

MESSAGE

To meet the immediate and long term needs of Hong Kong, and to enhance the quality of life of the general public, it is our pledge to ensure that infrastructure development projects under the Public Works Programme are well-planned; are implemented in a timely and cost-effective manner; and are of high quality and standards.

We will continue to work with the construction industry to enhance the quality and standards of services provided by the industry, as well as the level of safety awareness in construction sites.

To cater for the demand arising from new developments and to reduce the risk of flooding, we will continue to review and improve the existing stormwater drainage systems and strengthen preventive measures to ensure proper functioning of the systems throughout the territory.

We will continue to share our expertise in the construction industry with the Mainland and pave the way for closer co-operation with our counterparts in the Mainland.

We have set out in this booklet a number of initiatives and targets to achieve the above objectives. We are fully committed to fulfilling these targets.

Your comments or suggestions, which will help us attain a higher standard in our services, are most welcome.

A handwritten signature in black ink, reading "Lee Shing-see". The signature is written in a cursive style with a long, vertical flourish at the end of the name.

(Lee Shing-see)
Secretary for Works

PUBLIC WORKS PROGRAMME

Our Policy Objective is to ensure the effective planning, management and implementation of the Public Works Programme (PWP) as a whole and the major infrastructure development projects in particular.

Our targets this year in pursuing this Policy Objective are –

- to ensure that public works projects are planned and implemented to meet the requirements of the client bureaux/departments
- to enhance the quality and standards of services provided by the Works Departments, consultants and contractors, and the construction industry as a whole

Progress Made

In the past year, we had achieved satisfactory results in all eight Key Result Areas.

In the past 12 months, we had two targets at the Policy Objective level.

Our first target was to ensure that public works projects are planned and implemented on schedule and within budget. During the year, we have continued to strengthen the project management culture in the Works Departments to further improve the skills of all staff involved in managing public works projects.

We have studied the causes of slippage in the delivery of public works projects, and have implemented a number of remedial measures. We will continue our efforts in the coming year to strengthen the monitoring system and streamlining the procedures to ensure the timely delivery of the PWP.

Our second target was to enhance the quality and standards of services provided by the Works Departments, consultants and contractors, and the construction industry as a whole. During the year, we have published a consultants' handbook; issued guidelines; formulated a Contractors' Performance Index; developed financial assessment criteria and procedures; promoted ISO 9000 requirements and implemented quality management systems. We have also encouraged contractors to participate in the Considerate Contractors Site Award Scheme, and actively promoted site safety.

KEY RESULT AREAS (KRAs)

To ensure that this Policy Objective can be achieved, we must deliver results in a number of key areas, that is, we must –

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1

Ensure that public works projects are planned for cost effectiveness, feasibility studies are thoroughly conducted, and planning action is well co-ordinated

Public works provide the cornerstone of Hong Kong's physical infrastructure. As such, they must be carefully planned and implemented to ensure that they meet the requirements of the public and private sectors.

Preliminary Project Feasibility Studies (PPFS) are crucial to the successful implementation of construction projects. With this in mind, we carefully scrutinise PPFS reports of new projects and have introduced a land acquisition requirement prioritisation exercise before their inclusion in the PWP. This helps to ensure that public works projects are properly planned and co-ordinated, with a well-defined scope and a realistic cost estimate and implementation programme.

We have also set up a monitoring system for high impact public works projects at the planning stage to ensure their timely commencement.

Progress Made

In the past year, we aimed to ensure that public works projects approved by the Finance Committee commenced work according to plan.

Progress towards this target was satisfactory, with 66 out of the 93 new-start projects in the 1998-1999 Estimates (i.e. 71%) started on schedule. In addition, construction works on 52 projects which were not included in the 1998-1999 Estimates have also started. Moreover, we have introduced measures to ensure that construction of public works projects would start as planned.

To achieve results in this area, various initiatives have been undertaken in the past years. Details are set out below –

Initiative *	Target #	Present Position +
To prioritise new public works projects that require land acquisition to enable proper planning of the projects <i>(Works Bureau (WB))</i>	From 1999 onwards to issue a Site Handover Date Schedule each year for all new public works projects that require land acquisition <i>(1998)</i>	The latest Site Handover Date Schedule was issued in June 1999. <i>(Action Completed)</i>
To scrutinise more quickly PPFS reports in respect of projects for inclusion in the PWP <i>(WB)</i>	From 1999 we will complete our review of individual reports within three weeks of receipt of the reports, which will be one week quicker than our existing practice <i>(1998)</i>	Measures have been introduced to achieve the 3-week target. <i>(Action Completed)</i>
To set up a monthly reporting system to strengthen the monitoring of the planning progress of high impact public works projects <i>(WB)</i>	To set up the system in late 1998 <i>(1998)</i>	A monthly reporting system was set up in November 1998 to strengthen the monitoring of the planning progress of high impact public works projects. <i>(Action Completed)</i>

* the bracketed information denotes the agency with lead responsibility for the initiative

the bracketed information denotes the year in which the target was set

+ the bracketed information denotes the status of the target

Looking Forward

In the next 12 months, we will assess our performance in respect of this KRA against the following indicator –

Indicator	1999 Target
The percentage of new projects commenced compared with the Estimates	70%

We will undertake the following initiatives to deliver results in this area –

Initiative	1999 Target
To prioritise new public works projects that require land acquisition to enable proper planning of the projects (WB)	To issue a Site Handover Date Schedule for 2000 for all new public works projects that require land acquisition
To scrutinise PPFS reports in respect of projects for inclusion in the PWP within the prescribed time frame (WB)	To maintain the target of checking individual reports within three weeks of receipt of the reports

2

Ensure that the most appropriate methods of procurement and methods of delivery of construction projects are used

To ensure the value for money of our construction works and efficiency in their construction in a timely manner and within budget, we must choose the most appropriate method of procurement for different kinds of public works projects. In so doing, we will incorporate an equitable sharing of risk between the Government and the contractors.

Progress Made

In the past year, we aimed to introduce and develop an improved procurement and contract strategy for public works and progress on this target was satisfactory.

We have published the 1999 editions of the General Conditions of Contract (GCC) for civil engineering, building and electrical and mechanical engineering works, and for design and build contracts. We have also carried out a more fundamental review of the allocation and management risks in the GCC and are studying the review recommendations.

To achieve results in this area, various initiatives have been undertaken in the past years. Details are set out below –

Initiative	Target	Present Position
To carry out a review of the General Conditions of Contract (GCC) for public works, taking into account legislative changes and development in construction contract law that have taken place since its last revision, and consider if further amendment to the conditions are necessary <i>(Works Bureau (WB))</i>	To complete the review by December 1999 <i>(1998)</i>	The review has been completed and the revised GCC (1999 editions) have been published. <i>(Action Completed)</i>

Initiative	Target	Present Position
To modify the GCC so as to adopt the most appropriate terms of contract for cost effective procurement (WB)	To complete the exercise by June 2001 (1998)	The allocation of risk in the GCC has been reviewed by an international expert. The recommendations are being considered. (Action in Progress: On Schedule)
To issue guidelines and administrative procedures for determining the appropriate forms of contract for different types of public works (WB)	To issue the guidelines and procedures by December 1998 (1998)	Tender procedures for public works have been reviewed in line with the World Trade Organisation Government Procurement Agreement. Administrative Procedures and GCC for design and build contracts have been revised and updated. (Action Completed)

Looking Forward

In the next 12 months, we will assess our performance in respect of this KRA against the following indicator –

Indicator	1999 Target
The percentage of initiatives completed within the target time	100%

We will undertake the following initiative to deliver results in this area –

Initiative	1999 Target
To develop procedures and guidelines for the use of Interim Payment Schedules (IPS) in public works contracts in order to simplify the method of interim payments to contractors (WB)	To complete and implement the new IPS guidelines and procedures by 2001

3

Ensure that the quality of consultants and contractors selected to deliver public works will meet the requirements of our projects

The quality of contractors and consultants affects the delivery of the PWP. To ensure quality, we have clarified our standards and systems for selecting and managing consultants and contractors. These include monitoring their performance and taking regulating action against poor performance.

We require all contractors and consultants of major public works projects to obtain International Organisation for Standardisation (ISO) 9000 certification. The certification will show that they have established quality assurance systems up to international standards.

As the PWP represents a large proportion of the overall construction activities in Hong Kong, we can contribute to a broader raising of standards within the local construction industry by improving the quality of our contractors and consultants.

Progress Made

In the past year, we aimed to enhance our system for monitoring and recording the performance of contractors and consultants by 2000.

The progress in various fronts contributing to the target was satisfactory. The Handbook on Selection, Appointment and Administration of Engineering and Associated Consultants was promulgated for use. The draft report on the review of the Financial Assessment Criteria and Procedure has been prepared, and recommendations to strengthen monitoring of the financial capabilities of contractors have been formulated. A Contractors' Performance Index to measure the level of performance of contractors in public works contracts has been developed and trial runs for fine-tuning purposes are underway.

To achieve results in this area, various initiatives have been undertaken in the past years. Details are set out below –

Initiative	Target	Present Position
<p>To improve the guidelines and procedures and issue a contractor management handbook for administering and monitoring the performance of contractors on approved lists</p> <p><i>(Works Bureau (WB))</i></p>	<p>To finalise and promulgate the contractor management handbook by 2000</p> <p><i>(1998)</i></p>	<p>A review of the various technical circulars constituting the contractor management handbook is being carried out.</p> <p><i>(Action in Progress: On Schedule)</i></p>
<p>To strengthen the criteria for the selection of contractors and evaluation of tenders</p> <p><i>(WB)</i></p>	<ul style="list-style-type: none"> ● To formulate a Contractors' Performance Index System by 1999 ● To complete a review of Financial Assessment Criteria and Procedure by the second half of 1999 <p><i>(1998)</i></p>	<ul style="list-style-type: none"> ● A Contractors' Performance Index System has been formulated, and trial runs are being carried out. The evaluation of tenders is already covered by the third initiative under KRA 2. ● The Draft Report on the review of Financial Assessment Criteria and Procedure has been prepared. Proposals to refine some of the recommendations are being formulated. <p><i>(Action in Progress: On Schedule)</i></p>
<p>To encourage public works contractors to employ qualified tradesmen with Trade Test Certificates and semi-skilled tradesmen who have passed the Intermediate Trade Tests</p> <p><i>(WB)</i></p>	<p>To require in 1998 that at least 10% of the workers employed by public works contractors be qualified tradesmen and at least 5% be semi-skilled tradesmen</p> <p><i>(1998)</i></p>	<p>Contractors are required to employ at least 10% qualified tradesmen and 5% semi-skilled tradesmen in their workforce in public works contracts since promulgation of the Works Bureau Technical Circular No. 10/99 in March 1999.</p> <p><i>(Action Completed)</i></p>

Initiative	Target	Present Position
To improve and set out the guidelines and procedures for selecting and administering consultants and monitoring their performance (WB)	To finalise and promulgate the Handbook on Selection, Appointment and Administration of Engineering and Associated Consultants by mid-1999 (1998)	The Handbook on Selection, Appointment and Administration of Engineering and Associated Consultants was promulgated in May 1999. <i>(Action Completed)</i>

Looking Forward

In the next 12 months, we will assess our performance in respect of this KRA against the following indicators –

Indicator	1999 Target
The number of adverse reports issued as a percentage of the total number of reports issued within the year	To monitor closely the number of adverse reports
The number of contractors and consultants who have received three or more consecutive adverse reports leading to suspension	To monitor closely the number of adverse reports

We will undertake the following initiative to deliver results in this area –

Initiative	1999 Target
To strengthen the criteria for the selection of consultants and evaluation of proposals (WB)	To formulate a Consultants' Performance Index System by end-2000

4

Ensure that contractors for public works maintain a safe and healthy working environment

The construction of high-rise buildings and other major projects can pose hazards to workers and to the public. We recognise this, and are committed to achieving the highest possible standards of safety in Hong Kong's construction industry.

Since the introduction of safety management systems in the Airport Core Programme (ACP) contracts in 1992 and non-ACP contracts in 1993, there has been a downward trend in accident rates on public works construction sites. Our target rate of less than 60 accidents per 1 000 workers per year has been met since 1997. We aim gradually to reduce accident rates to less than 55 accidents per 1 000 workers per year by 2000.

Two major safety initiatives: the Pay for Safety Scheme and the Independent Safety Audit Scheme, were introduced in 1996 to encourage public works contractors to set up more efficient safety management systems and to enhance the standard of safety performance of contractors.

We will continue to work together with the private sector, through the Construction Advisory Board, to transform safety attitudes throughout the construction workforce.

We will continue to monitor the site safety performance of our contractors and ensure that only contractors with satisfactory performance will be allowed to tender for public works contracts.

Progress Made

In the past year, we aimed to gradually reduce the accident rate on public works construction projects to less than 55 accidents per 1 000 workers per year by 2000.

The progress towards this target over the past year was satisfactory. The overall accident rate for public works contracts has been maintained at below the target of 60 accidents per 1 000 workers. The Pay for Safety Scheme has been extended to include 10 term contracts in addition to works contracts. To promote safety awareness, one seminar on construction safety has been held jointly with an external organisation and another one is being organised for November 1999. Three safety award schemes are also in various stages of implementation. The auditing of 35 public works contracts in the second stage of the independent audit scheme is expected to commence later in the year upon the appointment of a manager to administer the scheme. Site inspection of builder's lifts and tower working platforms has been strengthened.

To achieve results in this area, various initiatives have been undertaken in the past years. Details are set out below –

Initiative	Target	Present Position
<p>To expand the Pay for Safety Scheme to term contracts in addition to works contracts so as to encourage the participating contractors to set up more efficient safety management systems</p> <p><i>(Works Bureau (WB))</i></p>	<p>To include ten term contracts in the Scheme in 1999</p> <p><i>(1998)</i></p>	<p>A total of 267 contracts, including ten term contracts, have been included in the Pay for Safety Scheme.</p> <p><i>(Action Completed)</i></p>
<p>To implement the second stage of an independent auditing system to monitor the safety performance of public works contractors</p> <p><i>(WB)</i></p>	<p>To include 35 public works contracts in the second stage of the system in 1999</p> <p><i>(1998)</i></p>	<p>The auditing of 35 public works contracts is expected to commence in late 1999 upon appointment of a manager to administer the scheme.</p> <p><i>(Action in Progress: On Schedule)</i></p>
<p>To promote more intensively safety awareness through the Construction Advisory Board and through additional promotional activities</p> <p><i>(WB)</i></p>	<ul style="list-style-type: none"> ● To co-organise two seminars for 250 persons with external organisations in 1999 <i>(1998)</i> ● To organise three safety award schemes in 1999 to promote safety awareness of all personnel involved in the construction industry <i>(1998)</i> 	<ul style="list-style-type: none"> ● One seminar was held with the Occupational Safety and Health Council in March 1999, and the other one will be held in November 1999. <i>(Action in Progress: On Schedule)</i> ● The three safety award schemes have been kicked off since January 1999. <i>(Action Completed)</i>
<p>To monitor the safety performance of public works contractors to ensure that accident rates remain below our target of 60 accidents per 1 000 workers per year</p> <p><i>(WB)</i></p>	<p>To maintain the accident rate below our target of 60 accidents per 1 000 workers per year in 1998</p> <p><i>(1997)</i></p>	<p>The overall accident rate in 1998 for public works contracts has been maintained below the target of 60 accidents per 1 000 workers.</p> <p><i>(Action Completed)</i></p>

Initiative	Target	Present Position
To strengthen site inspections of builder's lifts and tower working platforms in 1999 (WB)	To conduct 200 site inspections of builder's lifts and tower working platforms in 1999 (1997)	As at the end of June 1999, a total of 120 site inspections were carried out, with the remaining 80 site inspections to be carried out by the end of 1999. (Action in Progress: On Schedule)

Looking Forward

In the next 12 months, we will assess our performance in respect of this KRA against the following indicator –

Indicator	1999 Target
The rate of reduction in accident rates	Less than 55 accidents per 1 000 workers per year

We will undertake the following initiatives to deliver results in this area –

Initiative	1999 Target
To publish a Construction Site Safety Handbook (WB)	To publish the Handbook in early 2000
To monitor the safety performance of public works contractors to ensure that accident rates remain below our target of 55 accidents per 1 000 workers per year (WB)	To maintain the accident rate below our target of 55 per 1 000 workers per year in 2000

5

Ensure high quality and standards in the construction and maintenance of public works

To ensure the successful delivery of public works, we need to maintain and improve the quality of contractors, consultants and personnel in the construction industry. The development of local construction standards in line with leading international standards is essential, as it can help ensure that the construction of Hong Kong's public works complies with internationally recognised standards of work.

Progress Made

In the past year, we aimed to further improve the quality and standards in the construction of public works projects.

Progress in the various areas contributing to the target was satisfactory. We have promoted conformity with ISO 9000 requirements. All Works Departments have developed their own quality management plans in various forms and implemented measures to improve the quality of maintenance works.

As a result of our efforts to encourage more participation by contractors of public works and private sector construction sites in the Considerate Contractors Site Award Scheme, a total of 66 contracts have joined the 1999 phase, which is 13 more than the 1998 phase. When the appraisal period closes at the end of the year, we anticipate that over 40% of the participating contractors will receive awards under the Scheme.

To achieve results in this area, various initiatives have been undertaken in the past years. Details are set out below –

Initiative	Target	Present Position
To encourage the participation of public works and private sector construction sites in the Considerate Contractors Site Award Scheme by promoting the Scheme in publications of the industry <i>(Works Bureau (WB))</i>	Over 40% of the participating contractors in the 1998 phase to meet the performance standard required under the Scheme and be given the award <i>(1998)</i>	A total of 66 contracts have been included in the 1999 phase, 13 more than the 1998 phase. The appraisal period will end by the close of 1999. Over 40% of the participating contracts in the 1999 phase are expected to receive awards under the Scheme. <i>(Action in Progress: On Schedule)</i>

Initiative	Target	Present Position
<p>To require the Works Departments to develop and maintain their quality management systems (WB)</p>	<p>All Works Departments to develop quality management systems by end 1999 (1998)</p>	<p>Various forms of quality management systems have been developed in the Works Departments, for example, ISO 9000 certifications and Hong Kong Laboratory Accreditation Scheme (HOKLAS) accreditation. <i>(Action Completed)</i></p>
<p>To promote further quality management among public works consultants and contractors (WB)</p>	<p>To organise an industry-wide seminar in 1999 to promote conformity with ISO 9000 requirements (1998)</p>	<p>An industry-wide seminar on promotion of conformity with ISO 9000 requirements was held in March 1999. <i>(Action Completed)</i></p>
<p>To commission a consultancy study on setting up a central construction standardisation body in Hong Kong to oversee the development of local construction standards and their alignment with international standards (WB)</p>	<p>To complete the consultancy study, which will make recommendations on the framework and the implementation plan for setting up the body, in the year 2000 (1998)</p>	<p>The tendering proposals are being assessed. The consultancy study will start in late 1999, for completion in mid-2000. <i>(Action in Progress: On Schedule)</i></p>
<p>To formulate an implementation plan for the alignment of standards for Unplasticised Polyvinyl Chloride (UPVC) pipes and fittings commonly used in Hong Kong with corresponding international standards (WB)</p>	<p>To finalise the implementation plan in 1999 (1998)</p>	<p>The implementation plan is being finalised, and will be completed at the end of 1999. <i>(Action in Progress: On Schedule)</i></p>
<p>To require the Works Departments to produce and implement action plans for the improvement of the quality of maintenance works (WB)</p>	<p>To finalise action plans for implementation in 1999 (1998)</p>	<p>Action plans were agreed with the concerned Works Departments in end 1998, and implemented in April 1999. <i>(Action Completed)</i></p>

Initiative	Target	Present Position
To review comprehensively the list of construction standards used in Hong Kong in 1998 (WB)	To complete the review by December 1998 (1997)	The revised list was published in December 1998. (Action Completed)
In 1998, to strengthen our participation in standards development activities organised by international standards bodies, such as the International Organization for Standardization (ISO) and the International Electromechanical Commission (IEC), and regional bodies, such as the Asia-Pacific Economic Co-operation (APEC) and the Pacific Area Standards Congress (PASC) (WB)	To establish contacts with major international and regional standardisation bodies in 1998 (1997)	Contacts have been established with various major international and regional standards organisations through different channels, such as participation in the Second APEC Conference in Standards and Conformance in September 1998, and meeting with Standards Australia in December 1998. (Action Completed)

Looking Forward

In the next 12 months, we will assess our performance in respect of this KRA against the following indicator –

Indicator	1999 Target
The percentage of Group C Contractors undertaking public works with ISO 9000 quality certification	100%

We will undertake the following initiative to deliver results in this area –

Initiative	1999 Target
To set up a system for monitoring the compliance of maintenance works with the maintenance action plans developed in 1999 with a view to improving the quality of maintenance works <i>(WB)</i>	To set up the system by mid-2000

6

Ensure that projects in the Public Works Programme are completed on time and within budget

To ensure the effective provision of public works, projects must be completed on time and within budget. The completion of projects on time allows client bureaux to deliver their services to the public as scheduled. Completion within budget facilitates financial planning and ensures that the works are carried out cost-effectively.

As an on-going process, we will review the relevant administrative or statutory procedures so as to remove hurdles affecting the implementation of the projects as and when necessary. In particular, we will strive to maintain overall underspending of the Public Works Programme (PWP) at no more than 5% of the annual expenditure estimate.

Progress Made

In the past year, we aimed to ensure the timely delivery of public works projects within budget.

Progress made in this area was satisfactory. Monitoring of the progress of all public works projects has been strengthened by monthly review meetings in addition to the existing quarterly reporting system in respect of high impact projects. These meetings help to identify potential areas likely to give rise to delays, enabling early and appropriate remedial actions be implemented for timely delivery of the projects within budget. In the financial year ending March 1999, the underspending on the PWP was 1.4% against the 1998-1999 Estimates.

To achieve results in this area, various initiatives have been undertaken in the past years. Details are set out below –

Initiative	Target	Present Position
To strengthen the monitoring of the progress of High Impact PWP projects to ensure that there will be no undue delay <i>(Works Bureau (WB))</i>	To ensure that High Impact PWP projects are implemented according to the approved programme and project estimate <i>(1998)</i>	In addition to the existing quarterly report on PWP, monthly meetings are held to review progress to ensure that all PWP projects, including the High Impact projects, are implemented according to the approved programme and project estimate. <i>(Action in Progress: On Schedule)</i>

Initiative	Target	Present Position
To assess the cumulative effect of the housing development programme on infrastructure capacity, so as to identify the need for new infrastructure projects and co-ordinate the planning for these projects, to monitor their progress and to ensure their timely completion (WB)	To update the assessment on a half-yearly basis starting from 1999 to ensure that any implications for new infrastructure capacity are taken care of (1998)	A system has been set up and implemented to update the assessment on a half-yearly basis since February 1999. (Action Completed)
To monitor the progress of the port development studies for better planning (WB)	To compile quarterly progress reports on all port development studies and plans starting from late 1998 (1998)	A quarterly reporting system has been put in practice. (Action Completed)

Looking Forward

In the next 12 months, we will assess our performance in respect of this KRA against the following indicators –

Indicator	1999 Target
The percentage of public works projects delivered on time	70%
The percentage of public works projects delivered within budget	80%

We will undertake the following initiatives to deliver results in this area –

Initiative	1999 Target
To assess the cumulative effect of the housing development programme on infrastructure capacity, so as to identify the need for new infrastructure projects and co-ordinate the planning for these projects, to monitor their progress and to ensure their timely completion <i>(WB)</i>	To compile quarterly progress reports on high impact housing-related infrastructure PWP projects starting from early 2000 to enhance monitoring
To maintain the expenditure of public works on target against the provisions in the Estimates <i>(WB)</i>	To ensure that underspending on public works will be less than 5 % against the provisions in the Estimates

7

Promote the exchange of construction technology and expertise in public works between Hong Kong and the Mainland

The exchange of public works technology and expertise between Hong Kong and the Mainland contributes to higher standards in the construction industry, develops general understanding of construction practices in Hong Kong and the Mainland, and broadens the potential for future co-operation.

Contractors and consultants in the construction industry who undertake public works have an important role themselves in developing links with the Mainland. Works Bureau promotes and facilitates such exchanges through seminars and visits. We will continue to maintain close links and establish new contacts with our counterparts in the Mainland.

Progress Made

In the past year, we aimed to organise seminars and visits to the Mainland jointly with authorities, trade associations and professional bodies in the Mainland and Hong Kong.

Progress made in this area was satisfactory. Five seminars and visits to the Mainland have been jointly organised with interested parties. These seminars and visits have enhanced the understanding of the management system of the construction industry, urban planning practices, tall building design and construction technology in the two places. Through these activities, the engineering and construction professionals in Hong Kong and the Mainland have established a co-operative relationship with each other.

Through the co-ordination of the Works Bureau, a joint Research and Information Centre on Landslip Prevention and Land Development has been established at the University of Hong Kong in collaboration with the Mainland's Academy of Sciences of China and the Comprehensive Institute of Geotechnical Investigation and Surveying of the Ministry of Construction.

To achieve results in this area, various initiatives have been undertaken in the past years. Details are set out below –

Initiative	Target	Present Position
<p>To promote joint technological research activities and exchange of construction technology with the Mainland <i>(Works Bureau (WB))</i></p>	<p>To liaise with local universities and related Mainland authorities in 1999 on joint research activities in construction engineering <i>(1998)</i></p>	<p>Through our efforts, the Jockey Club Research and Information Centre for Landslip Prevention and Land Development was jointly established by the University of Hong Kong, the Academy of Sciences of China and the Comprehensive Institute of Geotechnical Investigation and Surveying of the Ministry of Construction in January 1999. <i>(Action in Progress: On Schedule)</i></p>
<p>To facilitate contact between the local construction industry and Mainland counterparts to help enhance mutual understanding in the organisation and practice of the construction industry <i>(WB)</i></p>	<p>To co-organise at least one exchange seminar and arrange visits to the Mainland on topics related to the systems and practices adopted by the construction industry in Hong Kong and in the Mainland by end 1999 <i>(1998)</i></p>	<p>An exchange seminar on “Management Systems of the Engineering and Construction Industry and Urban-Rural Planning”, and another one on “Tall Building Design and Construction Technology” were held in April and June 1999 respectively. Separately, one visit to Hebei Province was held in April 1999. <i>(Action Completed)</i></p>
<p>To foster liaison and co-operation among engineering and construction and related professionals, such as lawyers and financiers, for the promotion of a comprehensive service to the construction industry <i>(WB)</i></p>	<p>To co-organise at least one exchange seminar and arrange visits to the Mainland by end 1999 to share experience and promote co-operation between local professionals and Mainland counterparts <i>(1998)</i></p>	<p>An exchange seminar on “Mainland and Hong Kong BOT Conference” was held in October 1998. A visit to Guangdong Province to promote co-operation in operation and maintenance of airport facilities was organised in July 1999. <i>(Action Completed)</i></p>
<p>To hold further Mainland-Hong Kong seminars on engineering and construction standards and other appropriate topics in early 1998 <i>(WB)</i></p>	<p>To hold at least one seminar in 1998 <i>(1997)</i></p>	<p>An exchange seminar was held in Qingdao in March 1998 to promote co-operation between the Mainland and Hong Kong construction industries. <i>(Action Completed)</i></p>

Looking Forward

In the next 12 months, we will assess our performance in respect of this KRA against the following indicator –

Indicator	1999 Target
The number of seminars and visits to the Mainland organised jointly with trade associations and professional bodies	As set out under respective initiatives (i.e. at least one seminar and one visit each year)

We will undertake the following initiatives to deliver results in this area –

Initiative	1999 Target
To promote joint technological research activities and exchange of construction technology with the Mainland (WB)	To liaise with local universities and related Mainland authorities in 2000 on joint research activities in construction engineering
To facilitate contact between the local construction industry and Mainland counterparts to help enhance their co-operation (WB)	To compile a directory of construction service providers in Hong Kong for the information of the Mainland counterparts by end-2000
To facilitate contact between the local construction industry and Mainland counterparts to help enhance mutual understanding in the organisation and practice of the construction industry (WB)	To co-organise at least one exchange seminar and arrange visits to the Mainland on topics related to systems and practices adopted by the construction industry in Hong Kong and in the Mainland by end-2000
To foster liaison and co-operation among engineering and construction related professionals for the promotion of a comprehensive service to the construction industry (WB)	To co-organise at least one exchange seminar and arrange visits to the Mainland by end-2000 to share experience and promote co-operation between local professionals and Mainland counterparts

8

Ensure that the stormwater drainage infrastructure is adequate and effective in collecting and discharging surface runoff

Rapid infrastructural development gives rise to the need for improved drainage systems to alleviate the possibility of flooding. Low-lying areas of the New Territories periodically suffer from severe flooding, and flood relief measures are required to reduce hardship to residents of rural areas.

To match the demand arising from new developments and to reduce the risk of flooding, we will review and upgrade the existing stormwater drainage systems and strengthen preventive maintenance works to ensure proper functioning of the systems over the territory. We will also improve flood protection measures for the areas of the New Territories worst affected by inundation.

Progress Made

In the past year, we aimed to commence major flood prevention projects and river training schemes in the flood-prone areas in the New Territories and to complete the upgrading of critical stormwater drains in urban areas.

Progress in both areas was satisfactory. Work on the major flood prevention projects in the Northern New Territories has started as scheduled. The three Drainage Master Plan studies for the Northern New Territories and Sha Tin/Tai Po and Sai Kung/East Kowloon/Southern Lantau are progressing smoothly.

The drainage improvement works in local streets in the Mong Kok area have been completed on time.

Progress on a number of drainage improvement works pledged before 1998 was also satisfactory except for the flood protection schemes for 12 villages in the New Territories. The land resumption problems which caused delays in the construction works of these projects have now been resolved. The flood prevention works for four of these villages have been completed while the works for the remaining eight villages will be completed by the end of 1999.

To achieve results in this area, various initiatives have been undertaken in the past years. Details are set out below –

Initiative	Target	Present Position
<p>To implement river training schemes in the flood-prone areas of the Northern New Territories <i>(Drainage Services Department (DSD))</i></p>	<ul style="list-style-type: none"> ● To complete river training and rehabilitation works for River Beas and River Indus in 2001 ● To complete river training works in Area 30B in Sheung Shui in 2001 <p><i>(1998)</i></p>	<ul style="list-style-type: none"> ● Training and rehabilitation works for River Indus and River Beas were started in November 1998 and April 1999 respectively, with good progress. ● The river training works in Area 30B were started in September 1998, with satisfactory progress. <p><i>(Action in Progress: On Schedule)</i></p>
<p>To complete the Drainage Master Plan (DMP) Studies for Northern New Territories, Sha Tin/Tai Po and Sai Kung/East Kowloon/Southern Lantau to ensure that all stormwater drainage systems in the areas conform to a common high standard of flood protection <i>(DSD)</i></p>	<p>To complete the DMP Studies for Northern New Territories and Sha Tin/Tai Po in 1999 and the Sai Kung/East Kowloon/Southern Lantau studies in 2000</p> <p><i>(1998)</i></p>	<p>The three DMP studies are being carried out. The studies for Northern New Territories and Sha Tin/Tai Po are expected to be completed by end 1999 while the study for Sai Kung/East Kowloon/Southern Lantau is expected to be concluded by mid-2000.</p> <p><i>(Action in Progress: On Schedule)</i></p>
<p>To implement the recommendations of the DMP Study for West Kowloon to upgrade the stormwater drainage systems in the area <i>(DSD)</i></p>	<ul style="list-style-type: none"> ● To complete drainage works in local streets peripheral to the east side of Nathan Road between Playing Field Road and Nullah Road in 1999 ● To improve drainage at the section of Nathan Road between Boundary Street and Prince Edward Road by 2000 <p><i>(1998)</i></p>	<ul style="list-style-type: none"> ● The drainage works were completed in April 1999. ● The drainage works were completed in June 1999, nine months ahead of schedule. <p><i>(Action Completed)</i></p>

Initiative	Target	Present Position
<p>To recommend comprehensive plans to extend and upgrade the stormwater drainage systems under the seven DMP studies. To implement in phases the recommended drainage improvement works upon the completion of these studies (DSD)</p>	<ul style="list-style-type: none"> ● To commence the detailed design for the first package of works in 1999 ● To begin construction in 2001 (1997) 	<ul style="list-style-type: none"> ● The first study for Yuen Long, Kam Tin, Ngau Tam Mei and Tin Shui Wai has been completed, and the detailed design for the first package of works is being carried out. <i>(Action Completed)</i> ● Some critical drainage improvement works will start by end-2001. <i>(Action in Progress: On Schedule)</i>
<p>To complete all seven DMP Studies by 1999 (DSD)</p>	<p>To complete all seven DMP Studies by 1999 (1996)</p>	<p>The first three studies have been completed. Three other studies will be completed by end 1999. The scope of the last study, i.e. the study for Sai Kung/East Kowloon/Southern Lantau has been reviewed and expanded. As a result, the study has been replaced by a new initiative in 1998 and rescheduled for completion by mid-2000. <i>(Action in Progress: On Schedule)</i></p>
<p>To continue to work closely with the Shenzhen authorities on the preparations for Stage Two of the Shenzhen River Regulation Project (DSD)</p>	<p>To award two new contracts by April 1997 to construct 6.4 kilometres of main river channel, to start work before June 1997 and to complete works by 2000 (1996)</p>	<p>The construction works for the first contract were completed in May 1999. The works for the second contract will be completed by end-2000. <i>(Action in Progress: On Schedule)</i></p>

Initiative	Target	Present Position
To spend \$1.1 billion over the next three years to construct 20 kilometres of stormwater drains and other drainage channels (DSD)	<ul style="list-style-type: none"> To construct 20 kilometres of stormwater drains and other drainage channels by 1997 To complete by 1998 works on three contracts for the first stage of river channel improvement work in Yuen Long and Kam Tin areas (1994)	<ul style="list-style-type: none"> 20 kilometres of drainage works have been completed. The three contracts for the first stage of river channel improvement works in Yuen Long and Kam Tin areas have been completed. <i>(Action Completed)</i>
To complete flood protection schemes in the next three years (1994-1997) for 12 villages which are particularly vulnerable (DSD)	To complete flood protection schemes for the 12 villages by 1997 (1994)	The works have been delayed due to land resumption problems. Flood protection works for four villages have been completed. Work for the remaining eight villages will be completed by end-1999. <i>(Action in Progress: Behind Schedule)</i>

Looking Forward

In the next 12 months, we will assess our performance in respect of this KRA against the following indicators –

Indicator	1999 Target
The number of high priority drainage projects started in the flood-prone areas by end-2001	Seven
The number of high priority projects completed in the flood-prone areas by end-2001	Six
The value of maintenance works	\$110 million
The length of drains and main watercourses inspected	1 190 km

Indicator	1999 Target
The length of drains and main watercourses cleansed	390 km
The percentage of complaints on blockage addressed within one working day	99%

We will undertake the following initiatives to deliver results in this area –

Initiative	1999 Target
To work closely with the Shenzhen authorities on the implementation of the Stage 3 of the Shenzhen River Regulation Project (DSD)	To commence construction of the Stage 3 of the Shenzhen River improvement works in 2001
To implement the Phase 1 of the river training scheme in Ngau Tam Mei in the Northwestern New Territories (DSD)	To complete the river training works in 2002
To upgrade the stormwater drainage system in West Kowloon (DSD)	<ul style="list-style-type: none"> ● To complete the Stage 1 of the West Kowloon drainage improvement works in 2003 ● To complete the Stage 2 Phase 1 of the West Kowloon drainage improvement works in 2004