

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 703 – BUILDINGS
HEAD 704 – DRAINAGE
HEAD 705 – CIVIL ENGINEERING
HEAD 706 – HIGHWAYS
HEAD 709 – WATERWORKS

Increase in approved allocations for six works-related block allocations

Members are invited to recommend to Finance Committee to approve an increase in the 2009-10 allocations for six works-related block allocations under the Capital Works Reserve Fund (CWRP) from a total of \$4,243.0 million by \$988.3 million to a total of \$5,231.3 million.

PROBLEM

The approved allocations for 2009-10 for six works-related block allocations under the CWRP are insufficient to meet the estimated expenditure for the additional minor works to be implemented in 2009-10, which will create additional jobs for the construction sector.

PROPOSAL

2. We propose to increase the approved allocations for 2009-10 for six works-related block allocations from a total of \$4,243.0 million by \$988.3 million to a total of \$5,231.3 million. The breakdown is as follows –

Subhead	Approved allocation for 2009-10 (\$ million)	Additional allocation required (\$ million)	Total allocation for 2009-10 (\$ million)	Percentage change
3004GX – Refurbishment for government buildings (including public facilities with leisure, cultural services and environmental hygiene elements such as parks and public toilets)	1,620.000	701.240	2,321.240	+43.3%
3101GX – Minor building works (i.e. mainly to fund new public facilities of relatively minor scale, whereas 3004GX is to fund refurbishment / renovation of facilities already in place)	670.000	1.800	671.800	+0.3%
4100DX – Drainage works, studies and investigations	220.000	75.000	295.000	+34.1%
5101CX – Civil engineering works, studies and investigations	306.000	3.000	309.000	+1.0%
6100TX – Highway works, studies and investigations	727.000	109.500	836.500	+15.1%
9100WX – Waterworks, studies and investigations	700.000	97.800	797.800	+14.0%
Total for six works-related block allocations	4,243.0	988.3	5,231.3	+23.3%

PROJECT SCOPE AND NATURE

3. The scope of **3004GX**, **3101GX**, **4100DX**, **5101CX**, **6100TX** and **9100WX** is set out at Enclosure 1 to Enclosure 6 respectively.

/ JUSTIFICATION

JUSTIFICATION

4. On 9 January 2009, Finance Committee approved a total allocation of \$7.57 billion for 2009-10 for works-related block allocations under the CWRP. With the occurrence of the financial tsunami, the public and the Administration share the view that concerted efforts should be made to preserve and create jobs. There is a general consensus that the Administration should press ahead with major infrastructure and undertake more minor works to create additional employment opportunities in the construction sector. On 10 December 2008, the Legislative Council unanimously passed a resolution urging the Government to speed up infrastructure development.

5. Works departments have hence critically reviewed the position and have identified some 22 additional batches of minor works projects to be funded under CWRP. These projects have been identified taking account of views expressed by Legislative Council Members during the above-mentioned Motion Debate. As a result, the proposed additional minor works projects are of the following two themes –

(a) Enhancing government's infrastructural asset management – apart from new capital projects, we should not lose sight of the importance of enhancing the management of our infrastructural assets. This is to ensure that our infrastructure is resilient to adverse external conditions and old facilities are adequately upgraded to meet present-day safety and operational standards. The exceptionally heavy rainfall in 2008 demonstrates clearly the need to better manage our infrastructural assets, for instance in the areas of flood prevention and landslip mitigation. Projects under this theme include –

- (i) refurbishment of the exterior of 50 government buildings;
- (ii) renovation of aged protective surface of 500 slopes including provision of safe maintenance access and greening features;
- (iii) enhancement of the outlook of sewage treatment plants and facilities to better integrate them with the local communities;
- (iv) provision of internal linings for aged stormwater drains and sewers to sustain their serviceability and structural integrity;
- (v) upgrading of critical electrical and mechanical (E&M) installations that are old and due for replacement;

/(vi)

- (vi) footpath and street furniture enhancement; and
 - (vii) strengthening harbour control capability.
- (b) Enhancing green and sustainable environment – the promotion of green buildings contributes to achieving sustainable development. To this end, we are committed to putting into practice green and sustainable building features through various means. Projects under this theme include –
- (i) installation and retrofitting energy efficient E&M facilities for various government departments;
 - (ii) provision of green roofs in 40 government buildings;
 - (iii) retrofitting plumbing with water saving devices in government buildings and schools; and
 - (iv) refurbishment of building services installations in 100 government buildings to incorporate energy efficient features in lighting systems, lifts and escalators, air-conditioning systems and power supply systems.

— A full list of the 22 additional batches of minor works projects is at Enclosure 7. We have deposited a full list of all the additional items proposed to be funded under each of these six works-related block allocations for 2009-10 with the Legislative Council Secretariat.

FINANCIAL IMPLICATIONS

6. The total cost of the additional items to be funded under CWRP block allocations is about \$1.6 billion, of which \$988.3 million is anticipated to be spent in 2009-10. In other words, the spending on minor works projects under CWRP will be further increased from \$7.57 billion to \$8.56 billion in 2009-10. This represents a 13.0% increase against the approved allocations in 2009-10 as set out below –

Head	Description	Approved allocation for 2009-10 (\$ million)	Total proposed allocation for 2009-10 (\$ million)	Percentage change
703	Buildings	2,447.0	3,150.0	+ 28.7%
704	Drainage	220.0	295.0	+ 34.1%
				/705

Head	Description	Approved allocation for 2009-10 (\$ million)	Total proposed allocation for 2009-10 (\$ million)	Percentage change
705	Civil Engineering	1,459.0	1,462.0	+ 0.2%
706	Highways	727.0	836.5	+ 15.1%
707	New Towns and Urban Area Development	507.0	507.0	—
708 (part)	Capital Subventions	1,502.7	1,502.7	—
709	Waterworks	700.0	797.8	+ 14.0%
711	Housing	11.1	11.1	—
	Total	7,573.8	8,562.1	+ 13.0%

7. The proposed increase in the approved allocations will not give rise to any additional recurrent expenditure.

PUBLIC CONSULTATION

8. We consulted the Legislative Council Panel on Development on the proposed increase in the approved allocations on 20 January 2009. Members supported the proposal to increase the approved allocations in 2009-10 by \$988.3 million such that additional jobs could be created for the construction industry.

ENVIRONMENTAL IMPLICATIONS

9. The additional batches of works are minor in nature and therefore are unlikely to give rise to adverse environmental impact. We will implement the standard pollution control measures during construction, as promulgated by the Director of Environmental Protection.

10. For any individual projects which are classified as designated projects under the Environmental Impact Assessment (EIA) Ordinance, we will follow the statutory requirements stipulated under the EIA Ordinance.

11. We have considered measures in the planning and design stages to reduce the generation of construction waste where possible (e.g. using metal site hoardings and signboards so that these materials can be recycled or reused in other projects). In addition, we will require the contractor to reuse inert construction waste on site (e.g. use of excavated materials for filling within the site) or in other suitable construction sites as far as possible, in order to minimise the disposal of inert construction waste to public fill reception facilities¹. We will encourage the contractor to maximise the use of recycled or recyclable inert construction waste, as well as the use of non-timber formwork to further minimise the generation of construction waste.

12. We will also require the contractors to submit for approval plans setting out the waste management measures, which will include appropriate mitigating means to avoid, reduce, reuse and recycle inert construction waste. We will ensure that the day-to-day operations on site comply with the approved plan. We will require the contractors to separate the inert portion from non-inert construction waste on site for disposal at appropriate facilities. We will control the disposal of inert construction waste and non-inert construction waste to public fill reception facilities and landfills respectively through a trip-ticket system.

13. We estimate that the projects will generate in total about 15 800 tonnes of construction waste. Of these, we will reuse about 2 200 tonnes (13.9%) of inert construction waste on site and deliver 13 550 tonnes (85.8%) of inert construction waste to public fill reception facilities for subsequent reuse. In addition, we will dispose of 50 tonnes (0.3%) of non-inert construction waste at landfills. The total cost for accommodating construction waste at public fill reception facilities and landfill sites is estimated to be \$372,100 for the projects (based on a unit cost of \$27/tonne for disposal at public fill reception facilities and \$125/tonne² at landfills).

/ENERGY

¹ Public fill reception facilities are specified in Schedule 4 of the Waste Disposal (Charges for Disposal of Construction Waste) Regulation. Disposal of inert construction waste in public fill reception facilities requires a licence issued by the Director of Civil Engineering and Development.

² This estimate has taken into account the cost of developing, operating and restoring the landfills after they are filled and the aftercare required. It does not include the land opportunity cost for existing landfill sites (which is estimated at \$90/m³), nor the cost to provide new landfills (which is likely to be more expensive) when the existing ones are filled.

ENERGY CONSERVATION MEASURES

14. Amongst the some 500 minor works projects to be created, there are about 300 building, sewage treatment plant improvement works and street lighting improvement projects which have adopted various forms of energy efficient features, including –

- (a) energy efficient light fittings;
- (b) occupancy sensor control;
- (c) T5 and light-emitting diode (LED) lightings;
- (d) water-cooled chillers and optimization of chillers’ sequencing control;
- (e) high efficiency motors, equipment with high power factor, equipment with low harmonic distortion, active filters and low loss in distribution circuits; and
- (f) energy-saving street lighting installation.

15. The total estimated additional cost for adoption of the above features is around \$143 million. There will be energy savings of about 20.6 million kilowatt-hours in the annual energy consumption.

HERITAGE IMPLICATIONS

16. These projects will not affect any heritage site, i.e. all declared monuments, proposed monuments, graded historic sites/buildings, sites of archaeological interests and Government historic sites identified by the Antiquities and Monuments Office.

LAND ACQUISITION

17. The proposed additional works do not require any land acquisition.

/BACKGROUND

BACKGROUND INFORMATION

18. Finance Committee approved a total of \$7.57 billion for 2009-10 for works-related block allocations on 9 January 2009.

19. The proposed additional works will not involve any tree removal. We will incorporate planting proposals as part of the greening projects, including estimated quantities of 950 trees, 291 900 shrubs and 2 900m² of grassed areas.

20. We estimate that the proposed increase in approved allocations of \$988.3 million for the six works-related block allocations in 2009-10 will create about 1 600 jobs (1 500 for labours and another 100 for professional/technical staff) for a total employment of 19 200 man-months.

Development Bureau
February 2009

**Capital Works Reserve Fund
Head 703 Subhead 3004GX**

*Refurbishment of government buildings
for items in Category D of the Public Works Programme*

Ambit : Works estimated to cost \$21 million or less each for the refurbishment of government buildings.

Controlling Officer	Approved allocation for 2009-10 \$'000	Revised Estimate for 2009-10 \$'000	Percentage change as compared with the approved allocation for 2009-10
Director of Architectural Services	1,620,000	2,321,240	+ 43.3%

Part I : Proposed injection items (in descending order of "Project Estimate")

Project description	Project Estimate \$'000	Estimate 2009-10 \$'000
1. Refurbishment of external wall of Tuen Mun Law Courts Building	16,000	4,776
2. Refurbishment of external walls of Fa Yuen Street Municipal Services Building	15,000	4,478
3. Refurbishment of external walls of Fire Service Department Junior Married Quarters at Tseung Kwan O	13,000	3,881
4. Refurbishment of exterior of Kowloon Bay Sport Ground	13,000	3,881
5. Upgrading for Kwai Hing Public Transport Interchange	12,760	12,760
6. Upgrading for Kowloon Bay Public Transport Interchange	12,760	12,760
7. Upgrading for Tseung Kwan O Metro City Public Transport Interchange	12,760	12,760
8. Upgrading for Tai Po Market Public Transport Interchange	12,760	12,760

Project description	Project Estimate \$'000	Estimate 2009-10 \$'000
9. Upgrading for Sheung Shui Landmark North Public Transport Interchange	12,760	12,760
10. Replacement of chiller units, chilled water pumps and accessories for Civil Engineering and Development Department Headquarters Building	11,484	11,484
Part II : Others		Estimate 2009-10 \$'000
About 450 other injection items with expected expenditure in 2009-10		608,940
Total of Parts I and II :		701,240

**Capital Works Reserve Fund
Head 703 Subhead 3101GX**

*Minor building works
for items in Category D of the Public Works Programme*

Ambit : Minor building works, fitting out works and minor alterations, additions and improvement works including furniture and equipment replacement incidental to such works, and slope inspections and minor slope improvement works, subject to a maximum ceiling of expenditure of not more than \$21 million per item.

Controlling Officer	Approved allocation for 2009-10 \$'000	Revised Estimate for 2009-10 \$'000	Percentage change as compared with the approved allocation for 2009-10
Director of Architectural Services	670,000	671,800	+ 0.3%

Part I : Proposed injection items (in descending order of "Project Estimate")

Project description	Project Estimate \$'000	Estimate 2009-10 \$'000
1. Strengthening harbour control capability - to construct a two storey-building for the Harbour Patrol Section of Marine Department	18,000	1,800

Part II : Others

	Estimate 2009-10 \$'000
Nil	

Total of Parts I and II : 1,800

**Capital Works Reserve Fund
Head 704 Subhead 4100DX**

*Drainage works, studies and investigations
for items in Category D of the Public Works Programme*

Ambit : Minor works including slope inspections and minor slope improvement works, feasibility studies and site investigations in respect of drainage projects, subject to a maximum ceiling of expenditure of not more than \$21 million per Category D item. Items may also be included in Category D to cover the costs of preliminary feasibility studies and investigations to enable drainage projects to be included in Category C of the Public Works Programme, and consultants' fees and charges for feasibility investigations and design (including preparation of tender documents) of drainage projects in Category B or (subject to the Secretary for Financial Services and the Treasury's approval) Category C of the Public Works Programme.

Controlling Officer	Approved allocation for 2009-10 \$'000	Revised Estimate for 2009-10 \$'000	Percentage change as compared with the approved allocation for 2009-10
Director of Drainage Services	220,000	295,000	+ 34.1%

Part I : Proposed injection items (in descending order of "Project Estimate")

Project description	Project Estimate \$'000	Estimate 2009-10 \$'000
1. Preventive lining works in (i) Hong Kong Island and Islands; (ii) Tai Po and North District; and (iii) Shatin, Ma On Shan, Sai Kung and Tseung Kwan O	20,000	10,000
2. Retrofitting pumping systems as a pilot scheme in three selected medium size sewage pumping stations	20,000	10,000
3. Electrical power management and quality improvement works at Shek Wu Hui and Yuen Long sewage treatment works	20,000	10,000
4. Enhancement of odour control and management systems as pilot scheme in four selected sewage treatment facilities for improvement	20,000	10,000
5. Associated works for two sewer duplications in Shatin	20,000	5,000

Project description	Project Estimate \$'000	Estimate 2009-10 \$'000
6. Pilot applications of membrane technologies in the reuse of treated effluent in Stonecutters Island sewage treatment works	14,000	7,000
7. Pilot applications of membrane technologies in the reuse of treated effluent in two selected sewage treatment works in Hong Kong Island and outlying islands	14,000	7,000
8. Pilot applications of membrane technologies in the reuse of treated effluent in three selected sewage treatment works in the New Territories	11,000	5,500
9. Pilot applications of membrane technologies in the reuse of treated effluent in six selected screening plants and pumping stations	11,000	5,500
10. Greening and landscape enhancement works for buildings at Shatin sewage treatment works, Ma On Shan sewage pumping station, Tung Chung sewage pumping station and Shek Wu Hui sewage treatment works	10,300	5,000
Part II : Others		Estimate 2009-10 \$'000
Nil		
	Total of Parts I and II :	75,000

**Capital Works Reserve Fund
Head 705 Subhead 5101CX**

*Civil engineering works, studies and investigations
for items in Category D of the Public Works Programme*

Ambit : Minor works, feasibility studies and site investigations in respect of civil engineering works, including slope inspections and minor slope improvement works, subject to a maximum ceiling of expenditure of not more than \$21 million per Category D item. Items may also be included in Category D to cover the costs of preliminary feasibility studies and investigations to enable civil engineering projects to be included in Category C of the Public Works Programme, and consultants' fees and charges for feasibility investigations and design (including preparation of tender documents) of civil engineering projects in Category B or (subject to the Secretary for Financial Services and the Treasury's approval) Category C of the Public Works Programme.

Controlling Officer	Approved allocation for 2009-10 \$'000	Revised Estimate for 2009-10 \$'000	Percentage change as compared with the approved allocation for 2009-10
Director of Civil Engineering and Development	306,000	309,000	+ 1.0%

Part I : Proposed injection items (in descending order of "Project Estimate")

Project description	Project Estimate \$'000	Estimate 2009-10 \$'000
1. Greening enhancement in Tin Shui Wai	3,500	3,000

Part II : Others

Nil		Estimate 2009-10 \$'000
	Total of Parts I and II :	3,000

**Capital Works Reserve Fund
Head 706 Subhead 6100TX**

*Highway works, studies and investigations
for items in Category D of the Public Works Programme*

Ambit : Minor works covering highways, railways and railway development, bridges, subways and other structures, footways, vehicle parking, street lighting, roadside slopes, road resurfacing (including joint replacement), road reconstruction and rehabilitation, traffic engineering, etc. as well as feasibility studies and site investigation in respect of highway projects, subject to a maximum ceiling of expenditure of not more than \$21 million per Category D item. Items may also be included in Category D to cover the costs of preliminary feasibility studies and investigations to enable highway projects to be included in Category C of the Public Works Programme, and consultants' fees and charges for feasibility investigations and design (including preparation of tender documents) of highway projects in Category B or (subject to the Secretary for Financial Services and the Treasury's approval) Category C of the Public Works Programme.

Controlling Officer	Approved allocation for 2009-10 \$'000	Revised Estimate for 2009-10 \$'000	Percentage change as compared with the approved allocation for 2009-10
Director of Highways	727,000	836,500	+ 15.1%

Part I : Proposed injection items (in descending order of "Project Estimate")

Project description	Project Estimate \$'000	Estimate 2009-10 \$'000
1. Painting of bridges and footbridge to improve their durability and aesthetics	20,600	12,600
2. Lay or relay paving block footpaths to enhance environment and strengthen their beddings	20,200	10,200
3. Cycle track resurfacing/antiskid/colour dressing to improve riding and aesthetic qualities	16,000	10,000
4. Slope toe planting to provide greening on the hard slope surface	14,000	7,500
5. New type II railings	13,000	9,000

Project description	Project Estimate \$'000	Estimate 2009-10 \$'000
6. Decorative railings at pedestrian scheme and tourism areas	12,300	4,800
7. Repainting of street furniture and concrete profile barriers to enhance their appearance	10,500	6,000
8. Improvement of lighting for bridge inspection and maintenance	8,500	8,500
9. Lift/ramp retrofitting to footbridges and subways to provide access for the disabled	8,200	1,200
10. Improvement of slopes to reduce the landslide risk	7,800	4,800
Part II : Others		Estimate 2009-10 \$'000
Nine other injection items with expected expenditure in 2009-10		34,900
Total of Parts I and II :		109,500

**Capital Works Reserve Fund
Head 709 Subhead 9100WX**

*Waterworks, studies and investigations
for items in Category D of the Public Works Programme*

Ambit : Minor works including slope inspections and minor slope improvement works, feasibility studies and site investigations in respect of waterworks items, subject to a maximum ceiling of expenditure of not more than \$21 million per Category D item. Items may also be included in Category D to cover the costs of preliminary feasibility studies and investigations to enable waterworks projects to be included in Category C of the Public Works Programme, and consultants' fees and charges for feasibility investigations and design (including preparation of tender documents) of waterworks projects in Category B or (subject to the Secretary for Financial Services and the Treasury's approval) Category C of the Public Works Programme.

Controlling Officer	Approved allocation for 2009-10 \$'000	Revised Estimate for 2009-10 \$'000	Percentage change as compared with the approved allocation for 2009-10
Director of Water Supplies	700,000	797,800	+ 14%

Part I : Proposed injection items (in descending order of "Project Estimate")

Project description	Project Estimate \$'000	Estimate 2009-10 \$'000
1. Retrofitting plumbing appurtenance with water saving devices in government buildings and schools in Kowloon East	19,800	7,300
2. Retrofitting plumbing appurtenance with water saving devices in government buildings and schools in Kowloon West	19,500	7,100
3. Retrofitting plumbing appurtenance with water saving devices in government buildings and schools in Hong Kong West	19,400	7,100
4. Retrofitting plumbing appurtenance with water saving devices in government buildings and schools in Hong Kong East	18,800	6,900

Project description	Project Estimate \$'000	Estimate 2009-10 \$'000
5. Retrofitting plumbing appurtenance with water saving devices in government buildings and schools in New Territories North	17,300	6,600
6. Retrofitting plumbing appurtenance with water saving devices in government buildings and schools in New Territories South	17,200	6,600
7. Retrofitting plumbing appurtenance with water saving devices in government buildings and schools in New Territories West	16,800	6,400
8. Retrofitting plumbing appurtenance with water saving devices in government buildings and schools in New Territories East	16,500	6,300
9. Retrofitting of accelator at Sha Tin water treatment works	12,500	12,500
10. Building renovation and improvement works to a number of small pumping stations and waterworks access roads in the New Territories Region	11,000	11,000
Part II : Others		Estimate 2009-10 \$'000
Four other injection items with expected expenditure in 2009-10		20,000
Total of Parts I and II :		97,800

Full List of 22 Additional Batches of Minor Works Projects

Proponent		Project Type	Description of the Projects	Estimated Cost (\$ million)	Expenditure in 2009-10 (\$ million)
Theme - Enhancing government's infrastructural assets management (total of 15)					
1	Architectural Services Department (ArchSD)	Refurbishment of the exterior of various government buildings	To refurbish the exterior of 50 government buildings including renovation of building façade and provision of barrier free access and green features	335.0	100.0
2	ArchSD	Renovation of protective surface of slopes	To renovate aged protective surface of 500 slopes (chunam surface) including provision of safe maintenance access and greening features	180.0	76.0
3	Drainage Services Department (DSD)	Greening and landscape enhancement works for buildings at Shatin sewage treatment works (STW), Ma On Shan sewage pumping station (SPS), Tung Chung SPS and Shek Wu Hui STW	The four DSD plants are close either to residential areas, trunk roads, or cross-boundary railway. The concerned landscape works aims at beautifying the DSD facilities	10.3	5.0
4	DSD	Preventive lining works in (i) Hong Kong Island and islands; (ii) Tai Po and North District; and (iii) Shatin, Ma On Shan, Sai Kung and Tseung Kwan O	To provide internal linings for the aged stormwater drains and sewers with different levels of defects to sustain their serviceability and structural integrity while avoiding the need of open trench excavation	20.0	10.0
5	DSD	Associated works for two sewer duplications in Shatin	To provide associated and supporting works for the existing and proposed duplicated crossings in Shatin facilitating cross connection between the new and existing sewers, as well as safe and easy operation and maintenance of the local networks	20.0	5.0

	Proponent	Project Type	Description of the Projects	Estimated Cost (\$ million)	Expenditure in 2009-10 (\$ million)
6	DSD	Retrofitting pumping systems as a pilot scheme in three selected medium size sewage pumping stations	To provide engineering service solution including investigation, design, construction, modification and trial operation on pump and pipework retrofit to optimize energy usage in three selected sewage pumping stations, taking into account up-to-date flow pattern and future flow build-up and promoting energy saving	20.0	10.0
7	DSD	Electrical power management and quality improvement works at Shek Wu Hui and Yuen Long sewage treatment works	To provide engineering service solution including investigation, design, construction and commissioning to provide power management and improve power quality of the electrical systems at Shek Wu Hui and Yuen Long sewage treatment works, and to promote energy saving	20.0	10.0
8	DSD	Enhancement of odour control and management systems as pilot scheme in four selected sewage treatment facilities for improvement	To further enhance the existing odour control systems performance and provide odour management system for effective environmental performance at Ho Pong Street sewage pumping station, Stonecutters Island sewage treatment works, Kwun Tong preliminary treatment works (PTW) and Chai Wan PTW	20.0	10.0
9	Electrical and Mechanical Services Department (EMSD)	Replacement and upgrading of electrical and mechanical (E&M) installations	To replace and upgrade 200 critical E&M installations of 16 departments that are old and due for replacement	298.9	298.9
10	EMSD	Upgrading works for five public transport interchanges	To renovate the passengers waiting area for the improvement of air quality, image and maintenance and operation arrangements for the five public transport interchanges	63.8	63.8

	Proponent	Project Type	Description of the Projects	Estimated Cost (\$ million)	Expenditure in 2009-10 (\$ million)
11	Water Supplies Department (WSD)	(i) Improvement to Tuen Mun salt water pumping station (ii) Retrofitting of accelerator at Sha Tin water treatment works (iii) Improvements to Tai Tam West catchwater	(i) To carry out desilting work at the intake culvert and to carry out ancillary improvement works at Tuen Mun salt water pumping station (ii) To install inclined tubes at Accelerator N5 to improve the capacity of the clarifier at Sha Tin water treatment works (iii) To re-line about 2 km of catchwater channel	26.8	26.8
12	WSD	Building renovation and improvement works to a number of small pumping stations and waterworks access roads in New Territories Region	To carry out renovation works and greening works to a number of small pumping stations in New Territories West Region of WSD and to re-pave waterworks access roads and to carry out ancillary improvement works in Sha Tin and Tai Po areas	11.0	11.0
13	Highways Department (HyD)	Improving road asset	To improve lighting works, road surfacing/reconstruction works, footpath and streetscape enhancement works, slope improvement, structure painting and renovation, road improvement and parapet strengthening works, footbridge lift retrofitting and other structure works	97.3	97.3
14	Marine Department (MD)	Strengthening harbour patrol capability	To construct a two-storey building for the Harbour Patrol Section	18.0	1.8
15	Transport Department (TD)	Enhancing traffic monitoring	To install trial/pilot detectors for monitoring of traffic flow at sections of strategic road network	5.0	1.5

Proponent	Project Type	Description of the Projects	Estimated Cost (\$ million)	Expenditure in 2009-10 (\$ million)	
Theme - Enhancing green and sustainable environment (total of 7)					
16	EMSD	Energy saving initiatives for various government departments	To install and retrofit energy efficient lighting systems, air-conditioning plants and other E&M facilities for 87 government premises, with anticipated annual saving of \$11 million in electricity charges upon completion of the project	76.5	76.5
17	ArchSD	Construction of green roofs in various government buildings	Construction of green roofs in 40 government buildings	20.0	10.0
18	Civil Engineering and Development Department	Greening enhancement in Tin Shui Wai	To convert existing hard paved central median of carriageway at Tin Shui Road and Tin Sau Road in Tin Shui Wai to greening areas	3.5	3.0
19	WSD	Retrofit plumbing appurtenance with water saving devices in government buildings and schools	To retrofit plumbing appurtenance with water saving devices in all government buildings and schools	163.7	60.0
20	DSD	Pilot applications of membrane technologies in the reuse of treated effluent in 12 selected sewage treatment facilities	To design, construct and operate various effluent treatment systems with appropriate membrane technologies in providing treated effluent meeting different reuse application standards, including irrigation, polymer preparation and plant cleaning to be used in 12 sewage treatment facilities as pilot trial	50.0	25.0
21	HyD	Green initiatives for road asset	To install energy-saving lighting installation and to enhance roadside slope greening	10.7	10.7

Proponent		Project Type	Description of the Projects	Estimated Cost (\$ million)	Expenditure in 2009-10 (\$ million)
22	ArchSD	Refurbishment of the building services installations in various government buildings	Advanced programme for refurbishment of the building services installations in 100 government buildings to incorporate energy-efficient features in lighting system, lifts and escalations, air-conditioning systems and power supply systems	130.0	76.0
		Grand Total		1,600.5	988.3