Examination of Estimates of Expenditure 2026-27 Reply Serial No.

DEVB(W)096

CONTROLLING OFFICER'S REPLY

(Question Serial No. 0505)

Head: (39) Drainage Services Department

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

Programme: (1) Stormwater Drainage

Controlling Officer: Director of Drainage Services (MOK Wing-cheong)

Director of Bureau: Secretary for Development

Question:

With extreme weather events becoming increasingly frequent, there is a rising risk of flash flooding in many parts of Hong Kong due to heavy rainstorms. Regarding the flood prevention work of the Drainage Services Department (DSD), would the Government inform this Committee:

(a) of the number of flooding reports received by the DSD (with a breakdown by District Council district, location, date, and whether "Mobile Powerful Pumping Robots" were deployed) in the past 3 years;

(b) of the staff establishment of (i) DSD personnel and (ii) personnel engaged by outsourced contractors for handling flooding incidents, and the respective expenditures on salaries, operations, equipment and supplies in the past 3 years;

(c) of the (i) locations and (ii) handling capacities of completed stormwater drainage systems and stormwater storage tanks in the past 5 years;

(d) of the (i) locations, (ii) handling capacities and (iii) anticipated completion dates of stormwater drainage systems and stormwater storage tanks under construction or nearing completion this year and in the next 5 years;

(e) given that in recent years eastern areas such as Chai Wan and Tseung Kwan O have frequently been affected by flooding induced by heavy rainstorms, and the Hong Kong Observatory's Distribution Map of Mean Annual Rainfall in Hong Kong (1991-2020) also shows persistently higher rainfall in those areas, whether the DSD will carry out additional projects for stormwater drainage system and stormwater storage tanks to enhance the handling capacities there; if yes, of the locations, project timetables, handling capacities and costs; if not, of the reasons;

(f) of the current effectiveness of the DSD's Pilot Scheme on Wading Line System; if the results are satisfactory, whether the scheme will be regularised and expanded to more locations (if so, please provide a breakdown by District Council district); and if the results are unsatisfactory, how will the Scheme be optimised;

(g) of the staff establishment, and the respective expenditures on salaries, operations, equipment and supplies involved in the management of Flood Monitoring Devices and monitoring system of the Wading Line System mentioned above; and

(h) of the grades, posts and salary expenditures involved in achieving an estimated net decrease of 43 posts under Programme (1) in 2026-27; and how will the DSD ensure that its manpower can cope with a potentially increasing flood prevention workload?

Asked by: Hon NG Chau-pei, Stanley (LegCo internal reference no.: 29)

Reply:

Our reply to the Member's question is as follows:

(a) In the past 3 years, the Drainage Services Department (DSD) confirmed 312 flooding cases, and the information is consolidated as follows:

District	2023	2024	2025	No. of turnouts of powerful pumping robots in 2025*
Central and Western	1	0	8	2
Wan Chai	5	0	0	0
Eastern	17	2	4	3
Southern	8	0	7	2
Yau Tsim Mong	8	0	1	0
Sham Shui Po	8	0	2	0
Kowloon City	5	0	1	0
Wong Tai Sin	3	0	6	2
Kwun Tong	7	5	7	4
Tsuen Wan	0	0	4	0
Tuen Mun	3	0	3	2
Yuen Long	32	2	14	5
North	10	9	11	4
Tai Po	10	3	18	4
Sai Kung	18	15	12	6
Sha Tin	9	6	7	2
Kwai Tsing	2	1	3	0
Islands	4	5	6	1
Total	150	48	114	37

* In 2025, the DSD introduced mobile powerful pumping robots (including "Long Xi Shui" and "Xiao Yu" series), which were deployed 37 times in total during the year, with "Long Xi Shui" accounting for 28 of these deployments.

(b) The DSD regularly inspects and clears drainage channels, with enhanced inspections and clearance for those more prone to blockage, so as to reduce the risk of flooding. In addition, the DSD has implemented the "just-in-time clearance" arrangement. Under this arrangement, when the Hong Kong Observatory forecasts severe rainstorms, the DSD will proactively deploy manpower to inspect about 240 locations which are prone to blockage, and clear any blocked drains to reduce the risk of flooding during heavy rainstorms. During periods of severe rainstorms (for instance, when the Red or Black Rainstorm Warning Signal or the Special Announcement on Flooding in the northern New Territories is issued), the DSD will activate its Emergency Control Centre, deploy additional emergency response teams to handle flooding incidents, and inspect locations which are prone to blockage to reduce the risk of flooding. To further enhance the emergency response capabilities, the DSD has substantially increased the maximum number of emergency response teams from 160 in 2024 to 200 (about 750 staff members in total) in 2025, and introduced powerful pumping robots in 2025 to enhance the efficiency of handling flooding incidents. The DSD also internally deploys the staff required for supervising and coordinating contractors in handling flooding cases. After heavy rainstorms, the DSD will immediately carry out inspections and clearance at locations that are prone to blockage to ensure smooth operation of the drainage systems. When a typhoon signal is about to be lowered, the DSD will even deploy staff to inspect around 80 main river sections and take necessary follow-up actions, as well as implement proper precautionary measures against further rainstorms.

The DSD's major expenditure on handling flooding incidents in the past 3 years are as follows:

Year	2023-24	2024-25	2025-26 (Revised estimate)
Major expenditure on handling flooding ($ million)	10	21	49

Note: The expenditure incurred by contractors for handling flooding is calculated on an all-inclusive basis, covering the expenditure on salaries, operations, equipment and supplies. Hence, a breakdown of the expenditure involved is not available, and the above major expenditure is provided on a lump sum basis. As for the DSD, its existing staff members are responsible for handling flooding incidents in addition to their other duties, so we are unable to provide the information on the specific manpower expenditure involved in the work.

(c)&(d)

To combat extreme rainfall, the DSD has reviewed and formulated a territory-wide Drainage Master Plan in a timely and orderly manner to systematically examine the stormwater drainage facilities throughout the territory. Taking into account the topographical characteristics and constraints of different areas, the DSD has implemented the "three-pronged flood prevention strategy", i.e. "stormwater interception in the upstream", "flood storage in the midstream", and "drainage improvement in the downstream", which has proven to be effective in reducing the risk of flooding arising from heavy rainstorms.

In the past 5 years, the locations and functions of the stormwater drainage systems completed by the DSD are tabulated as follows, and construction of stormwater storage tanks is not involved in these projects:

Project	Location and function of stormwater drainage system	Completion date
1. West Kowloon drainage improvement – Inter-reservoirs Transfer Scheme	Construction of a drainage tunnel from the Kowloon Byewash Reservoir (KBR) to the Lower Shing Mun Reservoir (LSMR) to transfer the stormwater collected at the KBR to the LSMR, thereby reducing overflow from the KBR and increasing local yield, while reducing the discharge of stormwater into the drainage system of Lai Chi Kok area.	2022
2. Drainage improvement in Northern New Territories – package B (remaining works)	Construction of stormwater drains at Ho Sheung Heung Road in Sheung Shui so as to enhance the flood protection capability of the district.	2022
3. Drainage improvement works at Ngong Ping	Construction of stormwater drains at Ngong Ping in Lantau Island so as to enhance the flood protection capability of the area.	2023
4. Drainage improvement works at Yuen Long – stage 1	Construction of stormwater drains at Tai Tseng Wai in Wang Chau; and construction of drainage channels and stormwater drains at Shui Tsiu San Tsuen, Ho Lik Pui and Shan Ha Tsuen in Shap Pat Heung so as to enhance the flood protection capability of the district.	2023
5. Revitalization of Tsui Ping River	Revitalization of the existing nullah adjacent to King Yip Street in Kwun Tong, and reconstruction/strengthening of nullah structures, so as to enhance the flood protection capability of the district.	2024
6. Drainage improvement in Southern Hong Kong Island – package 2A	Construction of stormwater drains along the horse trail and walking trail uphill of Pok Fu Lam Village, as well as along Chi Fu Road to address the flooding blackspot at Pok Fu Lam Village so as to enhance the flood protection capability of the district.	2024

T, he locationsfunctions and anticipated completion dates of DSD's stormwater drainage systems and stormwater storage tanks under construction or nearing completion in 2026 and the next 5 years are tabulated as follows:

Project	Location and functionof stormwater drainage system and stormwater storage tank	Anticipated completion date
1. Drainage improvement in Southern Hong Kong Island – package 2B	Construction of stormwater drains in Tin Wan, Aberdeen, Ap Lei Chau, Wong Chuk Hang, Shouson Hill, Stanley and the Peak so as to enhance protection capability of the district.	2026
2. Drainage improvement works in Tsim Sha Tsui	Construction of a stormwater storage tank with a capacity of about 18 000 m^3 at the Urban Council Centenary Garden in Tsim Sha Tsui, to intercept and temporarily store the majority of upstream stormwater during heavy rainstorms, with discharge to the downstream only after the peak flow, so as to address the flooding blackspot at Chatham Road South (between Granville Road and Austin Avenue) in Tsim Sha Tsui; and construction of stormwater drains at Chatham Road South, Kimberly Road, Observatory Road, Granville Road, Granville Square and Cameron Road so as to enhance the flood protection capability of the district.	2027
3. Drainage improvement works at Yuen Long – stage 2	Construction of drainage channels in Tai Wo and Sung Shan New Village; and construction of drainage channels and stormwater drains in Shan Ha Tsuen, Ha Che and Lin Fa Tei, so as to enhance the flood protection capability of the area.	2027
4. Drainage improvement works in Kwun Tong – phase 1	Construction of a stormwater storage tank with a capacity of about 64 000 m^3 at Sau Nga Road Playground in Kwun Tong, to intercept and temporarily store the majority of upstream stormwater during heavy rainstorms, with discharge to the downstream only after the peak flow; and construction of stormwater drains at the nearby roads (including Hip Wo Street) so as to enhance the drainage capacity of the existing stormwater drainage system in Tsui Ping Road, Kai Lim Road, the nearby Kwun Tong Road and Tsui Ping River, and mitigate the flood risks in the said areas.	2028

Project	Location and functionof stormwater drainage system and stormwater storage tank	Anticipated completion date
5. Drainage improvement works at North District – phase 1	Construction of a stormwater storage tank with a capacity of about 10 000 m^3 and a stormwater pumping station at Kong Ha and Sha Tau Kok Town, to intercept and temporarily store the stormwater during heavy rainstorms, with discharge into the Starling Inlet via the stormwater pumping station; and construction or improvement of stormwater drains, drainage channels and flood walls at Kong Ha, Sha Tau Kok Town, Kai Fong Garden, Shek Kiu Tau, Hang Tau, Kwu Tung Road and Tin Ping Shan Tsuen (near Man Kok Village in Sheung Shui Wai), so as to enhance the flood protection capability of the district.	2028
6. Drainage improvement works in Eastern District – phase 1	Construction of stormwater drains at Kam Hong Street and Java Road in North Point, Yee Shun Street and Kam Yuen Lane in Chai Wan, Mount Parker Road in Quarry Bay, Wang Wa Street, Shau Kei Wan Main Street East and A Kung Ngam Road in Shau Kei Wan so as to enhance the flood protection capability of the district.	2028
7. Drainage improvement works in Wong Tai Sin	Construction of a stormwater storage tank with a capacity of about 47 000 m^3 at Morse Park in Wong Tai Sin, to intercept and temporarily store the stormwater conveyed through the section of Lung Cheung Road in Wong Tai Sin during heavy rainstorms, with discharge into the downstream Kai Tak River only after the peak flow; construction of stormwater drains at Wing Chuk Street, Chuk Yuen Road, Ma Chai Hang Road, Fung Mo Street and Wong Tai Sin Road; and rehabilitation of stormwater drains at Po Kong Village Road so as to enhance the drainage capacity of the relevant stormwater drainage system and reduce the flood risks in the vicinity of Lung Cheung Road near Shatin Pass Road.	2029

Project	Location and functionof stormwater drainage system and stormwater storage tank	Anticipated completion date
8. Drainage improvement works in Mong Kok – phase 1	Construction of a stormwater storage tank with a capacity of about 49 000 m^3 at Shek Kip Mei Park, to intercept and temporarily store the stormwater during heavy rainstorms, with discharge to the downstream stormwater drainage system in the vicinity of Boundary Street and Nathan Road only after the peak flow; and construction of stormwater drains at Cornwall Street, Tai Hang Tung Road and Embankment Road so as to enhance the drainage capacity of the relevant stormwater drainage system and reduce the flood risks in the vicinity of Mong Kok near Boundary Street and Nathan Road.	2029
9. Drainage improvement works in Kwun Tong – phase 2	Construction of a stormwater storage tank with a capacity of about 25 000 m^3 at Hoi Bun Road Park in Kwun Tong, and construction of a stormwater pumping station at Kwun Tong Promenade, to intercept and temporarily store the stormwater during heavy rainstorms, with discharge into Kwun Tong Typhoon Shelter via the stormwater pumping station; and construction of stormwater drains in the vicinity of Kwun Tong Road, Ngau Tau Kok Road, Hang Yip Street, Wai Yip Street and Hoi Bun Road so as to enhance the drainage capacity of the relevant stormwater drainage system and reduce the flood risks in the vicinity of Kwun Tong near Ngau Tau Kok Station.	2029

Project	Location and functionof stormwater drainage system and stormwater storage tank	Anticipated completion date
10. Drainage improvement works in Sha Tin and Sai Kung – phase 1	Construction of a stormwater storage tank with a capacity of about 8 600 m^3 and a stormwater pumping station at Sha Tin Park, to intercept and temporarily store the stormwater during heavy rainstorms, with discharge into Shing Mun River via the stormwater pumping station; construction of stormwater drains at Pak Hok Ting Street, Sha Tin Centre Street, Yi Ching Lane and Tai Po Road – Sha Tin in Sha Tin, and Po Lo Che Road in Sai Kung; improvement of drainage channels at Wong Chuk Yeung Village in Sha Tin; and construction of flood walls along Shing Mun River and at Kau To Hang in Sha Tin to enhance the flood protection capability of the districts.	2029
11. Drainage improvement works in Tai Po – phase 1	Construction of an underground stormwater storage tank with a capacity of about 25 000 m^3 and a stormwater pumping station at Tai Po Old Market Playground, to intercept and temporarily store the stormwater during heavy rainstorms, with discharge into Lam Tsuen River via the stormwater pumping station; construction of stormwater drains at Ting Kok Road, Tai Po Tai Wo Road, Chui Lok Street, Chui Wo Lane, Kau Hui Chik Street, Mei Sun Lane and Po Nga Road in Tai Po, and San Uk Pai Tsuen in Lam Tsuen Valley; improvement of drainage channel at Sha Pa in Lam Tsuen Valley; and construction of flood walls along Lam Tsuen River in Tai Po so as to enhance the flood protection capability of the district.	2029
12. Improvement of Yuen Long Town Nullah (Town Centre Section)	Construction of a dry weather flow interception system at the Yuen Long Nullah; strengthening the structure of a section of the Yuen Long Nullah (Town Centre Section); and revitalisation of a section of the Yuen Long Nullah between the Long Ping Station and the Shap Pat Heung Road.	2030

Project	Location and functionof stormwater drainage system and stormwater storage tank	Anticipated completion date
13. Yuen Long Barrage Scheme	Construction of a flood barrier and a stormwater pumping station at the Yuen Long Nullah, modification of the Yuen Long Nullah and drainage improvement works at the intersection of the Yuen Long Nullah and the Yuen Long Bypass Floodway, and construction of drainage channels, so that at times of heavy rainstorms and relatively high water level in the downstream of the Yuen Long Nullah, the flood barrier will be activated to prevent backflow from downstream of the Yuen Long Nullah, while the stormwater pumping station will also be activated to pump the stormwater from the Yuen Long Nullah to the downstream; improvement of flood walls along the Kam Tin River; construction of flood walls along the Yuen Long Nullah and the Sham Chung River so as to enhance the flood protection capability of the district; and revitalisation of the Yuen Long Nullah between the Long Ping Station and the location of the barrage.	2030
14. Drainage improvement works in Kowloon City	Construction of a stormwater storage tank with a capacity of about 75 000 m^3 and a stormwater pumping station at Argyle Street Playground in Kowloon City, to intercept and temporarily store the stormwater during heavy rainstorms, with discharge to the downstream stormwater drainage system in the vicinity of Sung Wong Toi Road and Mok Cheong Street via the stormwater pumping station only after the peak flow; and construction of stormwater drains at Olympic Avenue, Kowloon City Road and Ma Tau Kok Road in To Kwa Wan, and Baker Street, Lo Lung Hang Street, Bulkeley Street and Dock Street in Hung Hom to enhance the flood protection capability of the district.	2030

(e) To improve the insufficient capacity of the drainage system in the Eastern District, the DSD commenced “Drainage improvement works in Eastern District – phase 1” in August 2024 (see item 6 in the table above), which comprises the upgrading of stormwater drains in North Point, Chai Wan, Quarry Bay and Shau Kei Wan, scheduled for completion in 2028. In addition, to further reduce the flood risk of the Eastern District, the DSD proposes to implement “Drainage improvement works in Eastern District – remaining works”, including the construction of a drainage tunnel of about 3.6 kilometres in length and about 5 metres in diameter at the upstream areas of Shau Kei Wan and Chai Wan. The tunnel will intercept stormwater at the upstream areas for diversion and direct discharge into the sea, reducing stormwater inflow into the downstream areas of Shau Kei Wan and Chai Wan. Upon completion, flood protection level of the stormwater drainage system in the areas concerned will be enhanced. At present, the DSD is inviting tenders for the project in parallel, and the returned tender price will be reflected in the estimated cost of the project. The DSD plans to submit a funding application to the Finance Committee (FC) of the Legislative Council in 2026. Subject to the approval of the application by the FC, the DSD will commence the works as soon as possible for target completion in around 5 years.

As regards Tseung Kwan O, the DSD has just completed the “Review of Drainage Master Plan in Tseung Kwan O – Feasibility Study”. The study has reviewed and assessed the flood protection capacity of the existing stormwater drainage system in Tseung Kwan O district, and formulated plans for drainage improvement works. The Government will continue to take forward various projects in a steady and prudent manner, and will formulate the project implementation strategies and timetables in light of the progress of the projects and people’s livelihood needs, as well as the priority and overall plan of the Government’s various land development and infrastructure projects.

(f)&(g)

In 2025, the Government launched the “Pilot Scheme on Wading Line System” (the Pilot Scheme) at 5 low-lying road sections with higher flooding risk to monitor the flooding situation in real time, and facilitate more effective mobilisation and collaboration of relevant departments to handle flooding incidents as early as possible. At the same time, it alerts drivers of flooding on the road ahead, thereby reducing the risk of vehicles stalling due to damage by flooding. When the depth of the water has reached 0.3 metre, temporary traffic guidance will be implemented on-site to divert vehicles at the junction prior to entering the flooded area, thereby preventing them from entering the flooded road sections. The Transport Department will also disseminate information on traffic arrangements accordingly and the Police will assist at scene as necessary. During the heavy rainstorms in 2025, the system was functioning properly. The Government will continue to oversee the operation of the system, monitor the implementation of the Pilot Scheme, review its effectiveness in due course and optimise it as necessary.

Flood Monitoring Devices and monitoring system of the Wading Line System are managed by staff members within the existing staff establishment of the relevant government departments. As the staff members concerned also undertake other official duties, we are unable to provide the details of manpower expenditure on the work. The Wading Line System comprises 4 components, including warning signs on the road surface, signs erected next to the carriageway, water meter gauges, and Flood Monitoring Devices installed at the lowest points of the road sections. The total expenditure on equipment and supplies for the 5 existing Wading Line Systems is about $700,000.

(h) In 2026-27, the DSD will achieve a net decrease of 43 posts under Programme (1), with the 2026-27 notional annual mid-point salaries estimated at about $13.6 million. The grades, posts and salaries involved are as follows:

Grade	Post	No. of posts
Engineer	Chief Engineer	1
Typist	Senior Typist	3
	Typist	4
Drain Chargeman	Drain Chargeman	8
Chainman	Chainman	4
Leading Sewerman	Leading Sewerman	4
Laboratory Attendant	Laboratory Attendant	2
Motor Driver	Motor Driver	5
Personal Secretary	Personal Secretary II	4
Calligraphist	Calligraphist	1
Workman II	Workman II	7
	Total	43

The above deleted posts are from grades that are obsolete, being phased out, or no longer operationally required, while some posts were deleted upon expiry of the duration for which the posts are created. Bureaux/Departments will continue to enhance efficiency through management measures and digitalisation, re-prioritisation, internal redeployment, streamlining of work processes and application of technologies, so as to further streamline the civil service while continuing to take forward various existing as well as new policies and initiatives, delivering high-quality public services to members of the public.

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