

立法會
Legislative Council

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seen by the Administration)

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**Public Works Subcommittee of the Finance Committee
of the Legislative Council**

**Minutes of the 2nd meeting
held in the Chamber of the Legislative Council Building
on Wednesday, 25 October 2000, at 10:45 pm**

Members present :

Ir Dr Hon Raymond HO Chung-tai, JP (Chairman)
Hon Albert CHAN Wai-yip (Deputy Chairman)
Hon Kenneth TING Woo-shou, JP
Hon Cyd HO Sau-lan
Hon Eric LI Ka-cheung, JP
Hon Fred LI Wah-ming, JP
Prof Hon NG Ching-fai
Hon James TO Kun-sun
Hon CHAN Yuen-han
Hon CHAN Kam-lam
Hon SIN Chung-kai
Hon WONG Yung-kan
Hon LAU Kong-wah
Hon Mrs Miriam LAU Kin-yee, JP
Hon Andrew CHENG Kar-foo
Hon LAW Chi-kwong, JP
Hon TAM Yiu-chung, GBS, JP
Dr Hon TANG Siu-tong, JP
Hon Abraham SHEK Lai-him, JP
Hon Henry WU King-cheong, BBS
Hon IP Kwok-him, JP
Hon LAU Ping-cheung

Members absent:

Hon Andrew WONG Wang-fat, JP
Hon Emily LAU Wai-hing, JP
Hon Michael MAK Kwok-fung
Hon WONG Sing-chi

Public officers attending:

Miss Elizabeth TSE	Deputy Secretary for the Treasury
Mr S S LEE, JP	Secretary for Works
Mr Gordon SIU, JP	Secretary for Planning and Lands
Mr Rob LAW, JP	Director of Environmental Protection
Mr D C CHEUNG	Principal Assistant Secretary of the Treasury (Works)
Mr M L WAN	Principal Assistant Secretary for Housing (Project Management)
Mr P L KWAN, JP	Director of Architectural Services
Mr David WONG	Principal Assistant Secretary for Security
Mrs Mimi BROWN	Deputy Government Property Administrator
Mr CHU Man-chun	Chief Fire Officer (Headquarters)
Mr MAK Kwai-pui	Chief Ambulance Officer
Mr H K WONG, JP	Director of Territory Development
Mr B S LIU	Chief Engineer (Yuen Long), New Territories North Development Office Territory Development Department
Mr Hugh PHILLIPSON, JP	Director of Water Supplies
Mr LEUNG Mang-chiu	Assistant Director/New Works, Water Supplies Department

Clerk in attendance:

Miss Polly YEUNG	Chief Assistant Secretary (1)3
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Staff in attendance:

Ms Pauline NG	Assistant Secretary General 1
Ms Anita SIT	Senior Assistant Secretary (1)8

HEAD 711 - HOUSING

PWSC(2000-01)52

170BF

**Fire station-cum-ambulance
depot in Area 112, Tin Shui Wai**

Mr Albert CHAN expressed concern about the noise impact of the proposed fire station-cum-ambulance depot and enquired about the designated land uses in the vicinity and the planned measures to mitigate the noise impact. In reply, the Chief Fire Officer (Headquarters) (CFO(Hqts),FSD) advised that according to the Preliminary Environmental Review for the project, which had been agreed to by the Director of Environmental Protection (DEP), noise sensitive buildings would not be subject to undue noise impact provided that they were situated at least 28 metres and 16 metres away from the northern and eastern boundary of the depot respectively. On measures to be implemented at the depot to reduce the noise impact of the depot on nearby noise sensitive receivers, CFO(Hqts), FSD explained that during morning and night hours, the volume of the fire station alarm would be lowered and the loudspeakers at the open drilling yards would be switched off. At night time, the door of the appliance room would be closed. Furthermore, fire engines and ambulances departing from the depot would not activate their sirens unless necessary.

2. As regards the planned land uses in the vicinity of the proposed depot, the Director of Architectural Services (DArchS) advised that a public housing development was under construction at the adjacent site southwest of the depot, and the other sites adjacent to the depot had been designated as "Comprehensive Development Areas" (CDAs). As far as he understood, the detailed land uses of the CDAs had not yet been decided. However, as it had been agreed by DEP that a setback zone of 28 metres and 16 metres from the northern and eastern boundary of the depot should be reserved, the relevant authorities would implement the measure accordingly. The Secretary for Planning and Lands (SPL) advised that a "Comprehensive Development Area" usually comprised both residential and non-residential developments. The Administration would ensure that noise sensitive receivers, such as residential buildings, would not be located within the aforesaid setback zone.

3. Mr Albert CHAN said that according to his understanding, the Planning Department had adopted a planning principle that no fuel station should be located in the Tin Shui Wai area. While he appreciated that there was an operational need to include a fuel filling facility in the proposed depot, he sought clarification on whether the inclusion of the filling facility would be inconsistent with the aforesaid planning principle and give rise to a double standard being adopted for public- and private-sector projects. In response, CFO(Hqts), FSD advised that to meet operational needs, the fuel filling facility was a necessary and standard facility for fire stations to ensure efficient and adequate fuel supply for fire engines and ambulances. The operation of the proposed fire station would be adversely affected if its fire engines and

ambulances had to travel to another fire station to obtain fuel. SPL pointed out that a full-scale fuel station which was open to the public and a fuel filling facility inside a fire station were very different in terms of scale and the traffic impact on the neighbourhood. He confirmed that the inclusion of a fuel filling facility in the proposed fire station, as the case of other fire stations, was not incongruent with the relevant planning principles.

Admin

4. At Mr Albert CHAN's request, the Administration agreed to provide, before the relevant Finance Committee meeting (on 17 November 2000), information on the assessment of the risk of fuel leakage at the proposed depot and to explain why the inclusion of a fuel filling facility in the proposed depot was considered acceptable from the town planning perspective.

5. In reply to Mr Henry WU, the Principal Assistant Secretary for Security confirmed that all the facilities to be provided at the proposed depot as set out in paragraph 3 of the discussion paper had been drawn up according to the prevailing standards. As regards the estimated cost for the project, DArchS advised that the unit construction cost of the proposed depot was in the order of \$11,000 per square metre which was comparable to that of the other fire station-cum-ambulance depots built recently.

Admin

6. Mr LAW Chi-kwong sought elaboration on the requirements to be imposed on the contractor to minimize the generation of construction and demolition (C&D) materials and to reuse and recycle C&D materials. In reply, DArchS advised that some basic requirements in this regard would be included in the works contract. At Mr LAW's request, he agreed to provide further details on these requirements.

7. The item was voted on and endorsed.

HEAD 707 - NEW TOWNS AND URBAN AREA DEVELOPMENT

PWSC(2000-01)49

22CD

**North West New Territories
development - main drainage
channels for Yuen Long and
Kam Tin - remainder, phase 4**

8. Mr IP Kwok-him enquired about the planned measures to ensure that flooding in the project area would not be aggravated during the implementation of the proposed drainage works. In reply, the Director of Territory Development (DTD) advised that under the relevant contract conditions, the contractor would be required to submit an assessment on the impacts of the drainage works with recommendations of appropriate measures to ensure that the hydraulic capacity of the drainage system in the project area would not be reduced during the construction period. The assessment was subject to the

endorsement of the Drainage Services Department. DTD affirmed that the risk of flooding in the project area would be reduced upon completion of the proposed drainage improvement works.

9. Mr Albert CHAN enquired whether the persons affected by the land acquisition and clearance required for the proposed works had been duly notified. DTD advised that in accordance with the relevant procedures, the Administration had gazetted the land resumption notices and consulted the relevant District Council on the land acquisition and clearance arrangements. The Housing Department had also issued clearance notices to all the households affected. Rehousing and compensation for the affected persons would be provided in accordance with the relevant policies. The Administration did not envisage significant problems with the land acquisition for the proposed works.

10. Mr LAU Ping-cheung enquired about the mechanism for appeal against the rehousing and compensation arrangements offered by the Government in the land acquisition process. He also enquired whether flexibility could be exercised under the present land acquisition procedures for early disbursement of compensation where the circumstances so warranted. In reply, DTD advised that affected persons would be offered public housing or temporary accommodation in accordance with the current rehousing policy. In any case, no person should become homeless as a result of the clearance required for public works projects. As regards affected persons who possessed land title, they would be offered compensation in accordance with the relevant statutory provisions and prescribed rates. Persons who disagreed with the level of compensation could appeal to the Lands Tribunal. DTD agreed to convey to the Director of Lands the concern of Mr LAU regarding the need for early disbursement of compensation in the land acquisition process.

Admin

11. Noting that the proposed drainage channel would have a design capacity of accommodating a 50-year return period rainstorm, Mr Henry WU asked whether the term "50-year return period" could be converted into a quantitative measurement such as the level of rainfall recorded within an hour, which he considered would be more comprehensible by the public. In reply, DTD advised that the term "50-year return period" represented the highest statistically possible intensity of rainstorm within a very short duration, say five to 10 minutes, in a period of 50 years. The calculation of the statistics on rainstorm intensity for the purpose of drainage capacity design was highly technical. At the Chairman's request, DTD agreed to consider in conjunction with the Drainage Services Department whether terms such as "50-year return period" and "100-year return period" etc. commonly used to represent drainage design capacity could be quantified as simple measurements of rainfall for members' reference.

Admin

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12. Referring to the breakdown of the estimate for consultants' fees in enclosure 2 of the discussion paper, Mr Henry WU enquired about the timing of the last review of the "multiplier factors" and the results of the review. The Secretary for Works (S for W) advised that the "multiplier factors" for calculating the estimate for consultants' fees were drawn up having regard to the actual tendered fees of the successful bids for works-related consultancies awarded in recent years. He stressed that the estimate for consultants' fees was for budgeting purposes only. The actual consultants' fees would be determined by open and competitive tendering. For members' easy reference, the Deputy Secretary for the Treasury undertook to re-circulate to members the relevant information note issued to members upon completion of the last review on the estimates of the consultants' fees for capital works projects and if necessary, to update the information contained therein.

13. Noting that the proposed works would generate about 25 900 cubic metres of contaminated mud which would be disposed of at the East Sha Chau marine dumping site, Mr WONG Yung-kan enquired whether relevant parties had been duly consulted on the disposal arrangement. He said that the Advisory Committee on Agriculture and Fisheries had expressed grave concern about the environmental impacts of the disposal of contaminated mud at East Sha Chau and its possible overloading, bearing in mind that the dumping site would also accommodate the contaminated mud generated from other large scale projects underway such as the Disneyland development project and the Container Terminal No. 9 project.

14. In response, DTD advised that the East Sha Chau dumping site had been used for some time for the disposal of contaminated mud. The viability of East Sha Chau as a marine dumping site had been established and the disposal operation had caused minimal adverse environmental impact. Marine disposal at the dumping site for any project was subject to the approval of the Marine Fill Committee. The environmental condition of the dumping site and the disposal operation were closely monitored by the Civil Engineering Department and the Environmental Protection Department (EPD). DTD also confirmed that the Administration had ascertained that the East Sha Chau dumping site would have adequate capacity to accommodate the contaminated mud that would be generated from the proposed works, while at the same time catering for the need for marine disposal of other committed projects.

15. Mr WONG Yung-kan and Mr IP Kwok-him enquired about the contaminants contained in the contaminated mud generated from the proposed works and how the transportation and disposal operation would be monitored to ensure that the contaminants would not cause an adverse impact on the environment. In reply, DTD advised that EPD had established a set of criteria having regard to relevant international standards in defining what constituted contaminated mud. The said criteria were mainly concerned with the level of concentration of heavy metal contaminants. If any of the contaminants found

in a mud source exceeded the respective prescribed limit, the mud source would be considered contaminated. DEP supplemented that the main contaminants contained in the mud generated from the proposed works were copper, lead and zinc and the mud was classified as moderately contaminated. He further said that the contaminated mud classification system used in Hong Kong was a conservative one, erring on the side of protecting the environment. The whole disposal system at East Sha Chau was designed for handling highly contaminated mud. There was constant monitoring of the water quality and marine organisms in the general East Sha Chau area to ensure that no long-term accumulation of contaminants was taking place.

16. DTD also confirmed that the contained marine disposal method would be used for the disposal of contaminated mud at East Sha Chau. He elaborated that under this method, the mud would be placed into a series of dredged seabed pits, each of which would be completely capped with clean material when full. This disposal method had proved to be effective in preventing long-term adverse environmental impact.

17. Referring to the conditions imposed by the Advisory Council on the Environment in its endorsement of the environmental impact assessment (EIA) report for the project as set out in paragraph 17(a) to (c) of the discussion paper, Prof NG Ching-fai enquired whether funds for restoration of the old river channels into wildlife habitats and implementation of off-site wetland compensation measures had been included in the project estimate. He also asked which authority would be responsible for the implementation of these measures. In reply, DTD advised that these measures would be examined and implemented on a territory-wide and long-term basis rather than on a project-by-project basis. The Agriculture, Fisheries and Conservation Department was carrying out a relevant study and would report back to the EIA Subcommittee by end 2000. By then, there would be a clearer picture about the implementation of the measures. SPL confirmed that the Environment and Food Bureau was the policy bureau responsible for this area of work.

18. The item was voted on and endorsed.

PWSC(2000-01)50

81CD

**Main drainage channels for
Yuen Long and Kam Tin stage 2
- remainder**

19. Mr Albert CHAN reiterated his concern about the rehousing and compensation arrangements for the persons affected by the land acquisition required for the proposed works. He urged the Administration to adopt a flexible and sensitive approach in handling any disputes that might arise in the land acquisition process. The Administration took note of Mr CHAN's concern.

Admin

20. Mr Henry WU noted that the estimate for the main drainage channel works was about \$21.3 million per kilometre for the previous proposal PWSC(2000-01)49, while the same estimate was about \$40.9 million per kilometre for the present proposal. He enquired about the reasons for the substantial difference, bearing in mind that the drainage channels under both proposals would have a design capacity of accommodating a 50-year return period rainstorm. In reply, DTD advised that the main reason for the cost difference was that the drainage channels under the present proposal were much larger than that under item PWSC(2000-01)49, and this in turn was mainly attributed to the differences in the size and topography of the respective catchment areas. At Mr WU's request, DTD agreed to provide further information to explain the difference in the construction cost of the drainage channels under the two proposals.

21. The item was voted on and endorsed.

HEAD 709 - WATERWORKS

PWSC(2000-01)51

90WC

**Replacement and rehabilitation
of water mains, stage 1 phase 1**

22. Mr TAM Yiu-chung expressed support for the proposed water mains replacement and rehabilitation programme. In reply to his enquiry, the Director of Water Services (DWS) said that while some mains replacement or rehabilitation works would still be carried out on an ad hoc basis in the wake of main bursts and leaks, there was a need to carry out a full scale replacement and rehabilitation programme on a territory-wide basis as there were signs of rapid deterioration of the water distribution system.

23. On the reasons for phasing the whole project over a 20-year period, DWS informed members that the Underground Asset Management Study on the water supplies network completed in 1997 had recommended a 20-year period as the optimum time frame for the project, having regard to various factors including the extent and rate of depreciation of the existing water mains, the need to minimize disruption of the mainlaying works and various resource constraints.

24. Noting from the discussion paper that the loss of fresh water would be reduced from 240 million to 180 million cubic metres per year upon completion of the 20-year replacement and rehabilitation programme, Mr IP Kwok-him enquired whether new water pipes would still be proof to the leakage problem. In reply, DWS advised that water main leakage was a worldwide problem. While new pipe materials were more resistant to corrosion, more flexible and less susceptible to the problems found in ageing

iron pipes and cement pipes, the leakage problem was inevitable as water pipes were in continuous operation and would thus be subject to corrosion and disruption in the course of their service life. While total elimination of water main leakage was not possible, a leakage rate of 15% was considered very good performance among the water authorities worldwide. The 20-year replacement and rehabilitation programme in question would reduce the leakage of local water mains to less than 20%. The Chairman said that apart from pipe materials, workmanship was also an important factor relating to the extent of water main leakage.

25. Mr Albert CHAN said that according to some professionals in the field, the pipe materials used for local water mains were not among the best available in the market. He sought the Administration's clarification and expressed concern that Hong Kong was lagging behind other countries in this regard.

26. In response, DWS assured members that the Water Supplies Department (WSD) kept in touch with both the local and overseas water supplies industry and was kept abreast of the latest pipe materials available in the market. He remarked that normally, it took some time before new pipe materials would be widely used in local waterworks projects as the Administration would need some time to test the performance of these new materials in local environmental conditions. WSD also conducted research on the suitability of new pipe materials for use in Hong Kong. The Assistant Director/New Works, Water Supplies Department (AD(NW),WSD) supplemented that generally speaking, the pipes constructed in the 60's and 70's were found to be susceptible to rapid deterioration. The quality of the mild steel and ductile iron pipes commonly used in the 80's were of a much better quality and had very good leakage-proof performance.

27. Mr Albert CHAN expressed serious concern about the disruption that might be caused by the proposed replacement works to the public and enquired about the co-ordination with other works departments and utility undertakers to minimize road openings. In reply, DWS advised that a mechanism was in place within the Administration to co-ordinate the projects of various works departments with a view to minimizing road openings and the resultant disruption to the public. The works under the present proposal would be packaged into four contracts and the one covering the works in Mong Kok would be incorporated into the works contract for the West Kowloon drainage improvement project overseen by the Drainage Services Department.

28. Mr Albert CHAN considered that in order to minimize road opening works, co-ordination of works projects at the early planning stage was necessary since once a works contract was awarded, it would be extremely difficult to change the scope of a project to incorporate other works. He thus sought further details on the mechanism to co-ordinate road opening works and asked whether the mechanism would be extended to cover private utility

undertakers and the railway corporations.

29. In response, the Secretary for Works advised that all works departments had drawn up their respective five-year and 10-year works programmes and the information was consolidated and circulated among the works departments. The department responsible for a project involving road opening works would notify other works departments as well as private utility undertakers at the planning stage of the project. Where practicable, the works of two works departments would be included in a single contract, while private utility undertakers would be advised to schedule their works to tie in with the schedule of public works projects to minimize road openings. In this connection, Mr LAW Chi-kwong suggested that the Administration should not permit private utility undertakers to carry out road opening works within a certain period of, say two years, from the time of the completion of the previous road opening works undertaken at the same site.

30. In response, S for W advised that under the existing policy, utility undertakers were not permitted to carry out road opening works at new roads within five years after the completion of the new roads. For existing roads where major improvement works had been undertaken, the restriction period was three years. S for W further advised that there was a standing committee under the Highways Department to vet applications for road opening works and to handle related issues. He understood that if an application was concerned with a road section where a public works project involving road opening works had been carried out recently and the utility undertaker could not provide good reasons for not having adjusted its works schedule accordingly, the application would be rejected. AD(NW), WSD informed members that the aforesaid restriction would not apply to the proposed mainlaying works as these works were undertaken in phases and only small sections of roads were involved at any one time.

31. Mr Albert CHAN considered that the mainlaying works under the present proposal covered extensive areas and thus repeated road openings in the same areas would indeed cause undue nuisance to the public. He opined that there was an urgent need to establish a clear and stringent mechanism to restrict repeated road opening works.

32. In response, DWS pointed out that co-ordination of road opening works was a complicated issue. It was often not feasible to make entrustment arrangements between different utility undertakers as the nature of their respective projects could be very different. On the other hand, requiring different utility undertakers to carry out their works concurrently on the same site might give rise to confusion and disputes. In this connection, the Chairman suggested that issues relating to road openings should be followed up at the relevant Panel(s) in due course.

33. Miss Cyd HO recalled that when considering a previous sewerage project (PWSC(2000-01)8 discussed on 12 April 2000), members noted that the record drawings provided by utility undertakers were highly unreliable and this had caused project delay and additional costs. As the mainlaying works would be implemented under four re-measurement contracts and the contractors would be required to carry out trial pits/trenches prior to commencement of the works, Miss HO enquired about the effectiveness of these arrangements in reducing the risks associated with underground utilities and the cost implications of these arrangements.

34. DWS and AD(NW),WSD advised that to provide greater fairness to both the contractor and the Government, mainlaying works were usually implemented in the form of re-measurement contracts as these works usually involved many uncertainties with the ground conditions. As regards the requirement on the contractor to make trial pits/trenches prior to commencement of works, DWS advised that trial pits/trenches formed an essential part of the mainlaying works and the cost associated with these works constituted only a small proportion, in the order of a few percent, of the total project cost. He remarked that more problems would probably arise if trial pits/trenches were not made in advance to investigate the ground conditions. The Chairman concurred that it was a common arrangement to carry out trial pits/trenches prior to commencement of drainage and water main works. Otherwise, interference with or obstruction by underground utilities might cause significant delay and additional works.

35. In view of the problems associated with inaccurate record drawings of utility undertakers, Miss Cyd HO asked whether the Administration had established a central database of rectified records of underground utilities to facilitate future public works projects. In reply, DWS pointed out that even with accurate records in the first place, as many utility cables were flexible cables, they could often be relocated during road excavation works. Miss Cyd HO suggested and the Chairman agreed that the issues relating to the accuracy of records on underground utilities should be further discussed at the relevant Panel. The Chairman also requested the Administration to provide more information to members when the subject was discussed by the relevant Panel.

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36. Mr LAU Kong-wah observed that the completion dates on the notice boards erected at the sites of road opening works were often not adhered to, and the repeated extensions of these works had caused much inconvenience to the public. He thus enquired whether a mechanism was in place to ensure that the completion dates as stated on the notice boards would be adhered to. In reply, DWS said that the commencement and completion dates on the notice boards were the dates specified in the relevant road opening permits to control the duration of road opening works. While he appreciated the inconvenience caused to the public, he explained that extension was sometimes necessary

when unforeseen circumstances were encountered. He however assured members that WSD would closely monitor the progress of the proposed mainlaying works and would urge the contractors concerned to expedite works where practicable.

37. S for W advised that mainlaying works were carried out in small sections in order to minimize disruption to the public. The overall works programme was adjusted from time to time having regard to the works experience of completed sections. Extension of the completion date at individual sections might however be required when there were unforeseen difficulties with the ground conditions. He nevertheless added that works departments had been reminded to update the information on the notice boards at road openings sites once it was known that an extension was required.

38. Mr Albert CHAN commented that the completion dates stated on the notice boards erected at road openings were misleading in that completion of the works at a road section was usually followed by the commencement of works at another road section nearby. He suggested that the completion date of all the road opening works in the area concerned should also be stated on the notice boards. The Administration took note of Mr CHAN's suggestion for consideration.

Admin

39. Mr LAU Kong-wah enquired about the duration of suspension of water supply that might be required in the course of the proposed works. In reply, AD(NW), WSD said that upon completion of the mainlaying works, suspension of water supply would be required to facilitate connection of the new mains to the water distribution system. Where necessary, WSD would make temporary water supply arrangements for the affected residents. He envisaged that the duration of each occasion of suspension of water supply would be less than eight hours. In reply to Mr IP Kwok-him's enquiry on whether the relevant District Council(s) would be informed of any scheduled suspension of water supply. AD(NW), WSD confirmed that WSD would give notice to the affected residents as early as possible, and that this was a standing practice of WSD.

40. In reply to Mr TAM Yiu-chung's enquiry, DWS confirmed that because of the corrosive nature of salt water, salt water mains deteriorated at a faster rate than fresh water mains. Based on past records, about 50% of the main bursts in Hong Kong involved salt water mains and they constituted less than 20% of the overall water distribution system.

41. Pointing out that problems with water pipes within public housing estates often affected water supply, Mr TAM Yiu-chung enquired about the arrangement regarding the replacement and rehabilitation of water pipes within public housing estates. In reply, DWS advised that it was the responsibility of the management/property owners of public and private residential

developments to ensure that the water distribution systems within their developments were up to standard and in good condition. Where significant deterioration of the water pipes within residential developments were detected by or reported to WSD, the department would raise the matter with the relevant property management to bring about necessary improvements.

42. Mr LAU Kong-wah sought clarification on the statement in the discussion paper that the notional increase in water charges brought about by this project was negligible. In response, DWS said that the proposed works, costing about \$115 million (at money-of-the-day prices), accounted for about 1% of the total estimated capital cost of the 20-year replacement and rehabilitation programme. The capital cost of the programme however would be offset to some extent by the savings brought about by the proposed works; the works would bring about reduction in maintenance costs and other costs associated with ageing water mains such as interruption of water supply, closure of roads during bursts, water loss due to bursts and leaks etc. Taking these factors into account, the Administration considered that the direct effect of the proposed works on water charges would be negligible.

43. The item was voted on and endorsed.

44. The meeting ended at 12:30 pm.

Legislative Council Secretariat

16 November 2000