

**Legislative Council**  
**Panel on Environmental Affairs**

**North and South Kowloon Sewerage, Stage I, Phase II**

**Purpose**

This paper informs Members of the Administration's intention to seek Public Works Subcommittee's approval on 12 April 2000 to increase the approved project estimate for Public Works Project Item 199DS, namely North and South Kowloon sewerage, stage I, phase II, from \$481 million to \$644 million.

**Background**

2. The North and South Kowloon sewerage, stage I, phase II project comprises works for improving the sewage conveyance and treatment systems in Tsim Sha Tsui, Hung Hom, To Kwa Wan and Wong Tai Sin. The works were approved by Finance Committee in July 1995 at an estimated cost of \$481 million. The works were implemented under two civil contracts and one electrical & mechanical contract. These contracts commenced in stages in end 1995 and early 1996 respectively. Works were originally scheduled for completion in June 1997.

3. The scope of the **199DS** project comprises -

- (a) construction of about 5.8 kilometres of sewers with diameter 300 mm to 1 800 mm in Tsim Sha Tsui, Hung Hom Bay reclamation, Hung Hom, To Kwa Wan and Wong Tai Sin;
- (b) construction of Hung Hom Bay sewage pumping station and Wan Hoi Street sewage pumping station;
- (c) construction of about 2.3 kilometres of 1200 mm

diameter pumping mains from Hung Hom Bay sewage pumping station to To Kwa Wan sewage screening plant;

- (d) upgrading of existing Kai Tak No. 1 and No. 2 dry weather flow pumping stations and Whampoa Gardens sewage pumping station;
- (e) construction of eight dry weather flow interceptors in Tsim Sha Tsui, To Kwa Wan and Ma Tau Kok; and
- (f) decommissioning of Kowloon South sewage screening plant, Kowloon East sewage screening plant and Winslow Street sewage pumping station.

### **Justification**

4. The proposal to increase the approved project estimate of 199DS by \$163 million aims at covering additional project expenditure arising from the two following items-

- (a) to cover costs arising from prolongation and additional works which had not been allowed for during the tendering of works; and
- (b) to cover remeasurement payments under general site clearance items as required under an arbitration ruling and the interest payments accrued over the quantum in dispute.

### **Prolongation and Additional Works**

5. The North and South Kowloon sewerage, stage I, phase II project involved replacing a number of existing sewers or laying new sewers in areas where there were extensive underground utilities, other buried obstructions and heavy pedestrian and vehicular traffic.

6. To minimise the need for extensive utility diversions, detailed reviews of utility record drawings obtained from the utility undertakers were carried out

during the design stage. However, it was not possible to carry out comprehensive pre-contract underground investigation on site to verify the accuracy of all utility drawings without causing disproportionate inconvenience and disruption to the public. When the contractors excavated the roads for the sewerage works, the locations of most of the buried utilities were found to deviate substantially from those shown on record drawings. Many were found causing direct obstruction to the planned new sewers. The main areas where sewerage works have been obstructed by underground utilities during construction include Canton Road, Granville Road, Salisbury Road, Hung Hom Road, Hok Yuen Street East, Sung Ping Street and Shatin Pass Road. These locations are marked in the drawing at Annex A and illustrated in the photograph at Annex B.

7. Diverting these obstructing utilities involved very complex procedures. To arrange a complete diversion of utilities at each location usually involved a series of temporary traffic schemes and additional excavation. Although utility companies are responsible for diverting their own utility installations, our contractors were still required to arrange these additional temporary traffic schemes and excavation to facilitate utility diversions. As carrying out these additional works by our contractors was time-consuming, the project was not substantially completed until March 1999. Since these works could not have been allowed for when we tendered out the works, the costs arising from prolongation and additional works, which amounted to some \$68 million, have to be borne by the Government. The site staff costs have also been increased by \$28 million to cover the supervision works required for the extended contract periods.

#### Remeasurement under General Site Clearance

8. It is common for construction contracts to incorporate a clause to allow for a remeasurement of payment under general site clearance items. Under one of the contracts for the construction of sewers and pumping stations, there was a dispute between the Government and the contractor on the extent of the areas which should be re-measured for payment under general site clearance items. We considered that only those parts of the Site where clearance was required should be re-measured whereas the contractor contended that the contract allowed the whole of the Site to be re-measured. In accordance with the terms of the contract, the dispute was referred to arbitration. On 28 February 2000, the

Arbitrator ruled in favour of the contractor. As a result, we need to comply with the arbitration award and make payments to the contractor. The amount payable comprises the arbitration award which covers payments for the re-measurement of the previously unmeasured parts of the Site and interest payments accrued over the quantum in dispute. As the contract documents under dispute were prepared by our consultants, we are carefully examining the grounds for the arbitration award to see if we could seek indemnity from our consultants. Photographs illustrating one of the works areas under dispute are enclosed at Annex C.

### Financial Implications

9. Following a review of the financial position of the project, we consider it necessary to increase the approved project estimate of **199DS** by \$163 million from \$481 million to \$644 million in MOD prices (see paragraph 10 below) in order to cover the costs of the works.

10. A summary of the proposed increase of \$163 million is as follows –

	<b>\$ million</b>	<b>%</b>
(a) Contractors' prolongation costs	68	41.7
(i) Site and office overhead	40.3	
(ii) Payment to cover inefficient use of constructional plant	27.7	
(b) Arbitration	89	54.6
(i) Award	57.9	
(ii) Interest	31.1	
(c) Site staff supervision costs	28	17.2
(iii) Extended contract periods	22.0	
(ii) salary revision	6.0	
(d) Project contingencies	(22)	(13.5)
	<hr/>	<hr/>

Total	163 (in MOD prices)	100.0
-------	---------------------------	-------

11. The proposed increase in the approved project estimate will not give rise to additional recurrent expenditure.

### **Environmental Implications**

12. We have substantially completed the works. The proposed increase in the approved project estimate does not have any environmental implications.

Environment and Food Bureau  
April 2000