in the report have been implemented. We believe that with the implementation of all the recommendation measures, the recurrence of the incident can be effectively prevented.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)108

(Question Serial No. 2620)

Head: (194) Water Supplies Department

Subhead (No. & title): Not Specified

Programme: (2) Water Quality Control

Controlling Officer: Director of Water Supplies (C L WONG)

Director of Bureau: Secretary for Development

Question:

The Water Supplies Department (WSD) will continue to review the Waterworks Ordinance (Cap. 102) and Waterworks Regulations (Cap. 102A) to safeguard the drinking water quality through enhanced regulatory control of the inside services. In this regard, would the Government advise this Committee:

- 1 What were the details of the review and the enhancement measures adopted in the past 3 years?
- 2 Will any review targeting at the pollution to the water quality brought forth by emerging contaminant be included? For instance, how to ensure microplastics are kept away from the drinking water system and to prevent the citizens from consuming microplastics from drinking the water supplied by the WSD?

Asked by: Hon KWOK Wai-keung (Member Question No. (LegCo use): 50)

Reply:

1. The Water Supplies Department (WSD) has reviewed and put forth the Waterworks (Amendment) Bill 2017, Waterworks (Amendment) Regulation 2017 and Waterworks (Amendment)(No. 2) Regulation 2017 (collectively referred to as "the Amendments") to enhance the regulatory control of inside services to safeguard the drinking water quality. The Amendments have been approved by the Legislative Council, which have clearly specified the personnel who are allowed to carry out the construction etc. of inside services as well as their responsibilities. The Amendments have also enhanced the enforcement effectiveness by revising the time limit of prosecution by the Water Authority (WA) and empowering the WA to conduct inspection during construction etc. of inside services, thus enhancing the deterrent effect of contravening the Waterworks Ordinance (Cap. 102) (WWO). Furthermore, the Amendments updated the applicable technical requirements and standards for plumbing materials.

WSD is conducting a holistic review of the WWO and the Waterworks Regulations (Cap. 102A) for further enhancing the plumbing material control, process control of construction

of inside services and maintenance of inside services to safeguard drinking water quality.

2. WSD has established a mechanism to review emerging contaminants in drinking water. The mechanism involves literature review conducted by in-house Waterworks Chemists and engagement of consultants to provide regular updates on the latest worldwide development on the subject.

With regard to microplastics in drinking water, WSD has engaged a consultant to conduct a study which has revealed that there is currently no health-related guideline value for microplastics in the World Health Organisation's Guidelines for Drinking-water Quality. Also, according to the latest research findings, the risk associated with microplastics in drinking water on health is insignificant because drinking water is not the major source of human exposure to microplastics. Furthermore, the development of monitoring methodology for microplastics is still in the early stage of research and there is no internationally recognised standard method for monitoring microplastics in drinking water.

WSD will continue to keep in view the international researches and development on microplastics in drinking water.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)109

(Question Serial No. 1248)

Head: (194) Water Supplies Department

Subhead (No. & title): Not Specified

Programme: (3) Customer Services

Controlling Officer: Director of Water Supplies (C L WONG)

Director of Bureau: Secretary for Development

Question:

Regarding water main bursts and faults, would the Government inform this Committee:

(a) What were the respective numbers of cases of fresh water and salt water main bursts occurred in the territory in the past 2 years?

(b) Please use the following table to provide the information of cases of fresh water and salt water main bursts occurred in Yuen Long and Tuen Mun districts in the past 2 years:

Incident Date	Location	Type of Water Mains	Cause of Main Bursts	Time taken for Repair

(c) Does the Department have a plan in 2018-19 to replace the fresh water and salt water mains that have experienced main bursts in Yuen Long and Tuen Mun districts? If yes, what is the expenditure involved and what are the details?

Asked by: Hon LEUNG Che-cheung (Member Question No. (LegCo use): 14)

Reply:

(a) The numbers of fresh and salt water main bursts occurred in the territory in the past two years are tabulated below –

Year	Fresh Water	Salt Water	Total
2016	64	52	116
2017	36	52	88

(b) Details of the fresh and salt water main bursts occurred in Yuen Long and Tuen Mun in the past two years are tabulated in **Appendix I**.

(c) The programme of replacement and rehabilitation (the programme) of about 3 000 kilometres aged water mains was implemented in stages starting from 2000. All stages of the programme were substantially completed by the end of 2015. Given the much improved condition of the water supply network after completion of the programme, the Water Supplies Department considers it more effective to sustain the healthiness of the network by a continuous risk-based assessment of the water mains to determine the need for improvement works including re-provisioning. The risk-based assessment comprises a review of the consequence and probability of failure of the water mains taking into account various factors, such as population and customers served, location, material, age, failure record, pipe size, etc.

Based on the risk-based assessment, aged fresh water mains at Wang Yip Street West in Yuen Long and aged salt water mains at Lung Mun Road and Wu Chui Road in Tuen Mun will be re-provisioned in 2018-19 at an estimated expenditure of about \$28 million.

Appendix I

Details of the main bursts occurred in Yuen Long and Tuen Mun in the past two years are tabulated below –

Incident Date	Location	Type of Water Mains	Cause of Main Bursts	Time taken for Repair (hours)
18-Jan-2016	Wang Lee Street, Yuen Long	Fresh	Ground movement	7.2
29-Feb-2016	Yau Shin Street, Yuen Long	Fresh	Damaged by others	11.5*
19-Apr-2016	Wang Yip Street West, Yuen Long	Fresh	Ground movement	10.3*
05-May-2016	Sai Ching Street, Yuen Long	Fresh	Ground movement	7.8
22-May-2016	Fung Cheung Road, Yuen Long	Fresh	Ground movement	9.1*
11-Jun-2016	Shek Pai Tau Road, Tuen Mun	Fresh	Corrosion	13.1
16-Jun-2016	Lung Mun Road, Tuen Mun	Fresh	Ground movement	8.3*
01-Aug-2016	Hop Yick Road, Yuen Long	Fresh	Ground movement	6.8*
11-Aug-2016	Kung Um Road, Yuen Long.	Fresh	Ground movement	11.0*
20-Sep-2016	Leung King Street, Yuen Long	Fresh	Ground movement	7.8
15-Jan-2017	Wu Chui Road, Tuen Mun	Salt	Corrosion	10.0
17-Jan-2017	Tsing Lun Road, Tuen Mun	Salt	Corrosion	8.7
03-Mar-2017	Po Yip Street, Yuen Long	Fresh	Ground movement	10.0
07-Aug-2017	Mai Po Lung, Yuen Long	Fresh	Damaged by others	5.3
18-Apr-2017	Wu Chui Road, Tuen Mun	Salt	Ageing	11.7
19-Apr-2017	Lung Mun Road, Tuen Mun	Salt	Corrosion	29.1
13-Oct-2017	Lung Mun Road, Tuen Mun	Salt	Corrosion	12.3
15-Oct-2017	Ma Tin Road, Yuen Long	Fresh	Ground movement	13.3
19-Dec-2017	Lung Mun Road, Tuen Mun	Salt	Corrosion	18.7

Note(*): There was no water supply interruption in the case.

In the above fresh water main bursts, about half of them did not bring about water supply interruption to customers. For those fresh water main bursts causing water supply interruption, the water suspension was usually localised with only small number of customers affected.

The two salt water main bursts that occurred on 19 April 2017 and 19 December 2017 with much longer time taken for repair were isolated cases mainly due to the need to defer the repair works to avoid causing noise nuisance in the night time. For the former case, additional time was spent on locating the leakage spot and rectifying a defective control valve.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)110

(Question Serial No. 2218)

Head: (194) Water Supplies Department

Subhead (No. & title): Not Specified

Programme: (2) Water Quality Control

Controlling Officer: Director of Water Supplies (C L WONG)

Director of Bureau: Secretary for Development

Question:

Regarding the enhanced water quality monitoring programme, please provide the following information:

1. details of the programme, including manpower for manning, resources and procedures of monitoring;
2. what is the expenditure involved in implementing the enhanced water quality monitoring programme?

Asked by: Hon MA Fung-kwok (Member Question No. (LegCo use): 69)

Reply:

1. The Water Supplies Department (WSD) commenced the Enhanced Water Quality Monitoring Programme (Enhanced Programme) in December 2017 for monitoring the drinking water quality at consumers' taps and collecting local water quality data for review of the Hong Kong Drinking Water Standards. Under the Enhanced Programme, the WSD will collect water samples from the drinking water taps of randomly selected premises to test for the contents of the six metals, namely antimony, cadmium, chromium, copper, lead and nickel that could be present in an internal plumbing system.

The WSD will send letters to the consumers of the randomly selected premises to invite them to participate in the programme. Since participation in the Enhanced Programme is non-mandatory, additional premises as back-up will also be invited to ensure that sufficient water samples are collected. Therefore, not all of the invited premises will be visited for collecting water samples.

A sampling period will be stated in the invitation letter, which will usually start two weeks after the date of issue of the invitation letter. A sampling team will visit the selected

premises on any working day during the sampling period from 9 am to 5 pm to collect water samples. The team comprises a water sampler for collection of water samples and a licensed plumber for collection of plumbing information. If consent is obtained from the occupier during the visit, water samples will be collected from one of the drinking water taps in the premises. The water samples include a Tier 1 – Random Day Time (“RDT”) water sample and a Tier 2 – 30-minute stagnation (“30MS”) water sample. The Tier 2 water sample will only be tested if exceedance is found in the Tier 1 water sample to verify the test result. The whole sampling process will take about one hour.

The WSD will inform the consumers the water sampling test result within two weeks after the collection of water samples. The test results of the water samples collected under the Enhanced Programme will also be compiled as water quality statistics and uploaded to the WSD's website on a weekly basis.

At present, the WSD deploys one Senior Waterworks Chemist, two Waterworks Chemists, three Engineering Laboratory Technicians I, six Engineering Laboratory Technicians II, two Laboratory Attendants and two Water Samplers for the implementation of the Enhanced Programme. Additional posts will be created as necessary in 2018-19 to cater for sampling and testing of additional parameters that may be included in the Enhanced Programme.

The WSD has engaged an independent consultant to select premises for invitation to participate in the Enhanced Programme. The consultant also provides licensed plumbers to serve as members of the sampling teams.

2. The estimated expenditures for implementing the Enhanced Programme for monitoring the six metals are \$0.75 million and \$2.25 million in 2017-18 and 2018-19 respectively. These figures include the expenditures on (i) chemicals and consumables for collection and analysis of water samples, (ii) engagement of the independent consultant, and (iii) promotion of the Enhanced Programme.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)111

(Question Serial No. 2422)

Head: (194) Water Supplies Department

Subhead (No. & title): Not Specified

Programme: (3) Customer Services

Controlling Officer: Director of Water Supplies (C L WONG)

Director of Bureau: Secretary for Development

Question:

Regarding the programme of "Customer Services", would the Government advise this Committee of:

(a) the measures adopted in 2017-18 and will be adopted in 2018-19 by the Department to enforce, investigate, and prosecute cases related to the Waterworks Ordinance and Waterworks Regulations;

(b) the number of cases contravening the Waterworks Ordinance and Waterworks Regulations handled by the Department in the past 1 year and their nature (list the number of cases and their nature in tabular form); and

(c) the estimates of expenditure and staffing for enforcing the Waterworks Ordinance and Waterworks Regulations?

Asked by: Hon MAK Mei-kuen, Alice (Member Question No. (LegCo use): 41)

Reply:

(a) In 2017-18, the Water Supplies Department (WSD) continued to adopt risk-based inspections and surprise checks to detect suspected contravention cases of the Waterworks Ordinance (Cap. 102) (WWO) and Waterworks Regulations (Cap. 102A) (WWR) at target premises of higher risks based on previous records such as car parks, wet markets, etc. WSD also identified suspected contravention cases through other means, such as complaints received from the public, referrals from other departments, discoveries by WSD staff during the course of carrying out their duties, etc.

The Prosecution Unit of WSD is responsible for the investigation on the suspected cases identified. If a case is confirmed contravening the WWO and/or the WWR, as appropriate, one or more of the following enforcement actions will be made-

- Issuance of repair notices;
- Disconnection of water supply;
- Prosecution; and/or

- Suspension or cancellation of licences of concerned licensed plumbers.

In 2018-19, the WSD will be adopting similar measures against contravention of the WWO and/or the WWR.

- (b) The number of convicted cases of contravention of the WWO and the WWR in the past year is tabulated below-

Relevant Section of WWO or Regulation of WWR	Nature of Contravention	Number of convicted cases
Section 14	Construction, installation, alteration or removal of fire service or inside service without the permission of the Water Authority, or plumbing works not carried out as prescribed	42
Section 15	Construction, installation, alteration or removal of fire service or inside service not carried out by licensed plumbers	25
Section 29	Unlawful taking of water	101
Section 30	Pollution	3
Section 31	Damage to waterworks	17
Regulation 11	Hosepipe connected to inside services without passing through cistern or appliance or apparatus	8
Regulation 23	Installation or use of booster pump without the permission of the Water Authority	2
Regulation 44(b)	Contravention of condition of fishing licence	1
	Total	199

There were also five cases of suspension or cancellation of licences of licensed plumbers due to contravention of the WWO and the WWR in the past year.

- (c) In 2018-19, the estimated number of staff involved in the enforcement of the WWO and the WWR is about 190 and the associated staff cost is about \$66 million.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)112

(Question Serial No. 2691)

Head: (194) Water Supplies Department

Subhead (No. & title): Not Specified

Programme: (1) Water Supply: Planning and Distribution

Controlling Officer: Director of Water Supplies (C L WONG)

Director of Bureau: Secretary for Development

Question:

(a) It is learned that the consultant's report on desalination plant at Tseung Kwan O is supposed to be completed in the end of 2017. What is the latest development? Apart from seawater desalination, are there any specific and feasible measures to reduce the reliance on Dongjiang water?

(b) Please compare the costs of water produced by desalination (per cubic metre) between Hong Kong and overseas countries (e.g. Singapore, the UK, the USA, Australia, Canada, etc.) in 2017 and explain the differences.

(c) Please provide the estimates of expenditures on Dongjiang water (including total supply quantities, total water costs and average water costs per cubic metre) in the past 5 years and in 2018-19.

(d) Please compare the prices of Dongjiang water (per cubic metre) paid by Hong Kong and other Mainland cities (e.g. Shenzhen, Dongguan) which also consume Dongjiang water in the past 5 years and explain the differences.

(e) Please provide the quantities of the discharge of fresh water to the sea resulting from overflow from reservoirs and the total expenditures involved in the past 3 years.

Asked by: Hon MO Claudia (Member Question No. (LegCo use): 17)

Reply:

(a) The consultants engaged for the first stage of the proposed desalination plant at Tseung Kwan O (TKO) have completed the reference design of the plant. We have prequalified tenderers for the "Design, Build and Operate" contract for the plant in March 2018 and will invite tenders for this contract in due course. We have scheduled to brief members of the Panel on Development of the Legislative Council in April 2018, and seek funding approval of the Finance Committee subsequently with a view to commencing construction of the plant in end 2018 for its commissioning in 2022.

Currently, Hong Kong has a three-pronged water supply system, comprising rainwater from local catchments, imported Dongjiang (DJ) water from Guangdong (GD) Province and seawater for toilet flushing. To cope with the anticipated increase in water demand due to population and economic growth, and to enhance the resilience of our water sources to abate the impact of climate change, we have been implementing a number of water management measures on the supply and demand sides. The measures on the supply side include supplying reclaimed water to the north-eastern part of the New Territories for non-potable uses, and promoting wider use of grey water recycling and/or rainwater harvesting systems under suitable new government projects, apart from seawater desalination. Hong Kong will thus transform from the current three-pronged system into a six-pronged system. On the demand side, we have been extending the salt water supply networks to areas which otherwise consume fresh water for flushing. In addition, we have been striving to promote water conservation including promoting the use of water saving devices through the Water Efficiency Labelling Scheme, education on water conservation in kindergartens and primary schools, and collaboration with various stakeholders in organising activities to raise public awareness on water conservation.

(b) The estimated unit water production cost of the proposed desalination plant at TKO is about \$12-\$13 per cubic metre (m³) (at 2017 price level) including the distribution and customer services costs. If the distribution and customer services costs are excluded, the estimated unit water production cost will be about \$10.2 per m³ (at 2017 price level), which is comparable to those of other countries as set out below.

Country	Unit Production Cost (HK\$ per m³)
Spain (Carboneras)	7.4
Singapore (Singspring)	7.5
Middle East (Israel and Saudi Arabia)	3.9 to 26.3
United States of America	8.9 to 15.7
Australia	13.5 to 50.3

The above is based on information from the International Desalination Association, which excludes distribution and customer services costs. The variations in the unit production cost of the desalinated water in different countries are attributed to a number of factors including the construction cost, the energy cost, the seawater quality and temperature, and the environmental requirements.

(c) In the past five years, the annual supply ceiling in the DJ water supply agreements is 820 million m³. The annual expenditures in the past five years on purchasing DJ water are as follows:

Year	Expenditure (\$ million)	Average Unit Cost (\$ per m³)
2013	3,743.30	4.6
2014	3,959.34	4.8
2015	4,222.79	5.1
2016	4,491.52	5.5
2017	4,778.29	5.8

#The average unit cost is determined according to the annual supply ceiling of 820 million m³.

(d) We noticed there are reports stating that the DJ water prices paid by other GD cities which consume DJ water are lower than that paid by Hong Kong. We also noted that these GD cities are making other contributions to the supply and protection of DJ water (such as provision of land for the water supply infrastructures, investments on environmental protection, restricting developments for protection of water resources, etc.). It is therefore not appropriate to directly compare the DJ water prices paid by these cities to the price paid by Hong Kong.

(e) The overflow quantities from impounding reservoirs for these three years were 3.3 million m³ (2015), 28.5 million m³ (2016) and 48.4 million m³ (2017). All overflow water was locally collected rainwater naturally discharged by gravity from small and medium impounding reservoirs during or after heavy rainstorms. There was no overflow of water imported from DJ. The actual overflow quantities of each year depend on a number of factors, including rainfall intensity, rainfall distribution, frequency and duration of heavy rainstorms, etc. For example, the total rainfall in Hong Kong was 1 875 millimetres (mm) in 2015, but was more than 2 500 mm in 2016 and 2017. The collection and overflow of this locally collected rainwater did not result in any additional operation costs of the impounding reservoirs.

Every drop of water is precious. The Water Supplies Department has been exploring various means to reduce overflow from impounding reservoirs, including collaborating with the Drainage Services Department to take forward the Inter-Reservoirs Transfer Scheme. The Scheme involves building a tunnel to transfer the potential discharge from the Kowloon group of reservoirs to the Lower Shing Mun Reservoir. It achieves the dual objectives of reducing overflow into the drainage system for flood protection in the downstream urban areas and enhancing the collection of local yield.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)113

(Question Serial No. 0486)

Head: (194) Water Supplies Department

Subhead (No. & title): Not Specified

Programme: (3) Customer Services

Controlling Officer: Director of Water Supplies (C L Wong)

Director of Bureau: Secretary for Development

Question:

Regarding the number of customers of the Water Supplies Department (WSD) and the Meter Reader grade responsible for processing the meter reading work, please provide the following information for 2015-16, 2016-17, 2017-18 and 2018-19 (estimate):

- (a). the number of water meters required reading by Meter Readers;
- (b). the establishment and strength of Meter Readers in the WSD by rank, including Chief Meter Reader, Senior Meter Reader, Meter Reader I and Meter Reader II; and
- (c). please list by rank the average number of customers handled and meters read monthly by a Meter Reader.

Asked by: Hon POON Siu-ping (Member Question No. (LegCo use): 26)

Reply:

(a) The numbers of water meters read by Meter Readers in 2015-16, 2016-17, 2017-18 and 2018-19 (estimate) are tabulated below—

Financial Year	Number of Water Meters
2015-16 (as at 31 March 2016)	2 907 100
2016-17 (as at 31 March 2017)	2 955 377
2017-18 (as at 28 February 2018)	2 985 377
2018-19 (estimate)	3 046 000

(b) The establishment (Est.) and strength (Str.) of Meter Readers, including Chief Meter Reader (CMR), Senior Meter Reader (SMR), Meter Reader I (MRI) and Meter Reader II (MRII), are tabulated below-

Rank	2015-16 (as at 31 March 2016)		2016-17 (as at 31 March 2017)		2017-18 (as at 28 February 2018)		2018-19 (estimate)	
	Est.	Str.	Est.	Str.	Est.	Str.	Est.	Str.
CMR	5	5	5	5	5	5	5	5
SMR	8	8	8	8	10	10	10	10
MRI	53	53	53	53	51	51	52	52
MRII	94	91	94	90	94	85	95	95
Total	160	157	160	156	160	151	162	162

(c) Routine water meter reading for billing is normally performed by MRII three times a year. MRI are responsible for performing special water meter reading for resolution of disputes and investigation purposes. Both CMR and SMR do not perform water meter reading.

The average number of water meters read monthly by each Meter Reader in 2015-16, 2016-17, 2017-18 and 2018-19 (estimate) are tabulated below. However, there is no monthly average of number of customers handled because the number of customers served by a water meter varies significantly.

Financial Year	Average number of water meters read monthly by each staff	
	MRI	MRII
2015-16	140	7 732
2016-17	152	7 860
2017-18	127	7 940
2018-19 (estimate)	N/A ^{Note}	8 016

Note: No estimate could be provided as it depends on the number of special water meter reading required for resolution of disputes and investigation purposes.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)114

(Question Serial No. 2038)

Head: (194) Water Supplies Department

Subhead (No. & title): Not Specified

Programme: (2) Water Quality Control and (3) Customer Services

Controlling Officer: Director of Water Supplies (C L WONG)

Director of Bureau: Secretary for Development

Question:

The Water Supplies Department stated that during 2018-19, the Department will continue to review and enhance the control of the construction of the inside service including the review of the Waterworks Ordinance and Waterworks Regulations. Would the Department inform us the staffing responsible for the relevant work and how the work is allocated?

Asked by: Hon SHIU Ka-fai (Member Question No. (LegCo use): 49)

Reply:

In 2018-19, the Water Supplies Department will deploy two teams with a total of 13 professionals to continue to review and enhance the control of the construction of the inside service. One team, namely the Legislative Review Unit, comprising nine posts of professional rank will conduct a holistic review for legislative amendment of the Waterworks Ordinance (Cap. 102) and Waterworks Regulations (Cap. 102A) to enhance the control of the construction of the inside service. Another team comprising four posts of professional rank under the Technical Support Division will review and devise administrative measures as interim arrangement prior to the completion of legislative amendments.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)115

(Question Serial No. 2440)

Head: (194) Water Supplies Department

Subhead (No. & title): Not Specified

Programme: (2) Water Quality Control

Controlling Officer: Director of Water Supplies (C L WONG)

Director of Bureau: Secretary for Development

Question:

The Water Supplies Department (WSD) is responsible for water quality control by taking water samples from treatment works, service reservoirs, connection points and customers' taps to ensure that water safety conforms to the standards. Would the WSD provide the information of the past 5 years regarding the maintenance work for treatment works and reservoirs, including the form of maintenance, expenditure, staffing, and number of times?

Asked by: Hon WONG Kwok-kin (Member Question No. (LegCo use): 29)

Reply:

The maintenance works carried out by Water Supplies Department (WSD) for water treatment works and service reservoirs include civil works, such as cleansing of service reservoirs and water storage tanks, replacement of treatment works filter media, repair of joint sealants, etc., as well as maintenance, fault investigation and repair of mechanical and electrical plants, telemetry and Supervisory Control and Data Acquisition equipment and fire service equipment.

These maintenance works are conducted either by the term contractor staff under the supervision of in-house staff or carried out by WSD staff directly. The staffing and expenditure for the past five years are tabulated below:

Year	Number of Staff and Associated Expenditure	Expenditure under Maintenance Term Contracts
2013	158 \$55.6 million	\$242 million
2014	156 \$57.6 million	\$266 million
2015	158 \$61.0 million	\$267 million
2016	156 \$63.0 million	\$280 million

2017	157 \$65.1 million	\$314 million
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Over the past five years from 2013 to 2017, WSD on average issued about 1 430 works orders yearly to the term contractors for the maintenance works which were supervised by WSD in-house staff, and carried out about 6 400 planned maintenance works of minor nature yearly by in-house staff directly.

There are currently ten engineers, 18 waterworks inspectors, 28 assistant waterworks inspectors and 101 works supervisors in WSD involved in the supervision of and carrying out the maintenance works for the water treatment works and service reservoirs.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)116

(Question Serial No. 1410)

Head: (194) Water Supplies Department

Subhead (No. & title): Not Specified

Programme: (3) Customer Services

Controlling Officer: Director of Water Supplies (C L WONG)

Director of Bureau: Secretary for Development

Question:

1. The Department stated that it will be enforcing the Waterworks Ordinance and Waterworks Regulations including tightening plumbing material control and commissioning requirements of new plumbing installations. What are the details of the tightening of commission requirements?

Asked by: Hon WONG Pik-wan, Helena (Member Question No. (LegCo use): 26)

Reply:

The Water Supplies Department (WSD) has implemented the following measures for tightening commissioning of new plumbing installations:

- (i) A more detailed checklist for inspection of new plumbing installations by the WSD has been devised. An enhanced point penalty system against licensed plumbers for plumbing works not carried out in accordance with requirements has also been implemented.
- (ii) Material check will be carried out for soldered pipe joints during the inspection carried out by the WSD.
- (iii) Systematic flushing will be carried out for new plumbing installations with a view to reducing metal leaching from new pipes and fittings. To ensure that the new plumbing installations have been adequately flushed, 6-hour stagnation water samples are required to be taken for testing of six metals, namely antimony, cadmium, chromium, copper, nickel and lead. This new requirement has become effective since January 2018.

- End -

CONTROLLING OFFICER'S REPLY**DEVB(W)117****(Question Serial No. 1411)**Head: (194) Water Supplies DepartmentSubhead (No. & title): Not SpecifiedProgramme: (2) Water Quality ControlControlling Officer: Director of Water Supplies (C L WONG)Director of Bureau: Secretary for DevelopmentQuestion:

1. The Department stated that there will be an increase of 33 civil service posts for enhancing drinking water safety. Please list their post titles and terms of reference.

Asked by: Hon WONG Pik-wan, Helena (Member Question No. (LegCo use): 27)Reply:

The details of the 33 posts to be created in 2018-19 for enhancing drinking water safety are tabulated below: –

Rank	Number of Posts	Duties
Engineer/Assistant Engineer	1	To carry out the enhanced water quality monitoring programme
Waterworks Inspector	1	
Engineering Laboratory Technician II/Student Engineering Laboratory Technician	2	
Laboratory Attendant	1	
Water Sampler	3	
Engineer/Assistant Engineer	1	To promote Water Safety Plan for Buildings
Waterworks Inspector	1	(i) To conduct inspections of plumbing works during construction stage including
Assistant Waterworks Inspector	6	
Consumer Services Inspector	6	

Rank	Number of Posts	Duties
		<p>checking whether the relevant provisions under the Waterworks (Amendment) Ordinance 2018 are complied with by the designated persons (such as licensed plumbers, skill workers, etc.); and</p> <p>(ii) to handle investigations and prosecutions of non-compliance cases, which are anticipated to increase following the extension of the time limit for prosecution under the Waterworks (Amendment) Ordinance 2018.</p>
Mechanical Engineer/ Assistant Mechanical Engineer	1	To operate a new material testing laboratory to provide testing services to support the enhanced surveillance on plumbing products approved by the Water Supplies Department under the General Acceptance System.
Assistant Waterworks Inspector	1	
Works Supervisor II	1	
Artisan	3	
Workman II	2	
Clerical Assistant	1	
Engineering Laboratory Technician I	1	
Engineering Laboratory Technician II/Student Engineering Laboratory Technician	1	
Total:	33	

- End -

CONTROLLING OFFICER'S REPLY**DEVB(W)118****(Question Serial No. 2109)**

Head: (194) Water Supplies Department

Subhead (No. & title): Not Specified

Programme: (1) Water Supply: Planning and Distribution

Controlling Officer: Director of Water Supplies (C L WONG)

Director of Bureau: Secretary for Development

Question:

(i) Every year the Government purchases Dongjiang water from the Guangdong authorities. What is the production cost of each step starting from raw water cost, pumping process, treatment by water treatment works to the transmission to the customers' taps?

(ii) Regarding the fresh water from local reservoirs and reclaimed water, what is the production cost of each step in their pumping process, treatment by water treatment works, and transmission to the customers' taps?

Asked by: Hon WONG Pik-wan, Helena (Member Question No. (LegCo use): 69)

Reply:

The breakdown of the unit production cost for locally collected rain water (local water) and Dongjiang (DJ) water at 2016-17 prices are as follows:-

	Unit Cost (\$ per cubic metre)	
	DJ water	Local water
Raw water cost	5.6	-
Collection and delivery to water treatment works	0.6 ¹	
Treatment by water treatment works	1.0 ¹	
Distribution and customer Services	2.9 ¹	
Total Unit Production Cost	10.1	4.5

Note 1 : There is no separate breakdown on these items for DJ water and local water.

The production cost of reclaimed water varies with the quality of treated effluent (for production of the reclaimed water) which depends on the treatment level of the sewage treatment works producing the treated effluent, as well as the extent of supply and distribution network. The estimated unit production cost of reclaimed water to be supplied to Sheung Shui and Fanling using tertiary treated effluent from Shek Wu Hui Sewage

Treatment Works from 2022 onwards for non-potable use is around \$6.4 per cubic metre at 2016-17 price level with a breakdown of \$0.5 per cubic metre and \$5.9 per cubic metre for the costs on production of reclaimed water and distribution and customer services respectively. As the supply of reclaimed water is not for human consumption purpose and the above unit cost on distribution and customer services for the reclaimed water supply for Sheung Shui and Fanling is project specific, a direct comparison with the unit cost on distribution and customer services of local water or DJ water, which is the average cost for the territory wide, is not appropriate.

- End -

CONTROLLING OFFICER'S REPLY

DEVB(W)119

(Question Serial No. 2110)

Head: (194) Water Supplies Department

Subhead (No. & title): Not Specified

Programme: (3) Customer Services

Controlling Officer: Director of Water Supplies (C L WONG)

Director of Bureau: Secretary for Development

Question:

Would the Water Supplies Department provide the number of cases and the total amount of arrears of water charges in the past 5 years by District Council district?

Asked by: Hon WONG Pik-wan, Helena (Member Question No. (LegCo use): 70)

Reply:

The number of cases and the total amount of arrears of water charges in the past five years are tabulated below.

	2013-14	2014-15	2015-16	2016-17	2017-18 (up to 28 February 2018)
Number of Cases	12 257	10 692	11 608	11 611	11 635
Total Amount of Arrears (\$ million)	5.7	5.2	6.0	6.0	5.6

We have no breakdown of such cases by district.

- End -