

## **ITEM FOR FINANCE COMMITTEE**

**CAPITAL WORKS RESERVE FUND  
HEAD 708 – CAPITAL SUBVENTIONS AND MAJOR SYSTEMS  
AND EQUIPMENT  
Transport Department  
Subhead 8111ZN Expansion of Speed Enforcement Camera System,  
Phase 2**

Members are invited to approve an increase in the commitment of the Subhead Expansion of Speed Enforcement Camera System, Phase 2 from \$32.18 million by \$15.21 million to \$47.39 million for installation of 26 additional speed enforcement camera housings at long, steep downhill roads.

### **PROBLEM**

Speeding on long, steep downhill roads is regarded as a potential factor leading to serious traffic accidents. The provision of speed enforcement camera (SEC) housings at these roads can help deter speeding and reduce the occurrence of accidents.

### **PROPOSAL**

2. The Commissioner for Transport, with the support of the Secretary for Transport and Housing, proposes to install 26 SEC housings at long, steep downhill roads at a total estimated cost of \$15.21 million. The installation of these SEC housings would be incorporated into the “Expansion of Speed Enforcement Camera System, Phase 2” project (“the Phase 2 Project”), thereby increasing the commitment from \$32.18 million to \$47.39 million.

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**JUSTIFICATION**

3. The Finance Committee (FC) approved a commitment of \$32.18 million for the Phase 2 Project at its meeting on 13 June 2008. The commitment includes the acquisition of 20 digital camera units<sup>1</sup> and installation of 25 SEC housings<sup>2</sup> on selected strategic and trunk road locations to enhance the deterrent effect and enforcement actions against speeding. We also informed FC at that time that, following the serious coach accident in New Hiram's Highway at Sai Kung on 1 May 2008, Transport Department (TD) was conducting a territory-wide review on long, steep downhill roads with a view to identifying necessary improvement measures, including the installation of SECs at certain long, steep road sections as appropriate; and that we would report the findings of the review to the Legislative Council (LegCo) Panel on Transport in June 2008 and adjust the list of proposed SEC housings in the Phase 2 Project as necessary.

4. The LegCo Panel on Transport was briefed, at its meeting on 30 June 2008, about the findings of TD's review and the series of improvement measures to be taken to further enhance road safety on the 29 identified long, steep downhill roads. Members considered that SEC housings should be installed at each of these road sections in order to enhance the deterrent effect against speeding and to reduce the risk of occurrence of accidents similar to those on New Hiram's Highway and Garden Road. We have taken up the Panel's suggestion and studied the technical feasibility of installing SEC housings at these road sections.

5. Of the 29 road sections, one additional SEC housing<sup>3</sup> has already been installed at New Hiram's Highway, taking into account the views of the LegCo Panel on Transport and the Sai Kung District Council. TD has now completed the technical feasibility study on installing SEC housings at the

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<sup>1</sup> The 20 digital camera units include two to replace the existing wet-film cameras; eight to replace the existing 1.3 million-pixel cameras; and ten additional camera units.

<sup>2</sup> The 25 SEC housings include two to replace the existing wet-film camera housings; and 23 at new housing locations.

<sup>3</sup> The additional SEC housing is made available from the redeployment of one of the SECs at Tuen Mun Road which has been temporarily removed to facilitate road widening works. A replacement housing will be provided at Tuen Mun Road upon the completion of the road widening project in late 2009.

Encl.

remaining 28 road sections and confirmed that SEC installations are technically feasible at 26 road sections<sup>4</sup>. We therefore propose to install 26 additional SEC housings at the relevant road sections as listed at the Enclosure. In order that these additional SEC housings can be installed as soon as practicable, we propose to incorporate the works into the Phase 2 Project.

6. If the proposal in paragraph 2 above is approved, and upon completion of the revised Phase 2 Project, there will be a total of 20 digital cameras operating on a rotational basis at 127 SEC housings. The camera-to-housing ratio will be increased from the current 1:8.5 to 1:6.35<sup>5</sup>.

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<sup>4</sup> Installation of SEC housings at Broadwood Road and Keng Hau Road is not feasible because –

- Broadwood Road (between Tai Hang Road and Link Road, Wan Chai) is a bridge structure, and there is no footpath and other available space to accommodate the housing; and
- Keng Hau Road (between Tai Po Road and Roundabout at Che Kung Miu Road, Shatin) also has site constraints in that an erected SEC housing will either obstruct pedestrian flow or the run-ins to the residential premises.

<sup>5</sup> The SEC system comprises the following –

	No. of cameras	No. of housing sites	Camera-to-housing ratio
Existing	10 ( 2 wet-film and 8 digital )	85 ( 10 wet-film and 75 digital )	1 : 8.5
Upon completion of the revised Phase 2 Project in December 2010	20(digital), comprising 10 additional digital cameras and 10 new cameras replacing old ones	127(digital), comprising 75 existing + 51 new housing sites (including 2 replacing existing wet-film housings) + 1 reprovisioned site = 127 <sup>note</sup>	1 : 6.35

Note

- The one housing at Tuen Mun Road will have been reprovided by late 2009 (see Footnote 3).
- Out of the existing ten wet-film SEC housings, two will be demolished and replaced by new digital camera housings in this project. Replacement of the remaining eight wet-film housings will be carried out under a separate project involving the widening of Tolo Highway/Fanling Highway project which is scheduled for completion in early 2013. By then, the total number of camera housing sites will be 135.

**FINANCIAL IMPLICATIONS****Non-recurrent Expenditure**

7. We estimate that the proposed installation of 26 SEC housings will cost about \$15.21 million, with the breakdown as follows –

	<b>\$ million</b>
(a) Procurement of additional new SEC housings, camera poles and power cubicles	5.72
(b) Additional on-site installation (including civil works), testing, commissioning, training and expert report	6.44
<i>Subtotal</i>	<u>12.16</u>
(c) Electrical and Mechanical Services Trading Fund (EMSTF) project management charges	1.83
(d) Contingencies (10% of items (a) and (b))	<u>1.22</u>
<b>Total</b>	<b><u>15.21</u></b>

8. On paragraph 7(a) above, the estimated cost of \$5.72 million is for the procurement of 26 additional SEC housings and camera poles to accommodate and support the camera units, and 26 additional power cubicles to house the electrical devices for power supply.

9. On paragraph 7(b) above, the estimated cost of \$6.44 million is for the installation of additional SEC housings and ancillary equipment including the camera poles and power cubicles; laying of cable ducting; testing and commissioning of the expanded camera system after installation; training of Police staff for the operation of the system and engagement of an independent expert to provide expert reports on the accuracy and reliability of the system prior to implementation.

10. On paragraph 7(c) above, the estimated cost of \$1.83 million is for payment to EMSTF for providing additional project management services including the whole process of investigation, design, tendering, installation, testing, commissioning, and monitoring till the end of the defect liability period.

11. With the proposed addition of 26 SEC housings, the total number of new SEC housings to be installed in the revised Phase 2 Project will be increased from 25 to 51. There will be some adjustments in the implementation plan (see paragraph 15 below) and hence the estimated cash flow for the Phase 2 Project is revised as follows –

<b>Year</b>	<b>Original \$ million</b>	<b>Revised \$ million</b>
2008-2009	0.39	0.39
2009-2010	13.42	2.52
2010-2011	18.37	44.48
<b>Total</b>	<b>32.18</b>	<b>47.39 (+15.21)</b>

### **Recurrent Expenditure**

12. As with the proposed new SEC housings in the original Phase 2 Project, the proposed additional 26 SEC housings will also be handed over to the Hong Kong Police Force for operation and maintenance. Based on the revised implementation plan as set out in paragraph 15 below, we estimate that the proposed addition of 26 SEC housings will increase the full-year recurrent expenditure from \$13.80 million to \$15.61 million per annum for 2012-13 and 2013-14. This will be partly offset by the annual savings of \$0.24 million from 2014-15 onwards after the phasing out of the wet-film system in 2013. The breakdown is as follows –

	<b>2012-13 and 2013-14 \$ million per annum</b>	<b>2014-15 onwards \$ million per annum</b>
(a) Equipment maintenance	4.59	4.35
(b) Staffing resources <sup>6</sup>	11.02	11.02
<b>Total</b>	<b>15.61</b>	<b>15.37</b>

13. On paragraph 12(a) above, the estimated annual expenditure of \$4.35 million (an increase of \$1.25 million when compared with the original Phase 2 Project) is for the maintenance of cameras and housings, IT equipment and consumables.

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<sup>6</sup> The estimated annual expenditure has been updated from \$10.46 million to \$11.02 million to reflect the revised civil service pay since 1.4.2008.

14. On paragraph 12(b) above, the proposed addition of 26 SEC housings will not affect the staffing resources requirement when compared with the original Phase 2 Project. The estimated annual expenditure of \$11.02 million is for engaging 43 staff, comprising three Inspectors of Police, five Police Sergeants, 29 Police Constables and six clerical staff in the Hong Kong Police Force to carry out investigations and prosecution of speeding cases generated by the ten additional digital camera units.

## IMPLEMENTATION PLAN

15. Taking into consideration the proposed addition of 26 SEC housings, we propose to revise the implementation programme of the Phase 2 Project as follows –

	<b>Activity</b>	<b>Original Programme</b>	<b>Revised Programme</b>
(a)	Tendering exercise	October 2008 to February 2009	November 2008 to March 2009
(b)	Contract commencement	March 2009	April 2009
(c)	Commissioning of the 1 <sup>st</sup> batch of 26 SEC housings and six new cameras	March 2010 <sup>7</sup>	April 2010
(d)	Commissioning of the 2 <sup>nd</sup> batch of 11 SEC housings and 14 new cameras	August 2010 <sup>8</sup>	September 2010
(e)	Commissioning of remaining 14 SEC housings	–	December 2010

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<sup>7</sup> The original programme is to complete commissioning of 1<sup>st</sup> batch of ten housings (two to replace existing wet-film camera housings and eight at new locations) and six new cameras in March 2010.

<sup>8</sup> The original programme is to complete commissioning of 15 housings at new locations and 14 new cameras in August 2010.

**PUBLIC CONSULTATION**

16. The LegCo Panel on Transport was briefed about the findings of TD’s review and improvement measures to enhance road safety of 29 long, steep downhill road sections on 30 June 2008. The Panel urged for the provision of SEC housings at each of the 29 sections. Having considered the views of the Panel, we have prepared an action plan for the installation of SECs at the long, steep downhill roads. We have informed the Panel of our plan to seek necessary funding from FC in this legislative session for installing SEC housings on the identified long, steep road sections subject to technical feasibility, and outlined the revised implementation plan of the Phase 2 Project as set out in paragraph 15 above, by way of a letter to the Panel dated 10 July 2008. Members raised no objection to the proposal.

**BACKGROUND**

17. In 1999, the first SEC system was installed along Tolo Highway as an initial trial scheme to deter speeding. In the same year, FC approved a commitment of \$25.16 million for expanding the SEC system to other strategic road sections over the territory. Currently, there is a total of ten camera units operating in 85 SEC housings on a rotational basis. On 13 June 2008, FC approved a commitment of \$32.18 million for the Expansion of the SEC System, Phase 2, under which 20 digital camera units (including ten for replacement) will be procured and 25 new SEC housings (including two for replacement) will be installed.

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Transport and Housing Bureau  
November 2008

## Proposed New Speed Enforcement Camera Housing Locations

Long Steep Downhill Road Section		No. of Housings
<b>Hong Kong Island</b>		
1	Garden Road	1
2	Smithfield Road	1
3	Blue Pool Road	1
4	Magazine Gap Road	1
5	Old Peak Road	1
6	Aberdeen Reservoir Road	1
7	Sassoon Road	1
8	Chai Wan Road (from Tai Tam Road to Shau Kei Wan Road)	1
9	Chai Wan Road (from Tai Tam Road to Chai Wan Roundabout)	1
10	Pak Fuk Road	1
11	Cloud View Road	1
<b>Kowloon</b>		
12	Clear Water Bay Road	1
13	Shatin Pass Road	1
14	Wan Wah Street	1
15	Ede Road	1
<b>New Territories</b>		
16	Wah King Hill Road	1
17	Tai Mo Shan Road	1
18	Lo Fai Road	1
19	Clear Water Bay Road (near Ah Kung Wan Road)	1
20	Hang Hau Road	1
21	Tung Chung Road (from Pak Kung Au to Cheung Sha)	1
22	Tung Chung Road (from Pak Kung Au to Lung Tseng Tau)	1
23	South Lantau Road (from Nam Shan to Pui O)	1
24	South Lantau Road (from Nam Shan to Mui Wo)	1
25	Lam Kam Road (from Kadoorie Farm to Ng Tung Chai)	1
26	Lam Kam Road (from Kadoorie Agricultural Research Centre to Route Twisk)	1
<b>Total</b>		<b>26</b>

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