Islands District Council Paper No. IDC 1/2014

Work of the Drainage Services Department in Islands District

Background

The Administration has completed a review on the roles, functions and composition of the District Councils (DCs), and a number of recommendations were made including the enhancement of communication between the DCs and the Government through the attendance of DC meetings by department heads. All DCs supported this proposal. To pursue the initiative, the Director of Drainage Services will brief Islands DC on 24 February on the functions of the Drainage Services Department (DSD) and its major projects in Islands District, and to hear the views of DC Members.

Organisation Structure and Scope of Work

- 2. Established on 1 September 1989, DSD is one of the nine departments under the Development Bureau. As at January 2014, DSD has a total of about 1 800 staff.
- 3. DSD serves to protect the public from the risk of flooding and to provide effective sewage treatment services through planning, construction and operation of the stormwater drainage system as well as the sewage collection, treatment and disposal facilities.
- 4. DSD consists of a Headquarters and four branches, namely the Sewage Services Branch, the Operations and Maintenance Branch, the Projects and Development Branch, and the Electrical and Mechanical Branch. The flood prevention and sewerage works in Islands District are mainly undertaken by the Drainage Projects Division, the Sewerage Projects Division and the Consultants Management Division of the Projects and Development Branch, as well as the Harbour Area Treatment Scheme Division of the Sewage Services Branch. Sewage Treatment Division 2 of the Electrical and Mechanical Branch is responsible for the daily operation and maintenance of sewage treatment works, sewage pumping

stations and stormwater pumping stations in the District, while the Hong Kong and Islands Division of the Operations and Maintenance Branch is responsible for the daily operation and maintenance of drains and channels in the District.

Drainage and Sewerage in Islands District

Stormwater Drainage System

- 5. Some areas at Pak Ngan Heung, Luk Tei Tong, Tai Tei Tong and Ling Tsui Tau in Mui Wo of Lantau Island, and Cheung Sha Sheung Tsuen, Lo Uk Tsuen and Ham Tin San Tsuen of Pui O in Southern Lantau are low-lying areas with inadequate drainage system, making the areas susceptible to flooding during heavy rainstorms. To uplift the flood protection level of these areas, DSD commenced in 2008 the project of "Drainage Improvement in Southern Lantau" and put the improvement works involved into operation in late 2010. The cost of the project is about \$98 million.
- 6. Ngong Ping on Lantau Island is a famous tourist attraction in the territory. DSD conducted a drainage planning for the area by completing the "Drainage Study for Ngong Ping" in 2010. The objectives of the Study are to assess the adequacy of the drainage system in the area and recommend improvement measures to alleviate the flooding risk at Po Lin Monastery and its vicinity. DSD is currently working on the design of the drainage improvement project which comprises construction of about 900m long stormwater drains. We aim to commence the project in mid-2015 for completion in late 2017. The preliminary estimated cost of the project is about \$140 million.
- 7. In addition to implementing the above flood prevention projects, we also carry out regular inspection and maintenance for a total length of about 109 km long stormwater drains within the district to ensure its normal operation.

Sewerage System

8. At present, some areas of the Islands District are not served by public sewerage system. Sewage generated from those areas is mainly treated by means of private treatment facilities. If such facilities are not maintained and repaired properly, it would possibly cause water pollution and affect public health. In order to address this issue and to meet the growing population and future development needs in Islands District, the Administration completed in 2002 a study on "Outlying Islands Sewerage Master Plan Review". The study recommends that the public sewerage system in the District should be upgraded and extended to the unsewered areas. The

projects involved are taken forward in two phases and their implementation is underway. The projects under construction, with cost estimate of about \$2 000 million, are expected to be completed from mid-2014 to 2018 in phases. These projects are listed as follows:-

- Sewage collection, treatment and disposal facilities in Sok Kwu Wan, Lamma Island
- 2. Sewage collection, treatment and disposal facilities in Yung Shue Wan, Lamma Island
- 3. Lamma village sewerage phase 2, package 1
- 4. Upgrading of Mui Wo Sewage Treatment Works and sewerage at Mui Wo Town Centre and Wang Tong in Lantau Island
- 9. The estimated cost of the projects at planning and design stage is about \$7 300 million. We aim to commence the projects progressively from 2015 at the earliest for completion by 2022 in phases. These projects include:-
 - 1. Lamma village sewerage phase 2, package 2;
 - 2. Extension of sewerage system to other unsewered villages in Mui Wo;
 - 3. South Lantau sewerage works;
 - 4. Upgrading of Cheung Chau and Tai O sewage collection, treatment and disposal facilities;
 - 5. Peng Chau village sewerage phase 2; and
 - 6. Construction of sewage rising mains and rehabilitation of the existing sewage rising main between Tung Chung and Siu Ho Wan.
- 10. In addition to implementing sewerage projects, we also carry out regular inspection and maintenance for a total length of about 99 km long sewers within Islands District to ensure its normal operation.

Environmental Improvement

- DSD is also committed to enhancing the environment of the district and bringing better quality of life to the nearby residents by improving the outlook of DSD's facilities. We have put much effort in extensive planting at various sewage treatment works and providing green features on external walls and roofs of our facilities. Recently, the beautification works for Peng Chau Sewage Treatment Works and Peng Chau Sewage Pumping Station have been completed. We have also commenced the vertical greening works for Ngong Ping Sewage Treatment Works in October 2013. The vertical greening project, which costs about \$2 million, is expected to complete in mid-2014.
- 12. Meanwhile, DSD has taken the initiative to enhance the odour management measures at Siu Ho Wan Sewage Treatment Works in Northern Lantau by provision of covers to two operating primary sedimentation tanks and installation of associated deodourisation facilities. The project commenced in January 2013 and is expected to complete in late 2014. The cost of the project is about \$19.5 million.

Views from District Council

13. We are thankful to all Islands DC members for their valuable advice on our work. We would continue to work closely with Islands DC, and would also like to hear the views of members, in order to bring continuous improvements to the drainage and sewerage systems in Islands Disrict, and bring an even better living environment for the residents.

Drainage Services Department February 2014